The McGraw-Hill Companies

Financial Accounting

About the Author

Dhanesh K Khatri, MBA, PhD (Finance), PGDFM, has over 21 years of teaching and professional experience. He has been working as a faculty at Institute of Management Studies, B J S Rampuria Jain College, Bikaner, for the last 17 years, teaching papers in finance and accounting to the MBA and other postgraduate students. At present, he is the Head, Department of Finance.

Dr. Khatri started his career with Stock Holding Corporation of India Ltd., Mumbai (SHCIL) in the year 1989 and has had a good exposure to practical aspects of financial accounting, money market and capital market operations, with special focus on the functioning of depository systems.

He has been a visiting professor at many reputed institutions: Institute of Agri-Business Management, SKRAU, Bikaner; Faculty of Management, MNIT, Jaipur; Faculty of Management Studies, MLS University, Udaipur; Faculty of Management, JECRC, Jaipur; ICAI Bikaner chapter, among others.

His articles on contemporary issues and research on capital market and money market have been published in leading journals like *Journal of Indian Accounting Association*; *Prabandh (*MLS University, Udaipur); Bikaner Journal of Management etc. He has also published two titles—*Security Analysis and Portfolio Management* and *Investment Management and Security Analysis*. He continues to pursue research in the areas of accounting, finance, capital market, and money market. He has completed two minor research projects sponsored by UGC and has also organized one national level seminar, sponsored by UGC.

He has successfully guided PhD students in the past and more students are currently doing their research under his supervision.

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To

my wife Annu,
daughter Prachi,
and son Aaditya

UTTAR PRADESH
RAJARSHI TANDON OPEN UNIVERSITY
उत्तर प्रदेश राजर्षि टण्डन मुक्त विश्वविद्यालय

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Foreword

Financial accounting is a core course for business management students at post graduate level, taught either separately or in combination with other subjects. Acquaintance with the basic concepts and applications of accounting is a prerequisite for any successful business manager.

Dr. Dhanesh K Khatri's book on *Financial Accounting* is a refreshing effort to present in a simple and lucid manner, the core concepts and applied aspects of this branch of accounting. It is being designed specifically for the business management students, many of whom do not have a previous knowledge and understanding of the subject. The content and features of the book will help the students in having conceptual clarity in the subject and in excelling during their course of studies.

The book also provides adequate exposure for proper application of the subject matter in day-to-day business activities, which students would use after completing their respective courses. It provides a comprehensive treatment of accounting principles, techniques, and practices. A good number of examples, illustrations, and cases further aid and strengthen the comprehension. It includes cases based on the Indian environment. Chapter-end exercises in the form of multiple choice questions, unsolved problems, and so on, are also included. Relevant accounting standards have been taken into account in various chapters. Thus it will also help the teachers of this subject in taking up this subject in class in an easy-to-understand manner. With rich pedagogy and supplements, this book promises to offer a "complete package" on the subject. As such, students of other disciplines such as commerce will also find the book as a useful resource material.

Dr. Khatri has a sound background of teaching and research in the field of accounting for more than two decades. I congratulate the author for this scholarly work undertaken, and hope that the book will prove useful to the target audience. It is my pleasure to pen down the foreword for this promising and learner friendly treatise.

(Prof. Nageshwar Rao)

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Preface

Financial Accounting is a core course offered to the students of management and commerce stream. Offered under different names and different combinations, this course is one of the pillars for successful completion of the academic as well as professional courses in this area.

There are a number of books on this subject in the market today, but finding a book with the right balance between presentation of theoretical concepts and practical and numerical aspects of the subject is a challenging job. It is this gap that the present book attempts to address. It discusses the core concepts of financial accounting with the right mix of theory with practical applications in a student-friendly manner. Appropriate numerical examples and case studies, along with a rich pedagogy, offer students a good learning environment in the subject. It blends theory and practice in a logical sequence to ignite readers' mind for thinking, thereby providing a good base in the subject to all the students, especially those from the management stream.

THE TEXT

The ensuing text contains 19 chapters and three appendices, giving a wide coverage from the elementary level topics to the high-level application of accounting theory, concepts and practices followed across the globe. Most recent changes in the related areas (effective from 1st April, 2011) have been discussed in Appendix III.

Given below is a table, summarizing the coverage across various chapters and appendices in the book.

Chapter 1	▪ Different forms of business enterprises, types of capital, accounting system and elementary concepts about the presentation of financial accounts.
Chapter 2	▪ Introduction to financial accounting, management accounting and cost accounting, accounting concepts, and accounting conventions.
Chapter 3	▪ Concepts and provisions of Indian and international accounting standards relating to the classification and measurement of assets and liabilities, thus providing a base for further understanding and interpretation of financial statements.
Chapter 4	▪ Foundation of accounting *i.e.*, mechanism of double entry system, recording of monetary transaction in journal/subsidiary books, posting to ledger accounts, preparation of trial balance, and opening and closing entries.

Chapter 5	▪	Mechanism for preparing final accounts – financial statements, rectification of errors, provision for depreciation, provision for doubtful debts, adjustment in final accounts and preparation of adjusted trial balance.
Chapter 6	▪	Fundamentals of final accounts – financial statements of limited liability company (LLC), managerial remuneration and divisible profits of a corporate entity.
Chapter 7	▪	Financial performance analysis – ratio analysis (which is a prominent tool to evaluate financial health of a business enterprise), calculation of the ratios, mechanism to use these and its importance for different stakeholders and discriminant analysis.
Chapter 8	▪	Mechanism of preparing fund flow statement and the mechanism of drawing inferences for different stakeholders.
Chapter 9	▪	Provisions of Indian and international accounting standards relating to the preparation of cash flow statement and the fundamentals of making inferences from the statement.
Chapter 10	▪	Mechanism for inventory valuation and its control, basic input relating to accounting for inventory, and provision of AS–02 relating to valuation and accounting for inventory.
Chapter 11	▪	Provisions of Indian and international accounting standards relating to accounting for capital expenditures – fixed assets – property, plant and equipment, recognition of intangible assets and impairment of assets.
Chapter 12	▪	Recognition and measurement of liabilities, provisions of accounting standards regarding liabilities, particularly post-retirement employee benefits and contingent liabilities.
Chapter 13	▪	Complex and new subject of accounting *i.e.* accounting for derivatives – option, futures and forward, provisions of accounting standards relating to foreign exchange transactions and the mechanism of incorporating these transactions in the financial statements.
Chapter 14	▪	Mechanism relating to accounting for issue of shares and debentures, fundamentals and accounting mechanism relating to forfeiture of shares and redemption of debentures.
Chapter 15	▪	Accounting mechanism for business combination – merger and amalgamation, provisions of IFRS–03 and AS–14 (as well as Ind – AS 103) concerning business combination.
Chapter 16	▪	Mechanism for preparing consolidated financial statements and corporate relationship – associate companies, holding and subsidiary companies.
Chapter 17	▪	IFRS and its implementation across the globe, IFRS and its comparison with Indian GAAP.
Chapter 18	▪	Lease financing, its types, and mechanism of leasing; accounting mechanism applicable for lessor and lessee.

Chapter 19	▪	Discusses the end result of accounting *i.e.* ANNUAL REPORT – its preparation and presentation, corporate governance, IFRS and annual report, Indian GAAP and annual report, and global reporting initiatives.
Appendices	▪	**Appendix I:** explains about window dressing – creative accounting, earning management and the concept of forensic accounting and forensic auditing.
	▪	**Appendix II:** case studies
	▪	**Appendix III:** discusses most recent changes in the field (applicable from *01st April, 2011)* – Indian Accounting Standards (Ind AS), changes to schedule VI to Companies Act, 1956 etc.

THE PEDAGOGY

The pedagogy of the book has been designed keeping in mind the requirement of making the book as student-friendly as possible. This will help the average student as well as even those students who do not have any background in this subject.

Theoretical concepts: Theoretical aspects like accounting concepts and conventions, forms of business enterprises, different types of capital, common accounting practices, provisions of accounting standards (Indian as well as international), accounting mechanism, rules for preparing books of accounts, etc. have been discussed in a reader-friendly manner using simple language, in order to help the students establish a base for advanced learning in the field of accounting.

Practical applications/Numerical examples: Preparation and presentation of financial statements and making inferences from published financial statements have been discussed to make the readers understand how the theoretical concepts are applied in the real world.

Real-life case studies: Monetary transaction is one of the most important activities of corporate world. Thus, accounting becomes the business language in this world order, as it helps in achieving and analyzing the monetary transaction or business activity. In order to illustrate to the readers' further application of accounting theory and concepts, case studies from published annual reports have been discussed so that they can establish connection between the subject and its relation with real-life.

Illustrative case studies: The opening vignette at the beginning of each chapter, chapter-end questions, and case studies at the end of each chapter have been discussed using simulated data, depicting application of accounting concepts and theory in real-life.

PRESENTATION STYLE - FEATURES

Rich in-text features have been developed to make the readers' journey through the book interesting and also to aid in developing knowledge base in the subject.

Learning objectives: They have been given at the beginning of each chapter, to familiarize the readers about the broad coverage of the particular chapter. They work as a reference point to measure the depth of the chapter.

Opening vignette: Again at the beginning of each chapter, it provides a setting for discussing various themes in the chapter.

'Useful info' and 'Margin notes': At several places in the chapters, these two features provide ready reference on important concepts.

Boxed items: In each chapter certain important concepts have been presented as boxed items, so as to draw attention of readers.

Exhaustive text: Concepts in each chapter have been explained in an easy and simple language with the help of illustrations, legal provisions, mechanism, procedures and tricks to prepare books of accounts, among others. Recap at the important junctures of the chapters have been included for facilitating comprehension.

Solved examples: Each chapter includes solved examples illustrating the concepts discussed therein. They help in reinforcing the concepts learnt in the chapter.

Key Terms and Final Recap: At the end of each chapter, important terms introduced in the chapter have been given, followed by recapitulation of important points and concepts discussed.

Chapter-end exercises with hints and answers: At the end of each chapter, rich exercises with a variety of questions have been included to help students practice and evaluate their learning. The exercises are based on the question asked in the examinations of various universities / institutions in the past years. The questions are of different types – multiple choice questions, descriptive questions, and numerical problems. The hints and answers to these have also been provided for the benefit of the students.

Cases: Case(s) at the end of each chapter, is meant to give the readers an idea of how the theoretical concepts studied in the chapter are put into practice in real-life.

Model question papers: Two model question papers have been included at the end of the book for the benefit of the students. The detailed solutions to these question papers will be available on the companion website of the book.

Some important changes in the legal regulations were implemented at the time this book was in the final stages. These have been discussed in Appendix III of the book.

Rich online supplements for the instructors' as well as the students are available on the companion website of the book. Apart from this, an interactive platform has been developed on facebook (www.facebook.com/Financial.Accounting.Khatri) so that the readers can interact directly with the author. The readers can also write to me at the e-mail ID given below, with their queries and suggestions.

I am hopeful that this book with wide coverage and rich features will be useful for the students, particularly those in the management stream. I would be keen to receive valuable comments and suggestions from the readers.

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From the author

Moulding intangible intellectual matter into the form of something tangible like a book is the outcome of synergy of efforts by many people supporting an author.

First and foremost, I express my gratitude to my spiritual guru *ji* and parents who made me capable of becoming an author. I express my deep hearted thanks to my family, especially my wife—Annu, daughter—Prachi, and son—Aaditya. This book would not have been possible without their constant encouragement and support.

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I am thankful to Prof. Nageshwar Rao, Vice-Chancellor, UPRTOU, Allahabad, he is also the Chief Editor of Journal of *Indian Accounting Association*, for his consent to contribute the foreword for this book.

My sincere thanks are also due to various individuals and organizations for being the source of examples, illustrations and cases included in the book. These have been included with the sole purpose of aiding class discussion, and without these the book could not have come out in the present form.

I acknowledge the support of all the individuals who knowingly or unknowingly supported me in bringing out this book.

From the Publisher

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Model Curriculum

FINANCIAL ACCOUNTING

This model curriculum has been developed on the basis of syllabi for the financial accounting paper prescribed in different courses of universities and institutions across India. The focus, however, has been on the MBA / PGDM courses.

This curriculum is being suggested with the view to enable the readers acquaintance with the subject matter in a well-organized, objective, and structured manner. It will also help the faculties to develop their course plan and make the best use of this book for their teaching.

Section A – Fundamentals

Business organization and accounting – forms of business organizations, owner's capital and borrowed capital, financial, management and cost accounting, basic accounting fundamentals – double entry system of accounting, and books of accounts.

Accounting cycle: mechanism of preparing books of accounts – rules for journalization, posting to ledger accounts and preparation of trial balance, cash system *vs*. mercantile system of accounting, accounting concepts and conventions, classification of transactions, subsidiary books and accounting for inventory – valuation and control, adjustments and preparation of final accounts of sole enterprise.

Section B – Regulatory Environment

Provisions of accounting standards (Indian GAAP, international accounting standards and IFRS) – recognition, classification and measurement of assets and liabilities, revenue recognition, capital expenditures and revenue expenses, depreciation and impairment of assets, intangible assets – amortization and impairment, Indian accounting standards *vs*. international accounting standards, an overview of IFRS and Ind AS.

Section C – Company Accounts

Completion of accounting cycle: final accounts – financial statements of limited liability company (LLC), measurement of business income, recognition of revenue, expenses, assets and liabilities, provisions of Companies Act, 1956 - Schedule VI to Companies Act, 1956, divisible profits, managerial remuneration.

Company accounts – accounting for issue and forfeiture of shares, issue and redemption of preference shares and debentures, accounting for business combination – amalgamation and merger, consolidated financial statement.

Published accounts – annual report: its presentation and format, corporate governance.

Section D – Tools for Financial Analysis

Analysis of financial performance – ratio analysis, discriminant analysis, fund flow and cash flow analysis, creative accounting – window dressing, forensic accounting and forensic auditing.

Section E – Advance Accounting and Contemporary Issues

Accounting for leasing, recording transactions relating to financial derivatives – option, futures and forward, accounting for foreign currency transactions, recent changes in the field of accounting – global financial reporting initiatives.

MODEL CURRICULUM – MAPPING WITH THE BOOK

Business organization and accounting – forms of business organizations, owner's capital and borrowed capital	Chapter One
Financial, management and cost accounting, cash system vs. mercantile system of accounting, accounting concepts and conventions	Chapter Two
Basic accounting fundamentals – double entry system of accounting and books of accounts, accounting cycle, mechanism of preparing books of accounts – rules for journalization, posting to ledger accounts and preparation of trial balance, subsidiary books	Chapter Four
Classification of transactions, subsidiary books	Chapter Three
Accounting for inventory, valuation and control	Chapter Ten
Adjustments and preparation of final accounts of sole enterprise	Chapter Five
Provisions of accounting standards (Indian GAAP, International accounting standards and IFRS)– recognition, classification and measurement of assets and liabilities, depreciation and impairment of assets, intangible assets – amortization and impairment	Chapters Three, Eleven and Twelve
Revenue recognition, capital expenditures and revenue expenses	Chapter Six
Indian accounting standards vs. international accounting standards, An overview of IFRS and Ind AS	Chapter Seventeen and Appendix III
Completion of accounting cycle: final accounts – financial statements of limited liability company (LLC), measurement of business income, recognition of revenue, expenses, assets and liabilities, divisible profits, managerial remuneration	Chapter Six
Provisions of Companies Act, 1956 - Schedule VI to Companies Act, 1956	Appendix III

Company accounts – accounting for issue and forfeiture of shares, issue and redemption of preference shares and debentures	Chapter Fourteen
Accounting for business combinations – amalgamation and merger	Chapter Fifteen
Consolidated financial statement.	Chapter Sixteen
Published final accounts – annual report: its presentation and format, corporate governance.	Chapter Nineteen
Analysis of financial performance – ratio analysis, discriminant analysis.	Chapter Seven
Fund flow and cash flow analysis	Chapters Eight and Nine
Creative accounting – window dressing, forensic accounting and forensic auditing.	Appendix I
Accounting for leasing	Chapter Eighteen
Recording transactions relating to financial derivatives – option, futures and forward, accounting for foreign currency transactions	Chapter Thirteen
Recent changes in the field of accounting – IFRS and Ind AS, global financial reporting initiatives	Chapter Seventeen and Appendix III

List of Accounting Standards*

Accounting Standard (AS)	*Corresponding Ind-AS*	*Chapter in the book*
AS-1 Disclosure of accounting policies	Ind-AS 1; Ind-AS 101	One & Appendix III
AS-2 Valuation of inventory	Ind-AS 2	Two & Ten
AS-3 Cash flow statement	Ind-AS 7	Nine
AS-4 Contingencies and events occurring after the balance sheet date	Ind-AS 10	Two
AS-5 Net profit or loss for the period, prior period items and changes in accounting policies	Ind-AS 8	Two
AS-6 Depreciation of fixed assets	Ind-AS 16	Eleven
AS-7 Construction contracts	Ind-AS 11	Six
AS-9 Revenue recognition	Ind-AS 18	Two & Six
AS-10 Fixed asset	Ind-AS 16	Eleven
AS-11 The effects of changes in foreign exchange rates	Ind-AS 21	Thirteen
AS-12 Accounting for government grants	Ind-AS 20	Six
AS-13 Accounting for investment	Ind-AS 28	Sixteen
AS-14 Accounting for amalgamation	Ind-AS 103	Fifteen & Appendix III
AS-15 Accounting for employee benefits, post retirement employee benefits	Ind-AS 19	Six & Twelve

*The Accounting Standard have been discussed in this book

As-16 Accounting for borrowing costs	Ind-AS 19	Six
AS-17 Segment reporting	Ind-AS 108	Nineteen & Appendix III
AS-18 Related party disclosure	Ind-AS 24	Nineteen
AS-19 Accounting for leases	Ind-AS 17	Eighteen
AS-20 Earning per share (EPS)	Ind-AS 33	Nineteen & Appendix I
AS-23 Accounting for investments in associates and consolidated financial statements	Ind-AS 27	Sixteen
AS-24 Discontinuing operation	Ind-AS 105	Nineteen & Appendix III
AS-25 Interim financial report	Ind-AS 34	Nineteen
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The cases used in this book have been prepared by the author, either on the basis of imaginary data, or data taken from published sources, with the sole purpose of aiding discussion of the subject matter. They are not meant to serve as endorsements, or sources of data, or illustrations of effective or ineffective management.

List of Alternate Terms Used in Accounting

Terms generally used in accounting	*Alternate terms used in accounting*
Absorption	Acquisition
Accounting Equation	Balance Sheet Equation
Accounting Year	Financial Year
Accrual System of Accounting	Mercantile System of Accounting
Acquired Company	Amalgamated Company/Vendor Company
Acquiring Company	Amalgamating Company/Purchasing Company
Authorized Capital	Registered Capital
Balance Sheet	Statement of Financial Position/Statement of Affairs
Bonus Issue	Capitalization of Profits
Borrowed Capital	Debt Capital
Business Combination	Amalgamation
Buyer of Option	Holder of Option
Carrying Amount	Book Value
Current Assets	Short-term Assets
Current Liabilities	Short-term Liabilities
Demerger	Spin-off
Equity Share	Ordinary Share, Common Stock
Face Value	Par Value
Financial Statements	Final Accounts

Gilt Edged Securities	Government Securities
Inventory	Stock
Journalizing	Book-keeping
Ledger	General Ledger, Common Ledger, Principle Book of Accounts
Limited Liability Company	Joint Stock Company, Corporate Business Entity
Non-current Assets	Long-term (Fixed) Assets
Non-current Liabilities	Long-term Liabilities
Non-systematic Risk	Avoidable Risk/Diversifiable Risk
Other Income	Indirect Income
Owner's Equity	Share Capital, Risk Capital
Perpetual Bonds	Non-redeemable Bonds
Proprietary Funds	Owner's Funds/Shareholders Funds/Net Worth
Publicly Traded Company	Listed Company
Purchase Book	Purchase Day Book
Purchase Return	Return Outward
Quick Ratio	Acid Test Ratio/ Liquidity Ratio
Sales Book	Sales Day Book
Sales Return	Return Inward
Seller of Option	Writer of Option
Solvency Ratio	Leverage Ratio
Statutory Audit	External Audit
Straight Line Method of Depreciation	Flat Rate Method of Depreciation
Systematic Risk	Unavoidable Risk/Non-Diversifiable Risk
Trade Creditors	Accounts Payables /Sundry Creditors
Trade Receivables	Accounts Receivables/ Book Debts/ Sundry Debtors
Traditional Financial Instruments	Plain Vanilla Financial Instruments
Unearned Income	Income Received in Advance
Voucher	Bill
Written Down Value (WDV) Method of Depreciation	Reducing Balance Method of Depreciation
Zero Coupon Bonds	Deep Discount Bonds/Debentures

Brief Contents

Contents

CHAPTER

1

Business Organization and Accounting

Learning Objectives

After reading this chapter, you will be able to

- Understand the risk appetite and forms of business organization
- Classify sources of finance used by a limited liability company and identify non-conventional sources of finance
- Explain the concept of valuation and its mechanism
- Gain an insight into the elementary concept of preparation of final accounts
- Define and understand corporate democracy—reality or myth
- Know return on equity shares and identify valuation of firm
- Comprehend corporate financial reporting (presentation of financial results of a company) and evaluate qualitative parameters of annual report

Saloman vs Saloman—An Eye Opener to Understand Separate Legal Entity

Saloman was a sole trader who used to make shoes and sell those from his sole enterprise under the banner of **Saloman Enterprises**. He used to procure the raw material on credit from suppliers and enjoyed a sound goodwill in the market. One day, he converted his sole enterprise into a limited liability company namely **Saloman and Saloman Limited**. People could not understand much and considered it as a change of the name and nothing else. The promoters who subscribed the shares of the company were Saloman himself, his wife and his five children. They contributed in total $7,00,000. After a few days, the company issued debentures of $10,00,000, which were also subscribed by the same seven equity shareholders. The liability of Saloman and Saloman Limited as on March 31, 1895 showed a total of $25,00,000, which included equity and debentures as given above and trade creditors of $8,00,000. Of course, the book value of assets was also $25,00,000 but most of the assets were outdated and were penniless. Saloman appealed to court for bankruptcy. After completing the legal procedure, the court ordered the closing of the company and a legal receiver was appointed. The trade creditors to whom the company owed $8,00,000 could come to know the fact that the assets of the company were likely to realize $6,50,000 and the personal property of Saloman was worth $4,00,000. By following the same legal entity concept of the owner and that of the sole business enterprises, they had a faith that they would recover their dues from Saloman and Saloman Limited, collectively from the business assets and from the personal wealth of Saloman. But the legal receiver sold the business assets in $6,50,000 and paid off the dues of debenture holders and paid nothing to trade creditors. The trade creditors appealed to the court saying thereby that the entity of Saloman and his family members as owners and that of the company was same. Accordingly, the money realized by the legal receiver should be used in paying off the dues of trade creditors. But the honourable court gave a verdict that the concept of same legal entity is applicable only in case of sole enterprises and partnership but not in case of a limited liability company. Even if a shareholder is also the debentures holder, he/she has a priority over the rest of the unsecured creditors. The liability of the equity owners (shareholders) is limited and not unlimited as it is in case of sole enterprises and partnership.

RISK APPETITE AND STRUCTURE OF BUSINESS FIRMS

An entrepreneur has the option of starting the business firm or business organization in any of the forms, such as sole enterprises, partnership or limited liability company (LLC), i.e., joint stock company. One of the factors affecting the selection of the form of business organization is the risk-bearing capacity of the entrepreneur, as different business organizations have different risk for the owners, i.e., equity participants. In spite of the fact that a limited liability company facilitates running the business at a large scale as compared to sole enterprises, it entails comparatively less risk.

Risk is the chance of having a loss or less amount of profit as compared to the expected profit. This risk might even result into wiping out the whole capital contributed by the owner, i.e., equity stakeholders.

USEFUL INFO

Factors affecting selection of the form of business firm/organization:
- Risk appetite of the owner
- Scale of operation
- Amount of capital
- Owner's desire for control

Why is Limited Liability Company Less Risky as Compared to Sole Enterprises?

When one runs the business as sole entrepreneur, the separate entity concept gets activated partially, i.e., the owner and the business organization are separate from each other from the account point of view and not from the legal viewpoint. The implication of this is that the **liability of the owner is unlimited,** in case of sole enterprises the personal property of the owner can be used to fulfill the losses, if business assets are not sufficient to fulfill the business losses/external liabilities.

In case of a limited liability company, the separate entity concept gets completely activated and there is a pure distinction between the entity of owners (equity contributors) and the business organization—both are separate from each other from accounting as well as from legal viewpoint. This implies that **the liability of the owners (shareholders) is limited** only up to the amount of capital contributed by them and in none of the cases, the personal property of the owners can be used to fulfill the business losses, if business assets fall short in repaying the business liabilities.

TYPES OF BUSINESS ENTITY

Business entity is an organization that carries out some economic activity for profit-making purpose. Economic activity is the one that is money centred—done with money and done for money to earn money. Different business activities are trading, manufacturing and services (such as banking, insurance and transportation).

We shall discuss about three types of business entity as in the following:

- Sole enterprise
- Partnership
- Limited liability company, i.e., joint stock company

Sole Enterprise

It is a business enterprise that is managed by a single owner. It is the single owner who bears the risk of running the business and reaps out the profit. Practically, the owner always has the residual claim on the profits and the assets of the business organization. A sole entrepreneur has **unlimited liability**. If business property is not sufficient to repay the external liabilities of business, the personal property, including house, personal belongings, bank deposits, etc., of the owner can be utilized to pay off the business liabilities. This fact makes it more risky as compared to a limited liability company.

A sole enterprise is a business entity that is owned by one person who contributes towards the required capital as owner's equity.

USEFUL INFO

Features of sole enterprises:
- Single owner • Single owner contributes the capital • Single owner bears the risk
- Unlimited liability of owner • No need for any specific documentation

Partnership

A partnership is the result of an agreement of doing business between partners. Under partnership, the business organization is called the **firm**, that is managed by all the partners as per the provisions of Partnership Deed (agreement). The partners share the profit/loss as per the agreement executed by them. There is an agency relationship between/among the partners. The partnership firm does not enjoy the benefit of a separate legal entity. As a result, the partners, i.e., the owners of the partnership firm, own **unlimited liability**.

A partnership is the outcome of an agreement between two or more people for doing some business activity.

USEFUL INFO

Features of partnership:
- Two or more owners • Maximum 10/20 partners • Agency relationship
- Unlimited liability • Capital contribution is not the pre-condition to become a partner
- Governed by agreement between partners • Registration not obligatory but optional

Limited Liability Company

A limited liability company is a business enterprise that is an association of a large number of contributors who contribute towards the capital for business purpose. The capital contribution by the contributors is in the form of shares; therefore, they are called **shareholders**.

A limited liability company is also called a **joint stock company** or **corporate business entity**. The limited liability company is subject to the provision of Companies Act. Apart from the provisions of the Companies Act, there are several other Acts and legal provisions regulating the functioning of a company. The owners, i.e., the shareholders of the company, are not involved directly in the management of a company; instead they appoint a board of directors that is responsible for the management of the company. Due to this, a company has the feature of **separation of ownership and management** that is not the feature of sole enterprise or partnership.

A limited liability company is a business enterprise that is an association of a large number of contributors who contribute towards the capital for business purpose.

Table 1.1 compares these three types of business entities—sole enterprise, partnership and limited liability campany.

TABLE 1.1 A Comparative View of Forms of Business Organization

Point of Difference	Sole Enterprise	Partnership	Limited Liability Company
Number of Owners	One only	Min. 2 and Max. 10/20	For public limited company, min. 7 and max. no limit. For private limited company, min. 2 max. 50.
Accounting Entity	Separate	Separate	Separate
Legal Entity	Same	Same	Separate
Separation of Ownership and Management	No	No	Yes
Agency Relationship	Not applicable	Partners act as an agent of each other	Shareholders do not act as an agent of each other
Perpetual Succession	Yes	No	Yes
Registration	Not required	Not required	Yes required
Capital	Represented in rupees only	Represented in rupees	Represented by shares having face value
Winding up	Without much legal procedure	Without much legal procedure	With full legal compliance
Publication of Financial Statements	Not applicable	Not applicable	Yes, in the form of annual report, for listed company in the newspaper also.

LIMITED LIABILITY COMPANY—MOST TALKED ABOUT FORM OF BUSINESS ORGANIZATION

According to the Companies Act, a limited liability company is an artificial entity created by law, i.e., the **registration of the company with Registrar of Companies (ROC)** is a must, having a common seal, separate legal entity, perpetual succession and it can be wound up through a legal process only.

A limited liability company is a business set-up under the Companies Act which grants it a legal separate entity from its owners, i.e., shareholders.

USEFUL INFO

Features of limited liability company:
- Legal separate entity
- Limited liability of owners, i.e., shareholders
- Separation of ownership and management
- Capital represented by shares
- Risk sharing by large number of shareholders
- Shareholders have residual claim
- Can be closed through legal procedure only

A limited liability company, also called **joint stock company,** enjoys the status of a legal separate entity.

The capital contribution in a company is done by issuing the shares to the willing entities, who want to become the part of the company. In case of a limited liability company, the entity of the owners and of the business enterprise (company) is separate even from the legal viewpoint. The practical implication of this provision is that the owners, i.e., the shareholders have **limited liability** and the personal property of the equity stakeholders (equity owners) cannot be used to fulfill the business debts.

Every company works on the concept of separation of ownership and management. In a company, each shareholder does not enjoy the privilege of managing the business as it happens in a partnership firm. All the shareholders collectively appoint a team of directors called **board of directors** (BOD). This BOD is responsible to manage the business affairs on behalf of the shareholders. The appointment of directors and the other strategic decisions are taken in the meeting of shareholders by casting votes in proportion to the shares held by the shareholders.

The equity shareholders have the real **residual claim** on the profit and the asset of the company as well. The shareholders cannot demand the distribution of the profits as it happens in case of a partnership. The distribution of profit as **dividend** is proposed by the directors of the company and approved by the shareholders in the annual general meeting (AGM) of the shareholders; then only the shareholders are entitled to the profits of the company as dividend, that too as per the resolution passed in the meeting of the shareholders.

The promoters, i.e., the founder members of a company prepare two legal documents to establish the business in a company form. These documents are memorandum of association (MoA) that gives the introduction of the company to the rest of the world and also binds the company into outer functions periphery by having objective clause in it. Another document is articles of association (AoA) that is an internal document containing the policies and strategies to be followed by the company in achieving the objectives.

Types of Limited Liability Companies

A limited liability company can be established in two basic forms—public limited company and private limited company. The difference is how they register themselves and accordingly, they are governed by legal provision.

Public Limited Company

A public limited company is the one that is promoted by seven promoters and does not impose certain restrictions as applicable on a private limited company. This company can raise the capital by issuing securities—shares and debentures through a public issue. **Public issue** means inviting general public through mass media to subscribe towards the capital of the company. Public issue may be an **IPO or FPO.** A public limited company can commence the business only after obtaining a letter of commencement of business from the ROC.

A public limited company is the one that is started by seven promoters and can arrange the capital by issuing the shares through a public issue—**initial public offer (IPO); further public offer or follow-on public offer (FPO)**.

IPO vs FPO

Launching of a maiden public issue by a company is called **IPO**. In IPO, the general public is invited through mass media to contribute towards the capital of the company, i.e., by issuing the shares of the company to public.

Launching of a public issue any time after the first public issue of the company is called **FPO.** In FPO, general public is invited through mass media to contribute towards the capital of the company, i.e., by issuing the shares of the company to public.

Shares issued through IPO or FPO must be listed on a recognized stock exchange.

Private Limited Company

A private limited company is the one that is promoted by two promoters and follows certain restrictions on its working. The most practical limitation on a private limited company is not to issue shares/debentures through public issue—IPO or FPO. It can raise the capital by issuing the shares/debentures through private placement or rights issue only. There are certain legal restrictions on a private limited company as in the following:

- It cannot come out with a public issue.
- It cannot have more than 50 Shareholders.
- Its shares are not transferable freely as that of a public limited company.

> A private limited company is the one that can be promoted by two promoters and cannot arrange the capital by issuing shares through public issue—IPO or FPO.

USEFUL INFO

Types of limited liability companies:
- Public Limited Company
- Private Limited Company
- Government Company
- Holding vs Subsidiary Company
- Chartered Company

The companies can further be classified on the basis of control through shareholding pattern. A company in which government holds at least 51% shareholding having voting rights or it is controlled by the government is called **government company**. Such company may either be a public limited or a private limited company. A public limited or private limited company can be a holding company or a subsidiary company. A **holding company** is the one that holds at least 51% shares having voting rights or exercises control on the other company. The company being controlled by the holding company is called **subsidiary company.** All these companies are governed by the legislation of Companies Act. Other forms of companies, such as **chartered company**, are established as a result of promulgation of the order by a king/queen or Parliament. Such companies are governed by the provisions of the charter passed by the promulgating authority.

CAPITAL OF A FIRM—THE BACKBONE

It is the capital that gives functional capacity to a company—without the functional capacity, it cannot perform in the competition. Without sufficient capital, a company cannot function properly because the capital is like a mobilizing agent that brings rest of the factors in motion. In a limited liability company, the capital can be classified as in the following:

- Owners' Equity–Share Capital
- Borrowed/Debt Capital

Owners' Equity

It includes the amount of paid-up capital contributed by the shareholders and the retained profits held in the company that belongs to the equity shareholders. These are the promoters of a company who arrange the initial capital by subscribing to the shares capital of the company, whereas rest of the public is invested by general public by purchasing the shares of the company. The capital contributed by the owners–shareholders is called **share capital**. Shares can further be classified as **equity shares** and **preference shares**. Equity shareholders having voting rights and residual claim are called **real owners** of a company. The sum total of the capital contributed by equity owners and retained earnings is collectively called **equity shareholders' net worth**.

Why is Owners' Capital Called Risk Capital?

Owners' equity is like a cushion to absorb the loss of business enterprises. It provides a hedge against the risk of business enterprises. **Risk** is the chance of having a loss in the business. It works as a safety net to cover the losses of the business enterprises. Being risk absorber, it is also called **risk capital**. It has the **residual claim** on earning and assets that makes equity capital a risk capital.

Example: Capital structure of a company comprises equity capital of ₹ 200 lakh, preference shares ₹ 100 lakh and debentures of ₹ 250 lakh. Assets of the company are also worth ₹ 550 lakh. Let us suppose the company is wounded up but assets of the company realize only ₹ 325 lakh; in this case, debentures holders will be paid in full and preference shareholders will be paid ₹ 75 lakh (325–250) The equity shareholders will not be paid anything. This shows that they will bear the loss. If assets realize ₹ 400 lakh, the debenture holders and preference holders will be paid in full and remaining ₹ 50 lakh (400–250–100) will be paid to equity shareholders. Similarly, the equity shareholders have the residual claim on the profits of the company.

This example shows that the equity shareholders have **residual claim** and the equity share capital works as **risk capital**.

The above discussion explains that the share capital, particularly equity share capital is called **risk capital**. Therefore, a company having the larger proportion of share capital in the capital structure is **less risky** as compared to another company with a low proportion of share capital in the capital structure.

Important Terms Related to Share Capital

Share is the smallest unit in which the total capital of a company is divided into. **Share capital** is represented as follows in the balance sheet of the company.

- **Authorized share capital** is the maximum amount of capital that a company can raise by issuing both equity and preference shares during its lifetime. However, it can be increased or decreased by passing a resolution in the meeting of shareholders. A company gets registered with this amount of capital; therefore, it is also called **registered share capital** of the company. For example, a company gets registered with a capital of ₹ 1,500 crore represented by 100 crore equity shares of ₹ 10, amounting to ₹ 1,000 crore and 5 crore 12% preference share of face value ₹ 100, amounting to ₹ 500 crore.
- **Issued share capital** is such a proportion of the authorized share capital for which application is invited by the company for subscription by the public through any of the modes of issuance of shares. It can never exceed the amount of authorized share capital. For example, out of the authorised capital of ₹ 1500 crore, the company invites application for 70 crore shares of ₹ 10, each to be paid in full at the time of application. Here, the issued capital is ₹ 700 crore.
- **Subscribed share capital** is such a proportion for which the company issues the shares to public out of the issued share capital. And **paid-up share capital** is the amount that is actually paid by the subscribers.
- **Uncalled share capital** is such an amount out of the subscribed capital that has not been called up by the company. This gets created only when the company issues partly paid-up shares. Sometimes, companies issue partly paid-up shares and pass a resolution in the meeting of shareholders to the effect that the uncalled-up amount need not to be called up during the routine course of business. It is to be kept in reserve to be called only to fulfill the shortfall in the event of liquidation of the company. This amount of capital that is reserved like this is called **reserve capital**.
- **Face value** of a share is the value at which it is recorded in the books of accounts as capital and it is printed on the share certificate also. Shares may be issued by the company at par—at the face value,

at a premium—at a price more than the face value the amount over and above face value is called the **premium**, or at a discount, at a price less than the face value. When shares are issued at a premium, the issuing company has the onus to justify the premium being charged. The premium charged on the issue of shares is called **securities premium** and shown under the heading reserves and surplus on the liability side of the balance sheet; whereas the **discount** on issue of shares is a loss for the issuing company and shown as a fictitious asset in the balance sheet to be amortized in due course of time.

- **Book value** of a share is determined after considering the retained profits; it is represented as book value per share. The book value is nothing but the total equity net worth divided by the number of equity shares outstanding. **Net worth** is the sum total of paid-up equity shares capital and retained profits after adjusting the fictitious assets.

Borrowed Capital or Debt Capital

Borrowed capital is the amount of finance arranged by taking a loan or by issuing debentures to mobilize the funds. It is also called **debt capital**. On the debt capital, the company has the obligation to make the payment of the interest, irrespective of the profits or losses. The interest payment is like a legal and contractual obligation of the company. The debenture holders do not have any voting right as equity shareholders have. The contributors of the borrowed capital are categorized as **money lenders** and they are accorded priority over owners–shareholders of the company. Such preference is prevalent in making the payment of interest and making the repayment. Debt capital can be arranged either by taking a loan from a bank/institution or by issuing a debenture.

A **debenture** is an acknowledgement of the loan funds arranged by the company from general public. It is a debt instrument evidencing loan taken by the company from general public.

SOURCES OF CAPITAL FOR A COMPANY

A company arranges the capital by issuing different types of securities (shares/debentures) in the primary market. The isssue of the securities in the primary market is completely regulated by the provisions of Securities and Exchange Board of India (SEBI). Sources of capital as used by a limited liability company are broadly classified as long-term sources and short-term sources.

USEFUL INFO

Long-term sources of capital:

- Owner's Capital
  - Equity shares
  - Preference shares
- Debt Capital
  - Debentures
  - Long-term loan

Short-term sources of capital:

- Commercial Papers
- Bills of Exchange

Long-Term Sources of Capital

Long-term sources of capital are the one for which repayment by the company is to be made after a long-time period. Generally, this period is beyond five to ten years and in certain cases, these offer life-long source of capital, such as equity shares. Equity shares, preference shares, debentures, long-term loan, mortgage loan are the examples of long-term sources of capital for the company (Table 1.2). Long-term sources of capital are broadly classified as owner's capital and debt capital/borrowed capital.

TABLE 1.2 **Comparative View of Sources of Capital**

Point of Difference	Equity Shares	Preference Shares	Debentures/Loan
Voting Right	Yes	No	No
Preference	Last preference in income distribution and at the time of winding up of the company	Preference over equity shareholders in income distribution and at the time of winding up of the company	Preference over preference shareholders and equity shareholders in income distribution and at the time of winding up of the company
Residual Claim	Yes	No	No
Maturity	Perpetual	Yes, redeemed/converted into equity shares at the end of maturity period	Yes, redeemed/converted into equity shares at the end of maturity period
Conversion	Not applicable	Yes, convertibles are converted into equity shares	Yes, convertibles are converted into equity shares
Bonus and Rights	Yes	No	No
Fixed Dividend/Interest	No, payment of dividend changes from year to year	Fixed percentage of dividend	Fixed percentage of interest
Incidence of Dividend/ Interest Payment	If profits then subject to the approval in AGM	Conditional, subject to the availability of sufficient profits	Payment of interest is a legal and contractual obligation of company
Market Value	Changes very frequently	Does not change frequently	Does not change frequently

Owner's Capital

The amount of capital belonging to owners, i.e., shareholders of the company is called **owner's capital**. Owner's capital comprises paid-up share capital and net amount of reserves and surplus.

> Capital structure is the composition of long-term sources of capital used by a company.

Equity Shares The capital of a company is represented by shares; a **share** is the unit to represent the capital of the company. **Equity share** represents real ownership of the company. The holders of the equity shares have voting rights. They have the power to cast their votes in the meeting of shareholders in proportion to their holding. Equity shares are also called **common stock** or **ordinary shares.** These are also called the **shares with residual claim.** These shares do not have any maturity period. At the same time, the company does not promise any fixed dividend. The dividend on these shares is paid after considering the level of profits and the factors, such as liquidity, market trends, investment opportunities for the company, etc.

Preference Shares Preference shares are accorded preference over equity shares; such preference is given at the time of dividend distribution and also at the time of liquidation of the company. A company promises a fixed percentage of dividend on these shares, the payment of which depends upon the availability of sufficient divisible profits. These shares either have a fixed maturity period or get converted into the equity shares/debentures of the issuing company. All the terms and conditions regarding redemption/conversion are specified by the company at the time of issue of preference shares.

> Capital structure comprising borrowed capital along with owner's capital is called **leveraged capital** structure.

USEFUL INFO

Types of Preference shares:
- Redeemable vs Non-redeemable
- Convertible vs Non-convertible
- Participating Preference Shares

Because of a fixed dividend and no privilege for rights and bonus shares, these shares do not command high market value, such as equity shares.

Borrowed Capital or Debt Capital

Debt capital is the amount of capital that is borrowed from an external agency, such as bank, financial institution or from public issuing debentures. On the debt capital, the company has the legal obligation to make the **payment of interest** and repayment of the principal amount to the loan provider or debenture holders. **Interest** is the cost of using debt capital for the company and it is a reward for the loan provider and debenture holders. **Borrowed capital** is also called **debt capital** or **loan capital**. It comprises the following:

USEFUL INFO

Types of Debentures
- Redeemable vs Non-redeemable
- Convertible vs Non-convertible
- Debentures with warrants
- Debentures with option
- Deep discount debentures/Zero coupon bonds
- Floating rate debentures
- Index linked debentures

Debentures It is like an acknowledgement evidencing debt of the company. It is a kind of loan taken by the company from general public; these carry a coupon rate called **rate of interest**. Interest on these is generally paid six monthly and the payment of it is a legal obligation on the part of the issuing company. The company is liable to pay the interest whether it earns the profit or not.

Long-term Loan Long-term loan is the money borrowed from a bank or financial institution the repayment of which is to be made over the long term, i.e., five to ten years or even beyond it. Usually, it is granted by the lending agency—bank or financial institution against the security of the asset. The asset offered as security for the loan is called **collateral security (asset)** and value of such asset is called **collateral value**. When a loan carries the security of an asset, it is also called **secured loan**. A secured loan is issued against the security of the asset through the process of mortgage; therefore, it is also called **mortgage loan**. The secured loan implies that in the event of default, the money lender can recover the loan amount along with the due interest by selling the collateral asset.

Short-Term Sources of Capital

Short-term sources of capital are the one for which repayment is to be made during the short-time duration that is usually between three to five years. It is generally in the form of a loan or an instrument representing features of loan. On this, a payment of interest and repayment of the principal amount is the legal liability of company, i.e., the borrower. A company can arrange a short-term capital by using any of the following instruments:

- Commercial Papers
- Bills of Exchange

Commercial papers (CPs)

It is a promissory note issued as an unsecured debt obligation of the issuing company to raise short-term capital. As these are issued at a discount to face value and redeemed at par on maturity, these do not carry any coupon rate. The difference between the issue price and the maturity value is like a compensation for interest for the holding period. These are issued in negotiable form that brings in the concept of liquidity in these papers.

It is a money market instrument and issued by a large number of companies and commercial banks to raise funds for short term. As per Reserve Bank of India (RBI) rules, only the corporates, who obtain an investment grade rating, can issue CPs. In India, these have a minimum maturity period of 15 days with a maximum of one year.

Bills of exchange

With the help of bills of exchange, sundry debtors get converted into a negotiable instrument. A **bills of exchange** is an unconditional order by the seller to his/her credit customer to make the payment on the specified due date for the value received by him/her. The seller of the goods who writes the bill is called **drawer/holder** of the bill and the buyer of the goods on whom such bill is written is called **drawee/acceptor** of the bill. Once the drawer receives the accepted bill, it becomes bills receivable for him/her and for the acceptor, it becomes bills payable. Bills receivable is a current asset, such as sundry debtors and bills payable is a current liability, such as sundry creditors.

The drawer, also called **holder of the bill**, has three ways to dispose off the bill: (i) hold the bill till maturity (ii) endorse it in favour of another party and (iii) get it discounted with the bank.

NON-CONVENTIONAL SOURCES OF FINANCE

Non-conventional sources are the one that are different from the traditional sources, such as owner's capital and borrowed capital. Usually, companies use following non-conventional sources of finance:

- Lease Financing
- Hire Purchase
- Factoring Services

Lease Financing

With the help of lease financing, the owner of the asset passes the right to use the asset in favour of the user. It is the result of an agreement between the owner of the asset and user of the asset. The user can use the assets as per the terms and conditions specified in the agreement for which he/she is bound to make periodic payment to the owner. The owner of the asset is called **lessor** and the user is called **lesse**.

Finance companies also provide lease finance. The mechanism is such that the lessee identifies the asset as per his/her requirement that is purchased by the finance company and given to lessee on lease. By this mechanism, the lessee can use the asset without making the full payment. In certain cases, a nominal downpayment is to be paid that is adjustable against the lease rental. At the end of the lease term, the lessee has the obligation to return (revert) the asset to the lessor, which implies that the lessee does not become the owner of the asset. All the benefits related to ownership of the asset are vested with the lessor.

Lease financing can be used to fulfill long-term as well as short-term finance needs.

USEFUL INFO

Types of leases:
- Finance lease
- Operating lease
- Sale and lease back
- Cross-border lease
- Dry vs wet lease
- Big ticket lease
- Leveraged lease

Hire Purchase

Hire purchase system of buying the asset is a system in which the buyer does not make the complete payment for the asset at the time of taking the possession of the asset; instead he/she has the obligation to make the payment for the asset in several installments to be paid for a definite time period at a regular interval. The purchaser is called **hire purchaser** and seller is called **hire vendor**. The title to asset transfers in the favour of hire purchaser only when he/she makes the payment of the last installment. In case the hire purchaser defaults in making the payment of instalments, then the hire vendor has the right to repossess the asset and recover the due instalments. The ownership-related benefits are vested with the hire purchaser.

Factoring Services

Factoring is a financial service as well as a means to provide working capital finance for the companies.

Under factoring, the seller of the goods assigns his/her accounts receivables to an agency called **factor**. The factor provides the service of making follow-up with the receivables assigned, makes the collection, maintains the related books of accounts and, in certain cases, provides advance against the receivables factored.

For providing the service, the factor charges his/her commission and interest on the advance provided against the receivables factored. The factoring service can be provided by an agency that is established for this purpose and registered as factor.

With the help of factoring, an organization simply outsources its activities of collection of book debts and maintenance of the related books of accounts; when an advance is provided by the factor, this service also becomes a source of working capital finance. Generally, following types of factoring arrangements can be made:

USEFUL INFO

Types of factoring arrangements:
- Recourse factoring vs non-recourse factoring
- Advance factoring vs maturity factoring
- Full factoring
- Bank-participating factoring
- Cross-border factoring

Recap 1

So far, we have discussed the following topics:

- Forms of business enterprises
- Limited liability company
- Capital of firm
- Owner's capital
- Borrowed capital
- Non-conventional sources of finance

Self-assessment 1

1. Explain different types of business enterprises.
2. Why is a limited liability company less risky as compared to sole enterprises?
3. Differentiate between preference share capital and debentures.
4. Explain lease financing and factoring.

The following topics will be delved into next:

- Publicly traded company and fund-raising mechanism
- corporate democracy—separation of ownership and management
- Valuation of a firm
- Corporate financial reporting
- Structure and component of financial statements (as per IAS-1)
- Internal vs external control
- audit—audited books of accounts
- Case Study: Financial Statement Framework

PUBLICLY TRADED COMPANY AND FUND-RAISING MECHANISM

A company whose shares are traded on a recognized stock exchange is called **publicly traded company**. A public limited company is the one that can raise funds through any of the mechanisms explained here. As soon as a public limited company issues the shares through a public issue mechanism, it is mandatory for the company to get these shares listed on a recognized stock exchange.

USEFUL INFO

Modes of issuing securities (shares/debentures):
- Public issue
- Rights issue
- Private placement
- Public issue through book-building

When shares of a company are traded on a stock exchange, the company is called publicly traded company. A company whose shares are listed on a stock exchange is also called **listed company**. Companies can issue different securities in the primary market by any or all of the following mechanisms. A public limited company can issue these through all the mechanisms but a private limited company can issue the securities through private placement or rights issue.

Listing means including a share in the list of securities to be included in the list of securities to be traded on a stock exchange. On the stock exchange, only listed/permitted shares can be traded. The company is charged with listing fee by the stock exchange.

Public Issue

In a public issue, the general public is invited through mass media, such as radio, television, newspapers, magazines, bill boards, etc. to contribute towards the capital of the company. The general public includes individual investors, financial institutions, mutual funds, banks, high net-worth investors and others. The public issue can be an IPO—Initial Public Offer, FPO—Further Public Offer or Follow-on Public Offer.

USEFUL INFO

The maiden public issue of a company is called IPO. In this, general public is invited through mass media to contribute towards the capital of the company.

The securities issued through a public issue must get listed on a recognized stock exchange within ten weeks from the closing of the issue. The stock exchange is generally the one whose name has been mentioned in the prospectus for public issue. The securities so issued may be at par, at premium or at a discount.

USEFUL INFO

Public issue of a company after the first issue is called FPO. In this, general public is invited through mass media to contribute towards the capital of the company. Such FPO can be brought out several times depending upon the requirement of the company.

As per rules, only a public limited company can issue the securities through the public issue. The prospectus of the public issue is to be wetted by SEBI. The main focus of SEBI is that the company should maintain full disclosure and transparency in the prospectus for public issue.

Private Placement

The invitation to general public for the subscription towards the capital of the company without using mass media is referred to **private placement**. In this, prospective investors are approached by the company personally and individually without the use of mass media. This mode is mainly used by a private limited company. However, a public limited company can also issue the securities by using such media. The listing of the securities so issued is not compulsory; at the same time, the securities issued by a private limited company cannot be listed on a stock exchange. (On June 29, 2005 SEBI amended listing rules, now privately placed debentures can get listed on the stock exchange but not the shares). For example, Stock Holding Corporation of India Limited (SHCIL) is a public limited company; it has issued its shares through private placements only. Bikaji Foods Pvt Ltd, a private limited company, has also issued shares through this mode.

Rights Issue

When securities are offered and issued only to the existing equity shareholders of the company, the issue is referred to **rights issue**. In a rights issue, only existing equity shareholders of the company are offered securities in proportion to their holding in the company; such offer is the entitlement of the shareholders that has the feature of renunciation also. According to the provisions of Companies Act, general public can be invited by a company for the subsequent issue of securities (after the IPO), if a resolution to this effect has been passed by the equity shareholders of the company; otherwise, it has to be a rights issue.

Public Issue through Book-building

Book-building is the reverse mechanism of price fixation for a public issue. In a fixed priced public issue, the issue price is fixed by the company at the time of notification for the public issue. But in case of book-building, the issuing company specifies a price band and the applicants have the freedom to make their application within and including the ranges of price band. As per SEBI rules, the upper band for book-built issue can never be more than 20% of the lower band.

> The cut-off price is the price at which first time 100% subscription is possible. This is between the upper and lower price band, of course including both the limits.

The securities are issued to investors at the cut-off price. The system of book-building is a mechanism of issuing shares to general public in which the company does not decide the final issue price of the securities; instead, the pricing is done by inviting 'bids' from public. Decision on final issue price, acceptance of bids and book running are done as per SEBI rules. In case of book-building, different investors/bidders are classified as qualified institutional buyers (QIB), non-individual buyers, high net worth investors (HNIs) and individual investors.

CORPORATE DEMOCRACY—SEPARATION OF OWNERSHIP AND MANAGEMENT

The company form of business enterprise offers actual democracy. At the same time, it offers a distinct advantage of separation of ownership and management. The shareholders are not required to participate in day-to-day activities; rather these activities are managed under the leadership of the team elected/appointed by them through the process of voting. The management team is headed by a board of directors (BOD). Democracy implies that major strategic decisions are taken in the meeting of shareholders through the process of voting. All the equity shareholders are entitled to cast their vote in proportion to their shareholding in the company. These strategic decisions are approval of financial results, appointment of directors, auditors, bankers, dividend and bonus decision, merger and amalgamation, etc. The decisions approved in the meeting of shareholders are implemented with the help of a management team by the board of directors. In general, the structure of a company's organization chart is as shown in Fig. 1.1.

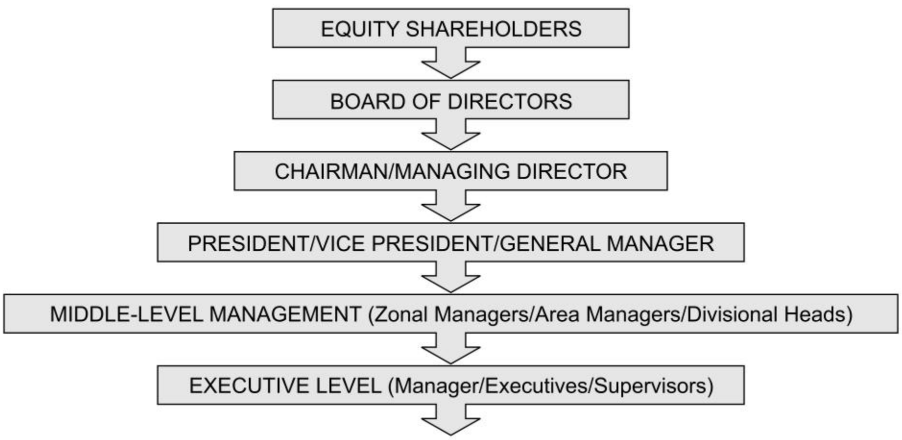

Fig. 1.1 Organization Chart of a Company

CORPORATE DEMOCRACY—MYTH OR REALITY

In a limited liability company, there is a separation of ownership and management. All the equity shareholders are entitled for voting rights in proportion to their shareholdings. As per rules, a company must hold one AGM of shareholders at the end of every financial year. The main purpose of the AGM is to approve the financial results and transact certain routine business. Whenever there is a need of shareholders' approval during the financial year, an 'Extraordinary General Meeting' (EGM) is held by the company. The real and practical aspect is that every shareholder is invited to attend the meeting and cast his/her vote. But as a matter of fact, very few shareholders show interest in attending the meeting and exercise their voting rights. The main focus of majority of the investors purchasing equity shares is to earn profit by getting dividend or capital appreciation in their invested capital. The prices of equity shares fluctuate very frequently, which is the main attraction to buy the equity shares. Yet another benefit for equity shareholders is to get benefited through the bonus issue and rights issue.

RETURN ON EQUITY SHARES

Due to the fact that a large number of shareholders do not attend the meeting, it is implied that corporate democracy is a false impression and companies are practically managed by the people close to the promoters and directors. The shareholders are interested in generating the return on their investment. The return obtained by the shareholders comprises two types of gains as in the following:

- Regular gain
- Capital appreciation

Regular gain is in the form of dividend and **capital appreciation** that implies the enhancement in the invested capital on account of rising prices of shares in the market. Both of these returns when represented as a percentage of invested capital is called **return on equity**.

$$R_e = \frac{D_1 + (P_1 + P_0)}{P_0} \times 100$$

R_e = Percentage return on equity
D_1 = Dividend at the end of the holding period
P_1 = Sales price or market price of share at the end of holding period
P_0 = Purchase price or market price at the time of investment

EXAMPLE 1 An investor purchases 100 shares of a company at a price of ₹ 60. At the end of one year, he gets a dividend of ₹ 5 per share and sells the share in the market at a price of ₹ 67 per share after one year. Calculate the return on equity.

SOLUTION Here

R_e = Percentage return on equity
$D_1 = 5$
$P_1 = 67$
$P_0 = 60$

$$R_e = \frac{5 + (67 + 60)}{60} \times 100 = 12 \times 100/60 = 20\% \text{ over the holding period}$$

EXAMPLE 2 An investor purchases 200 shares of a company at a price of ₹ 80, whereas the face value of each share is ₹ 5 at the end of one year he gets a dividend @ 40% and sells the share in the market at a price of ₹ 99 per share after one year. Calculate the return on equity.

SOLUTION Here

R_e = Percentage return on equity
D_1 = 2 (40% of face value)
$P_1 = 99$
$P_0 = 80$

$$R_e = \frac{2 + (99 + 80)}{80} \times 100 = 21 \times 100/80 = 26.25\% \text{ over the holding period.}$$

Note: Dividend is always the function of face value.

VALUATION OF FIRM

An investor is ready to pay for the present value of the monetary benefits to be received from an investment alternative, such as equity shares, preference shares, debentures and others. The **value** is the function of two factors: **first**, it is the benefits expected or likely to be received from the investment alternate and, **second**, the rate of return required by the investor. Therefore, the **value of a share/debenture** is the discounted value of expected benefits likely to be received in future. The valuation of firm can be viewed from two different perspectives: **first**, it is the accounting perspective and, **second**, it is the financial perspective.

Accounting Perspective of Valuation of Firm

A few thinkers are of the opinion that the value of a firm from accounting perspective is nothing but the net asset value of the firm. The **net asset value** (NAV) implies the total assets less the value of external liabilities. This view is used at the time of amalgamation of companies or for the valuation of sole enterprises and partnership firm. But most of the thinkers believe that the value of the firm, particularly a limited liability company (LLC), is the capitalized value of the firm as estimated by using overall capitalization rate applicable for the company. While assessing the value, the net income available for different **direct stakeholders**, i.e., for equity owners, preference shareholders and debenture holders is considered. This net income is capitalized using appropriate capitalization rate. The **capitalization rate** is the investors' expected rate of return from a particular investment avenue, such as equity share, preference share and debenture. While arriving at the capitalization rate, the investors should consider the following factors:

- Level of income
- Stability of income
- Risk level of the firm

As the value of firm from accounting perspective is the sum total of the value as perceived by different direct stakeholders:

$$V = V_e + V_p + V_d$$

V = Value of firm
V_e = Capitalized value of equity shares
V_p = Capitalized value of preference shares
V_d = Capitalized value of debentures

$$V_e = \frac{\text{Net Earnings for Equity Shareholders (PAT − Preference Dividend)}}{\text{Equity Capitalization Rate } (K_e)} \times 100$$

$$V_p = \frac{\text{Preference Dividend}}{\text{Preference Capitalization Rate } (K_p)} \times 100$$

$$V_d = \frac{\text{Interest on Debentures}}{\text{Debt Capitalization Rate } (K_d)} \times 100$$

The capitalization rates referred above are the expected rate of return as perceived by the respective investors.

EXAMPLE 3 The capital structure of a company includes 2,00,000 equity shares of face value of ₹ 10 each, 15,000 9% preference shares of face value ₹ 100 each and 10,000 10% debentures of face value ₹ 100 each. The net income of the company for the year ended March 31, 2010 was ₹ 12,50,000. The capitalization rate assigned by the equity investors for this type of company is 20%, whereas preference shareholders expect 12% return and debenture holders expect 10% returns. Calculate the value of the firm.

Solution

$$V_e = \frac{12,50,000 - 1,35,000}{20} \times 100 = ₹\ 55,75,000$$

Value of each equity share is ₹ 27.875

$$V_p = \frac{1,35,000}{12} \times 100 = ₹\ 11,25,000$$

Value of each preference share is ₹ 75.

$$V_d = \frac{1,00,000}{10} \times 100 = ₹\ 10,00,000$$

Value of each debenture is ₹ 100.

$$V = 55,75,000 + 11,25,000 + 10,00,000 = ₹\ 77,00,000$$

Financial Perspective of Value of Firm

Someone has rightly said it that the beauty lies in the eyes of the beholder. In the same way, the value of shares lies in the perception of the investors. This implies that in case of equity shares, the valuation is highly subjective, whereas in case of debentures and preference shares, it might have some element of objectivity. The high level of subjectivity brings in the element of difference of opinion, i.e., different value as perceived by buyer and seller activates the demand function as a result there is an active trading in the shares at every price level. There are instances when both buyers and sellers have the same perception about price which results into lop-sided demand function for the shares. The implication of this can be very well observed in the form of shares prices hitting either upper circuit or lower circuit.

Circuit Breaker

Stock exchange has the provisions to curtail an abrupt movement of equity prices in a single trading session. This is like safety net against widespread fluctuations in the share prices during a single trading session. Generally, shares have a circuit filter (breaker) of 20% on the base price (previous day's closing price), which implies that in a single trading session, the price of a share can increase or decrease to a maximum limit of 20% of the previous day's closing price. The price of a particular share will hit the upper circuit due to heavy demand, whereas it will hit the lower-circuit breaker on account of heavy selling pressure. Certainly, high demand is generated when every investor has an opinion that at the given price level, the share is undervalued and has a scope for rise in the prices in the future and every investor generates demand. The excessive supply is on account of the share being overvalued, and the price hits lower circuit.

There are three ways by which the financial perspective of the value of a firm can be evaluated:

- Valuation of equity shares
- Valuation of preference shares
- Valuation of debentures

(The details about the financial perspective are beyond the scope of this book.)

Recap 2

So far, we have discussed the following topics:

- Forms of business enterprises
- Limited liability company
- Capital of firm
- Owner's capital
- Borrowed capital
- Non-conventional sources of finance
- Publicly Traded Company and Fund-Raising Mechanism
- Corporate Democracy—Separation of Ownership and Management
- Valuation of a Firm

Self-assessment 2

1. Explain how a public limited company raises capital.
2. "Corporate democracy is a myth." Do you agree?
3. Explain accounting and financial perspective of the valuation of firm.

The following topics will be delved into next:

- Corporate Financial Reporting
- Structure and Component of Financial Statements (as per IAS-1)
- Internal vs External Control
- Audit—Audited Books of Accounts
- Financial Statement Framework—Case Study Approach (Story of a Fisherman)

CORPORATE FINANCIAL REPORTING

Due to the separation of ownership and management in a limited liability company, it becomes necessary for a company to have a system of apprising the owners about the financial performance of the company. Although every business enterprise prepares financial statements, for a limited liability company, it is mandatory to publish such financial statements in the form of an annual report every year. The annual report is a means to communicate the financial performance as well as policies and strategies of the company.

Annual Report—A Means to Communicate Business Progress

Every limited liability company has the legal obligation to publish its annual progress, particularly the financial progress in the form of an annual report. The report, published in the book form, is not only distributed to each and every equity shareholder but the summary report is also published in the leading newspapers. The obligation of publishing the annual report summary in the newspapers is mandatory for a public limited company, whereas it is not a must for a private limited company.

The objective of preparing and publishing the annual report is to keep all the stakeholders informed about the past performance of the company and apprise about the future prospects of the company. The financial statements—income statement (trading and profit and loss account), balance sheet and profit and loss appropriation accounts, project the historical accounting facts of the company. These statements show comparative figures of past two or more financial years, if available. The past financial performance is very much helpful in decision-making by different stakeholders and predicting financial performance of the company for the coming financial year.

Balance Sheet vs Annual Report

Balance sheet is a snapshot of assets and liabilities of the business organization held by it as on the balance sheet date. The balance sheet alone conveys not much of the meaning; it needs to be interpreted with the help of supporting facts given in the annual report.

Annual report of a company discloses a host of information about the company, which includes the following:

- Company's vision statement
- Chairman's speech and report
- Auditors' report
- Director's report
- Management discussion and analysis
- Abstract of audited financial statements
- Stand-alone as well as consolidated financial statements
- Accounting policies
- Corporate governance report
- Segment reporting

These financial statements are supported by accounting policies, management discussion analysis, auditor's report, director's report, corporate governance report and annexure, forming the part of financial statements, etc. These add-on supporting documents bring in the transparency and full disclosure that help in carrying out appropriate interpretation of the financial statements and serve as a meaningful purpose for different stakeholders.

USEFUL INFO

Business stakeholders:

1. Equity owners
2. Debenture holders
3. Money lenders
4. Suppliers and trade creditors
5. Employees
6. Management team
7. Government
8. Tax authorities
9. Investors
10. Academicians

Objectives of Corporate Financial Reporting

The annual report can be considered as a multi-utility document in the sense that owners, i.e., equity stakeholders get apprised about the profitability position, money lenders/debenture holders come to know about the long-term solvency of the business entity, short-term creditors/suppliers understand about the liquidity position of the business enterprises, employees also get an idea about the financial health and policies as well as the future course of action of the company.

The annual reports presented by the company should serve the following purposes:

- Full disclosure and transparency
- Accuracy of information
- Decision usefulness
- Vision and future prospects of the company

These facts finally help the present as well as prospective investors in the valuation of the business firm. The **valuation** practically means assigning value to shares of the company or value as a whole for the business organization. With the help of the information disclosed in the annual report, the existing as well as the prospective investors can take informed decisions. The main objective of corporate financial reporting through the annual report is not only to comply with the regulatory provisions but also to bring in the element of transparency and full disclosure in the functioning of the company, then only the concept of corporate democracy can be achieved.

STRUCTURE AND COMPONENTS OF FINANCIAL STATEMENTS

While referring to **International Accounting Standard 1 (IAS-1)**, we explore that a complete set of financial statements of a company include the following documents/accounts:

- Profit and Loss Account—Income Statement
- Profit and Loss Appropriation Statement
- Balance Sheet
- Accounting Policies
- Statement of Changes in Financial Position
- Cash Flow Statement

The main objective of the financial statements is to apprise the stakeholders of the financial performance of the business organization so as to serve the purpose of usefulness of decision. These statements not only provide accounting information but also facilitate easy interpretation of the financial results with the help of the accounting policies.

Recently, in March 2011, ICAI finalised the Indian Accounting Standards (Ind AS*). According to Ind AS, complete set of financial statements should include

1. A balance sheet as at the end of the period
2. A statement of profit and loss for the period
3. A statement of cash flows for the period
4. Notes comprising of significant accounting policies
5. A balance sheet as at the beginning of the period

- **Profit and Loss Account** is prepared for the year ending so as to depict all the revenue and matching expenses to make an appropriate calculation of the profit earned during the year.
- **Profit and Loss Appropriation Statement** shows the distribution of profit, for example the amount of the profit distributed as dividend and the amount of profit retained within the business organization for the purpose of reinvestment.
- **Balance Sheet** is prepared at the end of every financial year to depict the status of assets and liabilities as on the balance sheet date.
- **Accounting Policies** are such policies that are practised by the company while maintaining the books of accounts throughout the year and also followed by the company while preparing and presenting the financial statements.
- **Statement of Changes in Financial Position** is a statement that shows the change in the overall financial position of a business firm. The financial position refers to different monetary sources and application of these sources. Statement of changes in financial position is prepared by using financial statements of two consecutive accounting years. While preparing it, even the shares issued for consideration, other than cash, are also shown in the source of capital. At the same time, the assets purchased by issuing shares to vendors are also considered in the application of capital. This is also called **statement showing movement of overall financial resources**.
- **Cash Flow Statement** is a statement that depicts the movement of cash and cash-equivalent resources between two accounting years. Here, cash-equivalent sources are cash/bank balance and bank overdraft. Although it is prepared by using historical statements, it can very well be used to make a prediction about the liquidity position of the business firm. By using this statement, a finance manager can arrange for the cash resources so as to avoid liquidity crunch. He/she can also plan for investing surplus cash.

*(Details on Ind AS and recent changes to schedule VI of Companies Act 1956 have been discussed in Appendix III.)

Characteristics of Financial Statements

The purpose of decision usefulness of financial statements can be served only when these are prepared by following the concept of full disclosure and transparency. The financial statements will fail to convey the appropriate information, if these lack certain features as discussed below.

USEFUL INFO

Characteristics of financial statements:

1. Relevance
2. Reliability
2. Timeliness
4. Concise and adequate
3. True and fair

Relevance

Relevant information certainly helps in not only taking a decision but also in evaluating and correcting the decision taken in the past. The financial statements disclose both economic information—the information that influences the decision of stakeholders, such as declaration of bonus, announcement of merger, segment reporting and change in the risk profile of business—as well as other information. Financial statements should house more price-sensitive information as compared to other information.

The accounting standards also make it a binding on the company to disclose relevant information so as to help the stakeholders in decision-making. Accordingly, a change in the business segment must be reported appropriately, irrespective of its financial magnitude. Otherwise, it might influence the investment decision of investors/money lenders.

Reliability

Reliable information always sparks the current in the mind of readers. It is the source of information and its reliability that establishes a decision. It is nothing but the faith-building exercise. As far as possible, the financial statements should be audited by an independent auditor so as to bring in the concept of reliability. Usually, the audited financial statements are readily accepted at the face value by the users; however, the corporate incidences of the recent past have shown that these might not be reliable in certain cases, such as it happened in the cases of Satyam, Enron, Maytas and others. The malpractices and scams are the necessary evils that cannot be done away with.

Timeliness

A piece of relevant and reliable information, if not conveyed at the right time, is worthless. One should strike when the iron is hot. Therefore, the financial statement should be made public (mandatory in case of public limited company) not only just after the year end but also at quarterly and half-yearly rests also. The Companies Act rules provide that the AGM should be held within six months from the date of year-end or within twelve months from the previous AGM, whichever is later. Therefore, it becomes an indirect timeline for the company to prepare and publish the financial statements within this time limit. If financial statements are not disclosed immediately quarterly/half-yearly or at the end of the year, it might lead to use of the price-sensitive information by the insider(s), leading to insider trading.

As a result of insider trading, the investors, in general, suffer a heavy loss that otherwise can be avoided by providing the information on time.

Concise and Adequate

The financial statements should report precise and adequate information. Providing heavy information might be misleading and difficult to understand. The majority of the stakeholders are interested to know the summary result that can help in quick decision-making. Another reason for insisting upon the conciseness of information is that it becomes easy to interpret the information for decision-making without any delay.

True and Fair

A financial statement will provide true and fair information only when it meets the previously discussed features. As the purpose of the financial statements is to bring in the concept of full disclosure and transparency, therefore, these must be prepared using true and fair data. A true and fair information sometimes might have negative consequences in the short-time duration. But it will certainly have a long-lasting positive impact in aggregate. The financial statements will be true and fair only when these have the following:

- Free from accounting errors
- Based on realistic facts
- Based on the concept of consistency
- Disclose the accounting policies adopted in preparing these statements
- Being disclosed in the proper format
- Free from window-dressing effects

True and Fair View—Disclosure of Accounting Policies (AS-1) Diversity in accounting practices and dynamic nature of business transactions make it difficult to comply with all the accounting standards by every business enterprise. At the same time, there are some of the aspects that are not covered by the accounting standards. Even the prescribed accounting standards permit the adoption of more than one accounting policy for a single aspect. Due to these reasons, it is necessary that accounting policies are complied by the business enterprise. While maintaining books of accounts and at the time of presentation of final accounts, the accounting policies should be disclosed properly with reasoning for the adoption of a particular policy. Such disclosure is to help the readers to have appropriate interpretation of the financial results of the company; at the same time, it facilitates comparison of financial results.

The accounting standard one (AS-1) recognizes three accounting assumptions:

- **Going Concern** The intention to start business is to continue the same for an infinite time period. This helps in the classification of assets as non-current and current assets.
- **Consistency** To facilitate comparison of financial results across different financial years, similar accounting policies and practices should be adopted over the years.
- **Accrual Basis of Accounting** To have accurate projection of profit/loss and financial position, all the revenue and expenses relevant for current accounting year should be accounted for in the annual accounts.

INTERNAL VS EXTERNAL CONTROL IN THE WORKING OF A COMPANY

Control is the essence of each and every activity and process. Without effective control, none of the activities serve the desired purpose. The main purpose of control is to have effectiveness and efficiency in the working of a company. The profitability of a company can be achieved and maintained with the help of efficiency and effectiveness. The control can be as follows:

- Internal control
- External control

Internal Control

Internal control over the activities of a company is exercised by the managerial staff of the company. That can be done with the help of standard costing and variance analysis, budgetary control, activity-based costing, etc. The main aim is to achieve profitability with the optimum utilization of resources of the firm. Every manager has the responsibility to exercise the control so as to maximize the profitability and the wealth of all the stakeholders. The internal control is exercised within the following variables:

- Control environment
- Assessment of risk
- Control activities
- Information and communication network
- Monitoring and vigilance
- Feedback mechanism

External Control

External control over the working of a company is exercised by the parties external to the company, such as government, tax authorities, society, money lenders and suppliers. Certain stakeholders exercise the control directly and some exercise the control through indirect means. By means of license and quota system, the government exercises control over the activities of the business firms; tax authorities exercise the control over the accounting and reporting system of the company. Society exercises the control by means of putting ethical issues for the company.

Audited Books of Accounts

Books of accounts are subject to internal as well as external control. It is mandatory for a limited liability company (LLC) to have an external audit of its books of accounts so as to ensure the accuracy of books of accounts. Audited books of accounts are considered as a reliable source of accounting information. Carrying out internal control is an optional activity. But certainly, the process of internal control through internal audit adds to the quality of financial reporting.

Internal Audit

Companies carry out internal audit of the books of accounts by its own employees to have a check and balance in routine. Internal audit means carrying out the scrutiny of books of accounts by the employees of the company. It is a continuous process. The scrutiny is done with the aim to ensure accuracy of the books of accounts as well as to keep a check on the systems of the organization. It is more oriented towards checking systems and procedures so as to minimize the incidences of fraud, malpractice, misreporting of the accounting facts. Internal audit is not compulsory; rather it is optional. Even then a large number of companies adopt it, the reason being to ensure the proper functioning of the systems and ensure continuous scrutiny of the accounting records. A well-covered internal audit facilitates external audit.

External Audit

External audit is the scrutiny of the books of accounts by an independent auditor who is not an employee of the company but engaged by the company. Every LLC is required to get its books of accounts including financial statements audited by an independent and qualified auditor. Apart from the regulatory compliance, an external audit is performed to check the accuracy of the books of accounts. An auditor ensures that the books of accounts have been prepared by following the generally accepted accounting principles and accounting standards. The auditor also ensures that the company follows appropriate accounting policies while preparing the financial statements. All the material facts are disclosed appropriately. The audited financial statements are considered reliable as well as true and fair financial documents. Usually, an external audit is done by using the method of sample scrutiny—checking only a sample of the accounting documents/records out of the whole lot of accounting documents/records. Apart from the scrutiny of the records, an external auditor ensures that the company follows all the accounting policies and adheres to the compliance standard. The auditor's report might be as in the following:

- Unqualified report
- Qualified report

Unqualified report is a report that states about the fairness of books of accounts and of the financial statements. It conveys that the financial statements convey the true and fair view of the financial results of the company. It gives an assertion that the balance sheet of the even date conveys accurate financial position—status of assets and liabilities—and the operating results as depicted by the income statement conveys the accurate position of the profits.

Qualified report is usually not desirable. But sometimes it is unavoidable, as it conveys about the absence of fairness of the books of accounts, including financial statements. A qualified report states that the books of accounts do not show a true and fair view about the financial position of the business. It may be due to the fact that the company did not follow proper accounting policies while preparing the books of accounts and the financial statements. The balance sheet of the even date does not convey the real position of assets and liabilities. Similarly, the income statement also does not convey the accurate level of profits.

Sometimes, the outcome of the external audit is that the auditor could not form an opinion about the fairness of the books of accounts. Hence, he/she is not in a position to give any type of concise feedback about the financial statement. Whether it is a qualified report or unqualified report, the reliability of the report depends upon the goodwill and working style of the auditor. An external auditor with high score on goodwill about his/her audit work certainly helps in establishing the fact that the report given by the auditor is trustworthy.

SOLVED EXAMPLES

Example 4 Market price of an equity share of face value ₹ 10 is ₹ 125 per share. Expected dividend is 125% for the next year that is likely to grow at a constant rate of 10% p.a. forever. If an investor expects 15% returns on his/her investment, suggest him/her whether he/she should buy it or not. If yes, then at what price?

Solution By using dividend capitalization with constant growth model, the value can be ascertained as follows:

Here, $D_1 = 12.50$, $K_e = 15\%$ and $g = 10\%$, $V_e = (D_1/K_e - g) \times 100$

$$V_e = \frac{12.50}{15 - 10} \times 100$$

$V_e = 1250/5 =$ ₹ 250 per share

Conclusion Since market price of this share is ₹ 125 and the value for this investor as per dividend capitalization with constant growth model is ₹ 250. Therefore, it is undervalued and the investor should buy it.

EXAMPLE 5 Equity share of X Ltd is available in the market at a price of ₹ 45 per share, whereas its face value is ₹ 5 per share. During the current year, the company paid 66.66% dividend that has a track record of constant growth rate of 5% p.a. forever. What is the value of this share for an investor who expects a return of (i) 17% and (ii) 22.50%?

SOLUTION Using dividend capitalization with constant growth rate model, we can ascertain the value.

(i) Here, $D_0 = 3.33$, $K_e = 17\%$ and $g = 5\%$, $D_1 = 3.33 \times 1.05 = 3.50$

$$V_e = \frac{3.50}{17 - 5} \times 100$$

$$V_e = 350/12 = ₹\ 29.16 \text{ per share}$$

(ii) Here, $D_1 = 3.50$, $K_e = 17\%$ and $g = 5\%$

$$V_e = \frac{3.50}{22.50 - 5} \times 100$$

$$V_e = 350/17.50 = ₹\ 20 \text{ per share}$$

EXAMPLE 6 A company is issuing 14%, 6 years, ₹ 100 debenture at 5% premium. These are redeemable on maturity at 15% premium. If an investor expects a return of 18% on his/her investment then suggest him/her if he/she should buy it from the company or not.

SOLUTION Here, the investor will receive ₹ 14 per debenture every year for six years and at the end of sixth year, he/she will receive ₹ 115 as the maturity value. The expected rate of return for this investor is 18%. The value of this debenture for this investor is

$$V_d = 14 \times \text{PVIFA}_{18\%,6} + 115 \times \text{PVIF}_{18\%,6}$$
$$V_d = 14 \times 3.500 + 115 \times 0.370 = 49.00 + 42.55 = ₹\ 91.55 \text{ per debenture}$$

As the issue price is ₹ 105, which is more than the discounted value calculated above, it is overvalued for this investor and he/she should not buy it from the company.

EXAMPLE 7 There are 10 years, ₹ 200 face value debentures having 9% coupon rate available in the market at a price of ₹ 189 per debenture. These have a provision for redemption at 5% premium. If an investor expects 10% return on his/her investment then suggest him/her if he/she should buy it or not.

SOLUTION Here, the investor will receive ₹ 18 per debenture every year for ten years and at the end of tenth year, he/she will receive ₹ 210 as the maturity value. The expected rate of return for this investor is 10%. The value of this debenture for this investor is

$$V_d = 18 \times \text{PVIFA}_{10\%,10} + 210 \times \text{PVIF}_{10\%,10}$$
$$V_d = 18 \times 6.145 + 210 \times 0.386 = 110.61 + 81.06 = ₹\ 191.67 \text{ per debenture}$$

As the market price is ₹ 189, which is less than the discounted value calculated above, hence, it is undervalued for this investor and he/she should buy it from the market.

EXAMPLE 8 There are 7 years, ₹ 100 face value debentures having 15% coupon rate available in the market at a price of ₹ 105 per debenture. These have a provision for redemption at par. If an investor expects 12% return on his/her investment then suggest him/her if he/she should buy it or not.

Solution Here, the investor will receive ₹ 15 per debenture every year for seven years and at the end of seventh year, he/she will receive ₹ 100 as the maturity value. The expected rate of return for this investor is 12%. The value of this debenture for this investor is

$$V_d = 15 \times \text{PVIFA}_{12\%,7} + 100 \times \text{PVIF}_{12\%,7}$$
$$V_d = 15 \times 4.564 + 100 \times 0.452 = 68.46 + 45.20 = ₹\ 113.66 \text{ per debenture}$$

As the market price is ₹ 105, which is less than the discounted value calculated above, hence, it is undervalued for this investor and he/she should buy it from the market.

Example 9 Capital structure of a company includes the following:

(i) Equity share capital: 50,000 shares of face value ₹ 100 each
(ii) Preference shares capital: 20,000, 12% shares of face value ₹ 100 each
(iii) Debt of ₹ 30,00,000 bearing a coupon rate of 10%

During the year, the company earned EBIT of ₹ 25,00,000. The equity capitalization rate for this risk category of the company is 15% and the income of the company is subject to 30% tax. Calculate the value of the company.

Solution Here, we need to calculate the earnings for equity shareholders. It is assumed that the capitalization rate of preference shareholders and debenture holders is equal to the dividend/interest rate on these securities. Therefore, the value of preference and debt is equal to the book value as given in the question.

$$V_p = ₹\ 20,00,000$$
$$V_d = ₹\ 30,00,000$$

Earning for equity shareholders:

EBIT	25,00,000
Less: Interest on debt	300000
EBT	22,00,000
Less: Tax @ 30%	6,60,000
EAT	15,40,000
Less: Preference Dividend	2,40,000
Earning for equity shareholders	13,00,000

V_e = (13,00,000/15) × 100 = ₹ 86,66,666 represented by 50,000 shares resulting into ₹ 173.33 per share, whereas face value of each share is ₹ 100 each.
Value of firm (V) = 86,66,666 + 20,00,000 + 30,00,000 = ₹ 1,36,66,666

Example 10 Capital structure of a company includes the following:

(i) Equity share capital: 7,00,000 shares of face value ₹ 10 each
(ii) Preference shares capital: 20,000, 12% shares of face value ₹ 100 each
(iii) Debt of ₹ 30,00,000 bearing a coupon rate of 15%

During the year, the company earned EAT of ₹ 15,00,000. The equity capitalization rate for this risk category of the company is 20% and the returns expected by preference shareholder are 10%, whereas return expected by debt holders are 18%. Calculate the value of company.

Solution Value of Preference (V_p) = Preference Dividend Amount/Preference Capitalization Rate
Value of Preference (V_p) = (2,40,000/10) × 100 = ₹ 24,00,000

Value of Debt (V_d) = Interest Amount on Debt/Debt Capitalization Rate
Value of Debt (V_d) = (4,50,000/18) × 100 = ₹ 25,00,000
V_e = (15,00,000 − 2,40,000)/20) × 100 = ₹ 63,00,000 represented by 7,00,000 shares resulting into ₹ 9 per share, whereas face value of each share is ₹ 10 each,
Value of firm (V) = 63,00,000 + 24,00,000 + 25,00,000 = ₹ 1,12,00,000

Example 11 Capital of a company on April 1, 2010 comprised 3,00,00,000 equity shares of face value ₹ 10 each, and 14% preference shares of total value ₹ 12,00,00,000. On this date, the net balance of reserve and surplus was ₹ 9,00,00,000. During the year, the company had EAT of ₹ 30,00,00,000, out of which the company retained ₹ 18,00,00,000 after distributing the equity and preference dividend. Calculate the book value of equity shares on April 1, 2010 and on March 31, 2011.

Solution Book value of equity share is calculated using equity shareholder's net worth. Therefore, equity shareholder's net worth is as follows:

Equity Shareholder's Net worth (Opening) = Paid-up value of Equity Shares + Opening balance of net Reserve and Surplus

Equity Shareholder's Net worth (Closing) = Paid-up value of Equity Shares + Opening balance of net Reserve and Surplus + Retained Earnings for the year

Equity Shareholder's Net worth as on April 1, 2010 = 30,00,00,000 + 9,00,00,000
= ₹ 39,00,00,000

Equity Shareholder's Net worth as on March 31, 2011 = 30,00,00,000 + 9,00,00,000 + 18,00,00,000 = ₹ 57,00,00,000

Book Value = Equity Shareholders' Net Worth/No. of Equity Shares
Book Value as on April 1, 2010 = 39,00,00,000/ 3,00,00,000 = ₹ 13 per share
Book Value as on March 31, 2011 = 57,00,00,000/ 3,00,00,000 = ₹ 19 per share.

Example 12 A company earned EAT of ₹ 18,00,000, whereas its capital comprised only equity share capital represented by 4,50,000 equity shares of face value 10 each. The average price earning multiplier (P/E Ratio) of the industry to which this company belongs is 30. Estimate value of equity shares of the company using P/E Multiplier approach.

Solution Value of Equity Share using price earning multiplier approach is as follows:

Value of Equity Share = EPS × P/E Multiplier
EPS = (EAT − Preference Dividend)/Number of Equity Shares of the company
EPS = (18,00,000 − nil)/4,50,000 = ₹ 4 per share
Value of Equity Share = 4 × 30 = ₹ 120 per share

Example 13 An investor purchases 100 shares of a company at a price of ₹ 50. At the end of one year, he/she gets a dividend of ₹ 8 per share and sells the share in the market at a price of ₹ 47 per share after one year. Calculate the return on equity.

Solution Here, R_e = Percentage return on equity

$D_1 = 8$
$P_1 = 47$
$P_0 = 50$

$$R_e = \frac{8 + (47 + 50)}{50} \times 100 = (8 - 3) \times 100/50 = 10\% \text{ over the holding period.}$$

Example 14 An investor purchases 100 shares of a company at a price of ₹ 160, whereas face value per share is ₹ 10, he/she expects to get 90% dividend at the end of one year and expected market price at the end of the year is ₹ 180. Calculate the return on equity.

Solution Here,

R_e = Percentage return on equity
D_1 = 9 (90% of face value, as dividend is the function of face value)
P_1 = 180
P_0 = 160

$$R_e = \frac{9 + (180 + 160)}{160} \times 100 = 29 \times 100/160 = 18.125\% \text{ over the holding period}$$

Example 15 In the market, 12% ₹ 100 debentures are available at a price of ₹ 96 per debenture, the expenses (brokerage and securities transaction tax) at the time of purchase of shares is Re. 1 per debenture. Only one year is left to maturity, it has a provision of redemption at par on maturity. If an investor purchases it today then calculate the holding period return for him/her.

Solution Here, interest to be received at the end of the year is regular income and difference between the purchase price and maturity value is capital gain.
Effective purchase price is market price plus purchase expenses.
Therefore,

$P_0 = 96 + 1 = 97$
$P_1 = 100$

R_1 (Regular income) = 12 (12% of face value)

$$\text{Holding Period Return} = \frac{12 + (100 - 97)}{97} \times 100$$

Holding Period Return = (12 + 3) × 100/97 = 15.46 % over one year

FINANCIAL STATEMENT FRAMEWORK

The Story of a Fisherman

The financial statements, as discussed in the previous sections, are the progress report of a company's working, containing meaningful information for decision-making. The unique feature about the layout of these statements is that this will look alike for every business organization, the only difference lying in the quantitative values shown in these. Financial statements are prepared in a manner so that these can facilitate comparison—vertical as well as horizontal. We shall look at the preparation exercise for these statements with the help of the following case study.

The Story of a Fisherman—The Past

Rajukingam, the son of an experienced fisherman, learnt the art of fishing right from his childhood. His daily routine was to accompany his father for fishing. His father, the owner of two boats, used to go daily to the deep sea for fishing and then sell the fish in the market. Unfortunately, his father died while fishing and both the boats were lost. After his father's demise, Rajukingam joined as a fisherman with a multinational company carrying out fishing activity in Chennai. He used to get a monthly salary of ₹ 1,800. After his marriage, his wife also joined the same company and she was paid ₹ 1,500 per month. During the month of June 2007 due to heavy rains near the coastal area, there was no fishing activity and both of them were rendered jobless. This tough time generated an idea in his mind to start his own fishing business. Eventually, Rajukingam's (Raju) started his own fishing enterprise, Katyam Fishing Enterprises.

Katyam Fishing Enterprises

Raju started his business with an initial capital of ₹ 8,000 with an idea to take the boat and fishing net on rent to be paid daily in the evening in cash. He started his business on November 1, 2007. As he knew little bit of accounting, when he prepared his first day's balance sheet, it looked like as follows:

Balance Sheet is a summary overview as on a date about the assets owned and liabilities owed by a business enterprise.

Balance Sheet of Katyam Fishing Enterprises

As on November 1, 2007

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Equity (Capital)	8,000	Cash Balance	8,000
External Liabilities	–	Other assets	–
	8,000		8,000

The balance sheet just shown depicts the financial position—assets and liabilities of the business enterprises that is definitely different from its owner—Raju's financial position.

IMPLICATION OF A SEPARATE ENTITY

From the accounting viewpoint, the entity of owner and of the business organization is considered separate from each other. This fact implies that the capital contributed by the owner is a liability for the business and if the owner withdraws something from the business then it is either adjusted against the capital or shown as an asset (amount recoverable from owner) in the balance sheet.

The balance sheet is prepared by adopting a separate entity concept. That is why the capital contributed by the owner is the liability for the business enterprises. This implies that at the end, the business is required to provide an update to owner about the use of the capital contributed by him/her and return the capital as a residual claim.

The Business Practice

Raju would daily go to deep sea using a hired boat to catch sufficient quantity of fish that could be sold in daytime and then both husband and wife would go to the market to sell the product. One thing he learnt from his father was that not to do any credit transaction. Initially, he followed this principle. He kept on selling the fish in cash and also paid the rent of the boat in cash. Sometimes, he was left with a good quantity of fish. By the end of the day, he used to sell it to Reliance Fish Mart at a relatively low price. This bulk sale to Reliance caused a loss to Raju. The Reliance Fish Mart used to keep the fish in the refrigerated store to sell these at a higher price during off seasons or when there was a shortage of fish products.

First Five Months Results

At the end of first five months, Raju wanted to prepare his balance sheet once again so as to have an idea about the financial health of his business. He knew that the owner of the business always had a residual claim. By following this principle, he started preparing the balance sheet. As he was transacting the business in cash only, it was very easy for him to prepare the balance sheet. His wife told him that he was left with ₹ 23,000 and there was no dues to be paid to any external entity or to be recovered from anyone except a bank loan of ₹ 2,000 that he took from a cooperative bank.

Balance Sheet of Katyam Fishing Enterprises

As on March 31, 2008

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Equity (Capital)		Cash Balance	23,000
Opening Balance	8,000	Other assets	—
Retained Profit	13,000		
External Liabilities			
Bank Loan	2,000		
	23,000		23,000

When he compared his initial capital with the capital depicted on the balance sheet of March 31, 2008, he found an increment of ₹ 13,000. He once again confirmed from his wife whether some of the dues were outstanding or not but found a negative reply. As the owner always has the residual claim on the profits, he inferred that his profit at the five months' ending was ₹ 13,000. Both husband and wife were very much motivated on this achievement.

Maintaining Owners' Capital Account

Opening Capital is the balance of capital in the beginning of the year. It was ₹ 8,000 in case of Katyam Fishing Enterprises.

Addition to Opening Capital

To arrive at the closing balance of the capital account on the date of balance sheet, the owner's contribution as further capital during the year is added to the opening capital. The profit for the year is also added to the opening capital account.

Deduction from Opening Capital

Drawing from the business by the owner for his/her personal use is deducted from the opening capital in the same manner loss as it is to be recovered from the owner is also deducted from the opening capital.

Residual Claim of an Owner

The owner of the business always has a residual claim. By following this concept, Raju could conclude that the remaining ₹ 13,000, after providing the bank loan and keeping aside his initial capital, is his profit.

Limitations of the Balance Sheet

The balance sheet of Katyam Fishing Enterprises shown above does not disclose as to how the profit of ₹ 13,000 was earned during the five months' period. It only conveyed the status of assets and liabilities on the balance sheet date. To know how Katyam Fishing Enterprises earned the profit, we need to prepare a Profit and Loss Account for these additional facts about the operating activities are required.

Raju had maintained all the records of daily expenses and sales revenue by maintaining accounts but snot in a professional manner. The summary result of these accounts at the end of five months was as follows:

Rent of boats	₹ 18,000
Rent of fishing net	₹ 9,000
Purchase of food and fodder for fish	₹ 11,000
Municipal tax for fishing	₹ 2,000
Sales	₹ 53,000

These details can be used to prepare the profit and loss account of Katyam Fishing Enterprises. This is to be prepared by keeping into consideration the **flow concept** that implies that the profit and loss account should house the items that keep on going throughout the year, such as revenue and expenses; whereas the balance sheet is prepared by considering the **stock concept** by showing only the stock items—assets and liabilities.

Profit and Loss A/C of Katyam Fishing Enterprises

For the five months ending on March 31, 2008

Expenses	Amount (₹)	Revenue	Amount (₹)
To Purchase	11,000	By Sales	53,000
To Rent of Boats	18,000		
To Rent of Fishing Net	9,000		
To Municipal tax	2,000		
To Profit (Balancing figure) transferred to capital account	13,000		
	53,000		53,000

The profit shown above matches with the profit calculated by preparing the balance sheet on the basis of **residual claim** of the owner.

USEFUL INFO

Capital expenditure leads to the acquisition of an asset to be used over a period of time. It provides the utility in the years to come. These assets are called **fixed assets,** such as purchase of building, vehicle, equipment, etc. The capital expenditure is non-recurring in nature.

The Expansion of Business

Motivated by the success of his initial business practice, Raju thought of expanding his business. He made an estimate about acquiring a few assets by incurring certain capital expenditure. He estimated that it would cost about ₹ 50,000 to buy two motor boats, ₹ 90,000 for a refrigeration unit to keep the unsold fish as fresh and cool to be sold on the next day and two delivery vans costing ₹ 20,000 each for selling the produce in the market. He also thought of expanding the business by hiring four employees, two each for fishing and vending. With these estimates, he approached the bank manager and the manager granted him a loan of ₹ 1,80,000 @ of 10% per annum. The condition was to pay the interest annually along with ₹ 18,000 per annum towards the repayment of principal amount so as to repay the complete loan in ten years' time period.

Revenue expense is the one that results into immediate or near-future utility. This leads to the consumption of goods or utilization of services during the short-time period, such as consumption of raw material, wage and salary payment interest payment. It is recurring in nature.

The Beginning of Next Financial Year

Raju continued the business in the next financial year with more enthusiasm and vigour. Throughout the year, he did business in full swing with certain changes in his business policy. He started selling on credit also and kept the unsold fish in the refrigerated unit to be sold during the next working day. Within no time, he became a famous and seasoned businessman. At the end of the next financial year, i.e., March 31, 2009, he again prepared his balance sheet by following the residual concept that looked as follows:

Balance Sheet of Katyam Fishing Enterprises

As on March 31, 2009

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Equity (Capital)			
Opening Balance	21,000[1]	*Fixed Assets*	
Retained Profit	1,50,100	Motor Boats	50,000
External Liabilities		Refrigeration Unit	90,000
Bank Loan	1,62,000	Vending Auto	40,000
		Current Assets	
		Cash Balance	1,09,800
		Stock of Fish	13,300
		Sundry Debtors	30,000
	3,33,100		3,33,100

He also prepared the profit and loss account to cross check the profit arrived through the residual claim method. The details of the transactions executed throughout the year were as follows:

Cash sales	₹	3,00,000
Credit sales	₹	95,000
Collection from debtors	₹	65,000
Purchase of fodder for fish	₹	71,800
Municipal tax for fishing	₹	23,400
Wages for fishing	₹	40,000
Salary for selling staff	₹	40,000
Electricity and water	₹	12,000
Repair and Maintenance	₹	9,000
Interest paid to bank	₹	18,000
Repayment of principal	₹	18,000
Cash withdrawn for personal use	₹	24,000
Fuel (60% for fishing)	₹	20,000
Repayment of old loan	₹	2,000

[1]This included his initial contribution of ₹ 8,000 and ₹ 13,000, the retained profit of the previous financial year.

The unsold stock at the end of the year was of the cost ₹13,300 having a market value of ₹ 11,900 on the date of balance sheet.

Profit and Loss A/C of Katyam Fishing Enterprises

For the year ending on March 31, 2009

Expenses	Amount (₹)	Revenue	Amount (₹)
To Purchase	71,800	By Sales	3,95,000
To Municipal tax	23,400		
To Direct wages (wages paid for fishing)	40,000	By Closing stock	13,300
To Fuel for fishing	12,000		
To Gross Profit c/d	2,61,100		
	4,08,300		4,08,300
To Salary for selling staff	40,000	By Gross profit b/d	2,61,100
To Electricity and water	12,000		
To Repairs and Maintenance	9,000		
To Interest on loan	18,000		
To Fuel	8,000		
To Drawing by owner	24,000		
To Net Profit	1,50,100		
	2,61,100		2,61,100

As both the methods depicted the same amount of profit, he was confident about his method of calculating the profit.

Do you agree with the method adopted by Raju? Evaluate on the accounting policies adopted by Raju.

We answer the above question below.

Raju prepared the balance sheet by following the residual concept but he did not follow the matching concept and the accounting prudence. The matching concept emphasizes that all the relevant expenses should be matched against the revenue for the year. The expenses may be cash expenses or non-cash expenses, such as depreciation. If matching concept is not followed then it leads to the following two errors:

- Wrong calculation of profits
- Inappropriate valuation of the fixed assets

All About Depreciation

Depreciation is provided on all the fixed assets to record the wear and tear of the asset on account of their use in the business. Due to the use in the business, the useful life of the assets gets reduced. To record such reduction in the book value of assets, all the assets are shown in the books of accounts at the cost less depreciation.

As a result of depreciation, the book value of the assets gets reduced and the amount of depreciation is shown as an expense in the profit and loss account. The prominent methods for providing depreciation are straight line method (SLM) and written down value (WDV) method. The practical implication of providing depreciation is that the profits get calculated appropriately as well as the assets get projected at the appropriate value in the balance sheet.

Another mistake that Raju did is that he did not consider the market value of the unsold stock remaining at the end of the financial year. As per the accounting prudence, the unsold stock at the end of the year should be shown in the financial statement at the cost or market value, whichever is less. By following this concept, the cost of goods sold gets reflected at the appropriate level and at the same time, the current asset—stock gets recorded at its realizable value.

Going Concern Concept

It is the **Going Concern Concept** that helps in the classification of fixed assets and current assets. Accordingly, the assets that are procured for the use in the business and not for sale are classified as **fixed assets** and these are recorded in the financial statement at the cost less depreciation.

The assets that are purchased with the aim of selling back are classified as **current assets,** such as stock/goods.

Yet another mistake that Raju did is that he had shown owners' drawing as a business expense, whereas it is to be adjusted against the capital of the owner.

Now by considering these corrections, we can redraft the profit and loss account and the balance sheet for the year ending March 31, 2009. It has been considered that the useful life of the assets is ten years with 10% salvage value at the end. Accordingly, the depreciation of all the fixed assets would be ₹16,200.

Profit and Loss A/C of Katyam Fishing Enterprises

For the year ending on March 31, 2009

Expenses	Amount (₹)	Revenue	Amount (₹)
To Purchase	71,800	By Sales	3,95,000
To Municipal tax	23,400		
To Direct wages (wages paid for fishing)	40,000	By closing stock (cost 13,300 and market value 11,900)	11,900
To Fuel for fishing	12,000		
To Gross Profit c/d	2,59,700		
	4,06,900		4,06,900
To Salary for selling staff	40,000	By Gross profit b/d	2,59,700
To Electricity and water	12,000		
To Repairs and Maintenance	9,000		
To Interest on loan	18,000		
To Fuel	8,000		
To Depreciation on fixed assets	16,200		
To Net Profit	1,56,500		
	2,59,700		2,59,700

Substance over Form vs Substance over Materiality

Preparation of financial statements is done by following the principle of **substance over form.** This implies irrespective of forms of business enterprise, all the significant information should be incorporated in the financial statements per se.

While publishing corporate financial results, the principle of **substance over materiality** should be considered. This implies the proper disclosure of significant facts, irrespective of their value/size.

The practical application of substance over materiality can be viewed in the financial statement of a bank, a bank is required to disclose non-performing assets (NPA) separately, irrespective of their values. Similarly, none of the business organization should distribute reward (dividend) to its owners; out of capital is the example of substance over form.

USEFUL INFO

Gross profit is the amount of profit that is arrived at after deducting all the direct expenses from the sales revenue. **Direct expenses** are the expenses that are incurred in the production/procurement of the goods.

Net profit is arrived at after adjusting **indirect expenses** to the gross profit. The indirect expenses include administrative, finance, selling and distribution expenses. **Indirect revenue**, i.e., revenue other than sales is added to arrive at the net profit.

Balance Sheet of Katyam Fishing Enterprises

As on March 31, 2009

Liabilities		Amount (₹)	Assets		Amount (₹)
Owner's Equity (Capital)			*Fixed Assets*		
Opening Balance	21,000		Motor Boats	(50,000 − 4500)	45,500
Add: Net Profit	1,56,500		Refrigeration Unit	(90,000 − 8100)	81,900
Less: Drawings	24,000	1,53,500	Vending Auto	(40,000 − 3600)	36,400
External Liabilities			*Current Assets*		
Bank Loan		1,62,000	Cash Balance		1,09,800
			Stock of Fish		11,900
			Sundry Debtors		30,000
		3,15,500			3,15,500

In the balance sheet of March 31, 2009, the profit and loss account shows the accurate profit. The capital account also shows the correct balance. The assets—fixed as well as current—have also been reported at the appropriate value.

We shall discuss in detail about the accounting concepts, accounting cycle in the forthcoming chapters.

KEY TERMS

Sole enterprises
Limited liability company
Private limited company
Private placement
Public issue through book building
Equity shares
Debentures
Bills of exchange
Hire purchase
Balance sheet
Trading account
Gross profit
EBIT
Face value vs Book value
Issued capital
Paid-up capital vs Reserve capital
Accounting perspective of firm's value
Dividend capitalization approach of equity valuation
Equity capitalization rate
Partnership
Public limited company
Public issue
Rights issue
Publicly traded company
Preference shares
Commercial papers
Lease financing
Factoring
Annual report
Profit and loss account
Operating profit
EAT
Authorized capital
Subscribed capital
Internal audit vs External audit
Finance perspective of a firm's value
P/E multiplier approach to valuation

FINAL RECAP

- Apart from the risk, there are many other factors that influence the decision about form of business organization, such as scale of operations, amount of capital required to run the business, owner's desire for control on the business.
- A **sole enterprise** is a business entity that is owned by one person who contributes towards the required capital as owner's equity.
- A **partnership** is the outcome of an agreement between two or more people for doing some business activity.
- A **limited liability company** is a business set up under the Companies Act that grants it a legal separate entity from its owners, i.e., equity stakeholders. It can be considered as an association of large number of entities contributing the capital for executing some business activity.
- From the legal viewpoint, the **entity of owner** and that of the business enterprises is considered as same so long as it is the sole enterprises and partnership firm. Whereas in a limited liability company, the entity of equity owner and that of the company is separate from each other.
- A **public limited company** is the one that is not a private limited company.
- A **private limited company** is the one that can be promoted by two promoters and follows certain restriction in its functioning.
- A **publicly traded company** is the one whose shares are listed on a stock exchange for trading.
- **Owners' equity** includes the amount of paid-up capital contributed by the shareholders and the retained profits held in the company and not distributed among the shareholders.
- **Borrowed capital** is the amount of finance arranged by taking a loan or by issuing debentures.
- **Authorized Share Capital** is the maximum amount of capital that a company can raise by issuing both the type of shares during its life time. It is also called **registered capital**.
- **Issued Share Capital** is such a proportion of the authorized share capital for which the company invites the application for subscription by public through any of the modes of issuance of shares.
- **Subscribed Share Capital** is such a proportion for which the company issues the shares to public out of the issued share capital.
- **Face value** of a share is the value that is recorded in the books of accounts as capital and it is printed on the share certificate also.

- The **book value** is nothing but the total equity net worth divided by the number of equity shares outstanding.
- **Amortization** means spreading an expenditure or loss across its useful life till which it is expected to benefit the company.
- A **public limited** company can issue the shares through all the mechanisms—public issue, private placement and rights issue but a **private limited** company can issue the securities through private placement or rights issue.
- **A share** is the smallest unit in which capital of a company is divided into. An investor can contribute towards the capital of a company by purchasing these in the primary market.
- **Preference shares** are the shares on which a dividend at a fix rate is promised by the company, subject to, availability of sufficient profits. Holders of these are given preference over and above equity share holders.
- **Debenture** is a kind of loan taken by the company from general public; these carry a coupon rate called **rate of interest**. Interest on these is generally paid six monthly and payment of it is a legal obligation on the part of issuing company.
- **Commercial paper** is an unsecured paper issued by the companies in the form of a promissory note to raise the finance for a short term.
- A **bill of exchange** is an unconditional order by the writer (drawer) of the bill to drawee (on whom bill is written, he is also called acceptor of the bill) to make a particular payment on a future date upon the presentation of the bill.
- **Leasing** arrangement provides an enterprise with the use and control over assets without receiving title to them.
- **Hire purchase** transaction is a transaction to buy an asset, in which the purchaser, referred to 'hire purchaser' purchases the asset from the seller, referred to 'hire vendor', with a provision to make the payment in several installments over a period of time.
- **Factoring** is a financial service provided by the factor registered as factor. In this, a seller (called 'client of factor') of goods, who has sold goods on credit assigns (sells) his/her book debts to an outside agency called **factor**.
- **Balance sheet** is a snapshot of assets and liabilities of the business organization held by it as on the balance sheet date. The balance sheet alone conveys not much of the meaning. It needs to be interpreted with the help of supporting facts given in the annual report.
- The objective of preparing and publishing the **annual report** is to keep all the stakeholders informed about the past performance of the company and apprise about the future prospects of the company.
- Equity owners, debenture holders, money lenders, suppliers and trade creditors, employees, management team, Government, tax authorities, investors and academicians are the different **stakeholders** in a business organization.
- **Financial statements** of a company include the following documents/accounts:
  - Profit and Loss Account—Income Statement
  - Profit and Loss Appropriation Statement
  - Balance Sheet
  - Accounting Policies
- **Profit and Loss Account** is prepared for the year ending so as to depict all the revenue and matching expenses to make an appropriate calculation of the profit earned during the year.
- **Profit and Loss Appropriation Statement** shows the distribution of profit, for example the amount of profit distributed as dividend and the amount of profit retained within the business organization for the purpose of reinvestment.
- **Balance Sheet** is prepared at the end of the year to depict the status of assets and liabilities as on the balance sheet date.
- **Accounting Policies** are such policies that are practised by the company while maintaining the books of accounts throughout the year and also followed by the company while preparing and presenting the financial statements.
- A **statement of changes in aggregate financial position** includes resources that generate cash as well as conserve cash also.
- **Cash flow statement** shows changes in the cash position from one financial year to another financial year.

- **Features of Financial Statements** include relevance, reliability, timeliness, concise, adequate and true and fair.
- **Financial statements—Annual Report** is published with the objective to keep different stakeholders informed about the financial results and future plans of the company.
- Voting rights for equity shareholders brings in the element of **corporate democracy.**
- **Internal audit** means carrying out the scrutiny of books of accounts by the employees of the company and it is a continuous process.
- **External audit** is the scrutiny of the books of accounts by an independent auditor who is not an employee of the company but engaged by the company.
- **Unqualified report** is a report that states about the fairness of books of accounts and of the financial statements.
- **Qualified report** is usually not desirable, but sometimes it is unavoidable, as it conveys about the absence of fairness of the books of accounts including financial statements.
- From the accounting viewpoint, the **entity of owner** and of the business organization is considered separate from each other. This fact implies that the capital contributed by owner is liability for the business.
- **Capital expenditure** leads to the acquisition of an asset to be used over a period of time. It provides the utility in the years to come these are called fixed assets, such as purchase of building, vehicle, equipment, etc. It is non-recurring in nature.
- **Revenue expense** is the one that results into immediate or near future utility. This leads to the consumption of goods or utilization of services during the short-time period, such as consumption of raw material, wage and salary payment interest payment. It is recurring in nature.
- **Depreciation** is provided on all the fixed assets to record the wear and tear of the asset on account of their use in the business. Due to the use in the business, the useful life of the assets gets reduced. To record such reduction in the book value of assets, all the assets are shown in the books of accounts at the cost less depreciation.
- The prominent methods for providing depreciation are straight line method (SLM) and written down value (WDV) method.
- It is the **Going Concern Concept** that helps in the classification of fixed assets and current assets.
- The assets that are procured for use in the business and not for sale are classified as **fixed assets**.
- The assets that are purchased with the aim of selling back are classified as **current assets,** such as stock/goods.
- **Valuation of a firm** can be carried by using (i) accounting perspective and (ii) finance perspective.
- **Accounting perspective of valuation of firm** emphasizes the book profits and investors' capitalization rate. It is historical in approach.
- **Finance perspective of valuation of firm** focuses on earning potentials and investors capitalization rate. It is futuristic in nature.
- Preparation of financial statements is done by following the principle of **substance over form.** This implies irrespective of form of business enterprise, all the significant information should be incorporated in the financial statements per se.
- While publishing corporate financial results the principle of **substance over materiality** should be considered. This implies the proper disclosure of significant facts irrespective of their value/size.

Review Questions

Multiple Choice Questions

1. Which out of the following is true about legal entity concept with regard to a sole enterprise?
   (a) Entity of owner is separate from the business enterprises.
   (b) Entity of owner and of the business enterprises is same.
   (c) It depends on the nature and scale of business.
   (d) None of these.

2. Which of the following is not true about a partnership firm?
   (a) It enjoys the benefit of perpetual succession.
   (b) The legal entity of partners and of the partnership firm is same.
   (c) From accounting viewpoint, the entity of partners is not same as that of the partnership firm.
   (d) All of these.
3. In a limited liability company, which of the following is not applicable?
   (a) Perpetual succession
   (b) Legal separate entity
   (c) Registration is must
   (d) Agreement between the shareholders
4. Which of the following methods is used by a private limited company for issuing shares?
   (a) Public issue
   (b) Private placement
   (c) Public issue through book building
   (d) Buyout deals
5. Which of the following is true about the link between authorized share capital and issued share capital?
   (a) Issued share capital can exceed the authorized share capital.
   (b) Issued share capital can be less than or equal to the authorized share capital.
   (c) Issued share capital can never equal the authorized share capital.
   (d) None of these.
6. Inventory/stock is to be shown in the financial statement at
   (a) Cost or market price, whichever is less
   (b) Cost or market price, whichever is higher
   (c) Only at cost
   (d) Only at market value
7. Fixed assets are always shown in the financial statement at
   (a) Cost only
   (b) Realizable value
   (c) Cost less depreciation
   (d) Fair value
8. Capital contributed by owner is liability for the business organization. This follows from
   (a) Going concern concept
   (b) Separate accounting entity concept
   (c) Accounting prudence
   (d) All of these
9. Equity shareholders are the real owners of a limited liability company but they have
   (a) Residual claim on the earning and assets
   (b) First and assured claim on the earning and assets
   (c) Claim depending upon the policy of the company
   (d) None of these
10. Which of the following is not entitled for preference shareholders?
   (a) Voting right
   (b) Fixed percentage of dividend
   (c) Preference over equity shareholders
   (d) None of these

11. Which of the following statements is true about depreciation?
    (a) It is provided on fixed assets on account of their use in the business.
    (b) It is a non-cash expense.
    (c) Both of these.
    (d) Neither of these.

Descriptive Questions

1. "People might come or might go but the entity of a company does not get affected." Discuss.
2. Explain the concept of a limited liability company and differentiate between a public limited company and a private limited company.
3. Write short notes on the following:
   (a) Concept of legal separate entity
   (b) Concept of separate accounting entity
   (c) Depreciation
4. Write an essay as to how a limited liability company can raise the capital.
5. Explain the concept of borrowed capital.
6. Discuss the concept of audit as a tool to exercise control.
7. Elaborate the concept of hybrid securities.
8. "Balance sheet is prepared by following stock concept, whereas profit and loss account is prepared following flow concept." Discuss.
9. "Annual report is much superior to the balance sheet." Explain.

Numerical Problems

1. Capital structure of a company includes the following:
   (i) Equity share capital: 60,000 shares of face value ₹ 100 each
   (ii) Preference shares capital: 10,000, 10% shares of face value ₹ 100 each
   (iii) Debt of ₹ 20,00,000 bearing a coupon rate of 12%
   During the year, the company earned EBIT of ₹ 35,00,000. The equity capitalization rate for this risk category of the company is 18% and the income of the company is subject to 30% tax. Calculate the value of company.
2. Capital structure of a company includes the following:
   (i) Equity share capital: 6,00,000 shares of face value ₹ 10 each
   (ii) Preference shares capital: 20,000, 14% shares of face value ₹ 100 each
   (iii) Debt of ₹ 20,00,000 bearing a coupon rate of 14%
   During the year, the company earned EAT of ₹ 25,60,000. The equity capitalization rate for this risk category of the company is 25% and the returns expected by preference shareholders are 17.50%, whereas return expected by debt holders are 14%. Calculate the value of company.
3. Capital of a company on April 1, 2010 comprised 2,50,00,000 equity shares of face value ₹ 10 each, and 12% preference shares of total value ₹ 10,00,00,000. On this date, the net balance of reserve and surplus was ₹ 19,00,00,000. During the year, the company had EAT of ₹ 45,00,00,000 out of which after distributing equity and preference dividend, the company retained ₹ 22,00,00,000. Calculate the book value of equity shares on 1 April 1, 2010 and on March 31, 2011.
4. An investor purchases 200 shares of a company at a price of ₹ 150. At the end of one year, he/she gets a dividend of ₹ 18 per share and sells the share in the market at a price of ₹ 147 per share after one year. Calculate the return on equity.

5. An investor purchases 100 shares of a company at a price of ₹ 320, whereas face value per share is ₹ 10. He/she expects to get 120% dividend at the end of one year and expected market price at the end of the year is ₹ 380. Calculate the return on equity.
6. 12% ₹ 200 debentures is available in the market at a price of ₹ 196 per debenture, the expenses (brokerage and securities transaction tax) at the time of purchase of shares is Re. 1 per debenture. Only one year is left for maturity; it has a provision of redemption at par on maturity. If an investor purchases it today then calculate the holding period return for him/her.
7. An investor purchases 100 shares of a company at a price of ₹ 213., At the end of one year, he/she gets a dividend of ₹ 6.50 per share and sells the share in the market at a price of ₹ 257 per share after one year. Calculate the return on equity.

Answers

Multiple Choice Questions

1. (b) 2. (a) 3. (d) 4. (b) 5. (b) 6. (a) 7. (c) 8. (b) 9. (a) 10. (a)
11. (c)

Numerical Problems

1. Value of Firm ₹ 1,51,22,222 (equity ₹ 1,21,22,222; preference ₹ 10,00,000; debt ₹ 20,00,000),
2. Value of Firm ₹ 1,27,20,000 (equity ₹ 91,20,000; preference ₹ 16,00,000; debt ₹ 20,00,000),
3. ₹ 17.60 in the beginning, and ₹ 26.40, at the end
4. 10%, 5. 22.50 %, 6. 13.71%, 7. 23.71%

CHAPTER

2

Financial Accounting—Framework

Learning Objectives

After reading this chapter, you will be able to

- Understand the concepts of financial accounting, management accounting and cost accounting
- Know the accrual system of accounting and understand the accounting concepts and conventions
- Gain insights into the computerized accounting system and mechanism of accounting equation
- Comprehend double entry system of accounting, books of accounts and—accounting standards related to financial statements
- Understand the concept of capital maintenance

Impact of Changing Accounting Policies on Financial Results

Under continuous inventory valuation system, a firm adopted Last In First Out (LIFO) method of inventory valuation. As a result, the closing inventory for the year ending March 31, 2007 was 2,000 units with a cost of ₹ 2,01,800. After considering these facts and other accounting records, the firm reported a gross profit of ₹ 12,79,300 for the year ending March 31, 2007 and the net profit for the year was ₹ 6,64,500.

During the second year, the accountant of the company was changed as the previous accountant was not fulfillling the requisite qualification. The new accountant adopted the First In First Out (FIFO) method under continuous inventory valuation system. As a result, the closing inventory for the year ending 2008 was 2,000 units, valuing ₹ 2,20,000 (had it been valued as per LIFO ₹ 2,04,100) . The sales activity for 2008 was almost of the same level as that of the previous year and the gross profit reported by the firm was ₹ 12,95,200 and the net profit was ₹ 6,64,500. The chief executive of the firm expressed a feeling of satisfaction and relief over the results and motivated the employees to further improve the performance in the next financial year.

This clearly shows that the profits in the year 2008 have been maintained just because of the change in the inventory valuation policy and not because of maintaining the business activities. Although the policies should not be changed very often, a proper disclosure should be made about the effect of such change on profit, if it is still required.

ART AND SCIENCE OF MANAGING MONETARY TRANSACTIONS

Monetary transactions are the one that help a business enterprise to ascertain its financial performance. All the monetary transactions are first recorded in the financial accounting books and thereafter, these are used by different stakeholders according to their purpose. The mechanism of managing monetary transaction is spread over financial accounting, management accounting and cost accounting.

Financial Accounting—Basic Accounting Requirement

It is the basic accounting system that deals with the identification, recording, classification, summarization, presentation, analysis and interpretation of monetary transactions of a business organization. Its main objective is to find out profit/loss as well as assets and liabilities of a business organization. Various books of accounts are prepared and presented on the basis of universally accepted accounting concepts and conventions. Books of accounts are prepared by following double-entry system, i.e., for every debit there is a corresponding credit. To have uniformity and comparability of books of accounts, every business enterprise follows accounting standards specified by the Institute of Chartered Accountants of India (ICAI).

USEFUL INFO

Internal users of financial accounting:
- Managers
- Supervisors
- Corporate planners
- Employees

External users of financial accounting:
- Shareholders
- Money lenders
- Banks
- Tax authorities Government
- Customers
- Prospective investors
- competitors

Management Accounting—Managerial Toolkit

It is that branch of accounting that aims at providing information to managers for decision-making. Under this, the main stress is on gathering, recording, summarization, analysis and interpretation of data in such a manner so as to generate information to support in decision-making at various managerial levels. Management accounting is historical as well as futuristic in nature. It uses the accounting data recorded in the financial and cost accounting. At the same time, certain forecasting techniques are also used to make budgets and plans. Ratio analysis, cash flow and funds flow, budgetary control, standard costing and variance analysis are the tools of management accounting.

USEFUL INFO

Adoption of management accounting is not compulsory as per law.

Costing—Managerial Decision Tool

Costing is the technique and process of ascertaining cost. It has the important objective of ascertaining the cost of goods and services being produced. Sometimes, costing is done to ascertain the cost of different processes involved in producing the product or service. As a process, it aims at the collection and classification of cost data that are further allocated, apportioned and absorbed into the cost units. Each individual product is also called **cost unit.** To achieve the objective of cost ascertainment, various accounting functions and fundamental are applied so as to arrive at near accurate cost of cost units, i.e., goods and services. For this purpose, several costing techniques, such as **unit costing, process costing, contract costing, service costing, standard costing, marginal costing, incremental costing** and **differential costing,** are adopted according to the product or situation.

Tables 2.1 and 2.2 show the differences between financial accounting and cost accounting and management accounting and cost accounting, respectively.

Costing can be referred as a formal and well-structured system by which cost of products and services is ascertained with as far as possible significance level and accuracy.

TABLE 2.1 Difference between Financial Accounting and Cost Accounting

S. No	Point of Difference	Financial Accounting	Cost Accounting
1	Purpose	The purpose is to provide reporting to owners, creditors, tax authorities, govt. and prospective investors	The purpose is mainly internal reporting at different managerial levels for decision-making
2	Compulsory	It is compulsory for every form of business organization	It is not compulsory for every business organization
3	Nature of Transactions	All the monetary transactions are recorded	Only product/process/services-related transactions are recorded. Financial transactions, such as donation, dividend, etc. are not recorded
4	Reporting system	Generally, annual reporting system is adopted. In certain cases, quarterly and half-yearly system of reporting is also adopted	In this, reporting is done according to need of department and situation. In certain cases, daily or weekly reporting is also done
5	Profit or loss	Aggregate Profit or loss for the whole organization is calculated and not product wise	Profit or loss is calculated for each product to evaluate desirability of each product/service
6	Control Techniques	It does not make use of any type of control technique	It makes use of budgetary control and control through variance analysis
7	Pricing Decisions	It does not provide any basis for price fixation	It provides the basis for price fixation
8	Decision-making	Decision-making about different products and their desirability cannot be done	Decision-making about different products and services and their desirability is the main focus
9	Orientation	Historical in nature as only historical data are presented	Historical as well as futuristic apart from historical data certain estimates about future are also provided
10	Stock valuation	Valuation on cost or market price, whichever is lower	Valuation of stock at cost only

TABLE 2.2 Difference between Management Accounting and Cost Accounting

S. No.	Point of Difference	Management Accounting	Cost Accounting
1	Purpose	Its main purpose is to provide useful information for all the managerial levels to facilitate decision-making	It is to facilitate cost estimation, cost control and cost management
2	Compulsion	Implementation of management accounting system is not at all compulsory for any kind of business organization	It is not compulsory for every business organization however for certain big factories or business organization it is compulsory

(*Contd*)

(*Contd*)

3	Nature	Mainly analysis of pre-recorded data of cost and financial accounting and forecasts are used to generate meaningful information for decision-making	In this costing records are maintained as per the double-entry bookkeeping system and these are classified, summarized and anlaysed as per cost accounting fundamentals
4	Reporting system	Reports are generated using external as well internal information on a routine basis for lower level management, whereas for top level management ad hoc, i.e., non-structured reports are generated	In this, reporting is done according to need of department and situation. In certain cases, daily or weekly reporting is also done. Reports are product or service oriented and mainly for lower and middle level management
5	Scope	It has a broader scope as compared to cost accounting as it also encompasses the use of cost accounting within it	Its scope is narrow and it serves as an input for management accounting
6	Utility	Management accounting is totally oriented towards providing information to the members of the organization	In certain cases, such as exercise duty, sales tax and subsidy from Government, cost accounting provides information for external users also

ACCRUAL SYSTEM OF ACCOUNTING

Accrual system of accounting, also known as mercantile accounting system, focuses on both the cash transaction and credit transactions, including accruals. Under this, the following system of recording the transactions is followed:

- Entering the monetary transactions in the elementary books of accounts as soon as these transactions take place.
- Both cash and credit transactions are recorded in the elementary books of accounts.
- Posting from the elementary books of accounts to the appropriate accounts in the ledger. Such posting facilitates classification of the transactions.
- Preparation of trial balance to check the mathematical accuracy of the ledger accounts. A trial balance is like a ready reference containing the final balance of each and every ledger account.
- Making adjustment for accruals at the end of the year so as to abide by matching and accrual concept. Usual adjustments are about outstanding expenses, pre-paid expenses, accrued income, unearned income, depreciation, etc.
- Passing the closing entries for nominal accounts—revenue and expenses to ascertain profit/loss for the period. The closing entries help in preparing Trading and Profit and Loss Account.
- Real and personal accounts are balanced so as to have a projection of assets and liabilities in the balance sheet.

By following this system, a business entity can have a fair idea about profit/loss and also comes to know about the status of assets and liabilities as on the date of balance sheet. The final result as depicted by profit & loss account—income for the accounting period is calculated after considering all the revenue and expenses whether these have been received/paid in cash or not.

USEFUL INFO

AS-1 makes it binding on every business enterprise to follow accrual system of accounting.

Similarly, the balance sheet depicts the accurate status of assets and liabilities as on the balance sheet date. This system is in practice by all the business organizations and is as per the accounting concepts and conventions. It serves as a greater purpose as compared to cash system of accounting. Table 2.3 illustrates the differences between accrual system and cash system of accounting.

TABLE 2.3 Differences between Accrual System and Cash System

Point of Difference	Cash System	Accrual System
1. Type of Transactions	Only cash transactions are recorded in the books of accounts	Both cash and credit transactions are recorded in the books of accounts
2. Completeness of Records	Does not show all the monetary transactions	Shows all the monetary transactions
3. Suitability	Does not suit in all type of business organizations	Suits in every type of business organization

CONCEPT OF ACCOUNTING YEAR AND ACCRUALS

Business is started with the presumption that it will be a going concern. While doing business, the owner anticipates that it will continue forever. He/she never considers closing down the business in the near future. Accordingly, all the monetary transactions are recorded in the books of accounts at the historical cost and not at the market value of the transaction. Still, different stakeholders are interested to know about the financial performance of the business enterprises at a regular interval, therefore, every business enterprise finalizes its books of accounts at a regular interval of twelve months. As a matter of common practice, every business enterprise follows common accounting period from April 1 to March 31. Therefore, this period of twelve months is called **accounting year/financial year/fiscal year**. Finalization of accounts implies closing the books of accounts so as to work out the profit/loss incurred for the year, and also find out the status of assets and liabilities as at the end of the year. Finalization of books of accounts involves the following:

- Closing Ledger Accounts
- Preparing Trial Balance
- Preparing Adjusted Trial Balance
- Preparation of Financial Statements

As a matter of general practice, all the cash transactions are recorded in the ledger accounts but there are certain transactions that relate to the current accounting year but not dealt in cash by the end of accounting year, whereas there are certain more transactions that have been dealt in cash but are related to the next accounting year. These are as follows:

Outstanding Expenses—expenses due but not yet paid by the end of the year.

Pre-paid Expenses—expenses paid during the current year but relevant for the next year.

Accrued Income—income earned during the year but not received so far.

Unearned Income—income received but not earned so far.

(Details about these are given in Chapter 5.)

Short-Term Accruals vs Long-Term Accruals

Accruals include (i) certain income and expense items that are related to the current accounting year but have not been settled in cash, (ii) certain income and expense items that have been dealt in cash but not related to the current accounting year. Both of these accruals result into the items, such as outstanding expenses, pre-paid expenses, accrued income and unearned income. The accurate level of profit/loss and financial position can be arrived at only when these accruals have been incorporated in the financial statements. These accruals are further classified as short-term accruals and long-term accruals.

Short-term accruals are such accrual items that relate to the immediate next accounting year from the date of balance sheet. The short-term accruals are shown as **current assets**—pre-paid expenses and accrued income or **current liabilities**—outstanding expenses and unearned income; whereas **long-term accruals** are the ones that relate to the accounting years beyond the next accounting year. The long-term accruals are practically the revenue expenses that are likely to generate the economic benefit for the accounting years beyond the next accounting year. These are also called **deferred revenue expenses,** particularly to the extent not written off so far, such as preliminary expenses, advertising expenses, research and development expenses, discount on issue of securities, issue expenses. All these items are shown in the balance sheet as **fictitious assets**.

Fictitious assets are not the real assets; rather these are deferred revenue expenses to the extent not written off or losses or capital expenses to be written off in the coming accounting years.

ACCOUNTING CONCEPTS AND CONVENTIONS—AN OVERVIEW

Accounting is an art in the sense that a person having knowledge of accounting and zeal to fight with numbers can only successfully maintain the books of accounts. **It is a science** in the sense that it is based on certain principles that are universal in nature. The **accounting principles** are applicable globally. The global application of accounting principles is enforced so as to facilitate uniformity of accounting books as well as facilitate proper interpretation of books of accounts.

The accounting principles are represented by accounting concepts and conventions.

Accounting Concepts

Accounting concepts are like scientific rules that are time-tested and applicable universally across the boundaries and in different situations. These concepts are like scientific rules leading to same interpretation that helps in maintaining continuity and comparability of books of accounts. The following are the accounting concepts:

Accounting concepts are such fundamentals that are time-tested and applicable universally. Majority of the concepts are based on accounting standards developed by ICAI.

Separate Entity Concept

The **separate entity concept** implies that the entity of owner and that of the business organization are considered separate from each other. The separate entity concept has two viewpoints—first, accounting viewpoint and second, legal viewpoint. From the **accounting viewpoint**, the entity (existence) of the owner is always separate from the business organization. Due to this, the money contributed by the owner in the business is considered as a liability for the business organization. This contribution of the owner is called **capital** and shown as a liability in the balance sheet of business organization. By using this rule, drawings by the owner is deducted from the capital. **Drawing** is the money or money value of the asset used by the owner for his/her personal purpose. It is applicable equally in all the forms of business enterprises.

USEFUL INFO

Accounting view is applicable equally for sole enterprise, partnership and limited liability company.

The **legal viewpoint** has different interpretation in different types of business organization. In case of **sole enterprises and partnership,** the entity of businessman (the owner) and that of the business organization is not considered separate from each other; the implication of which is that in case business property is not sufficient to pay off business liabilities then the personal property of the owner can be used to fulfill business losses. This results into **unlimited liability** for the owner of the business. In case of a **limited liability company** (LLC), the entity (existence) of owners, i.e., the shareholders is considered separate from the entity of the company that implies even in case of losses in the company, the personal property of the shareholders cannot be used to fulfill business losses. This results into the **limited liability** of shareholders, the liability of shareholders is up to the value of shares purchased by them.

USEFUL INFO

In case of sole enterprise and partnership the entity of owner and business enterprise is same from legal viewpoint, whereas for LLC it is separate from each other.

Money Measurement Concept

A **transaction** is nothing but the exchange of commitment between two or more parties resulting into monetary/non-monetary implications. By monetary transactions, we mean the transactions that can be measured in money value and the monetary implications of such transaction can be calculated precisely. In the books of accounts, only monetary transactions are recorded, that too at historical cost only.

Going Concern Concept

Going concern concept enforces that once a business is started, the businessman (owner) foresees to continue it for a significantly longer time period that might even be an infinite time period. This fundamental helps in the classification of different assets into fixed assets and current assets.

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Due to this concept, fixed assets are not shown as direct expense; rather depreciation is charged on the fixed assets so as to provide for the replacement of the assets in future.

The concept of going concern also helps in recording and presenting different assets, particularly fixed asset at their cost, irrespective of the market price of such assets on the date of presentation in the balance sheet. This concept is also called **mother concept** as it gives birth to cost concept.

Cost Concept

Financial accounting is considered as a mechanism for recording only historical monetary transactions in the books of accounts. Due to this, it is sometimes called **postmortem/investigation** of the historical monetary transactions. All the transactions are recorded at the cost for the transaction, irrespective of the market price/value of the transaction.

Irrespective of the market price, all the monetary transactions are recorded at the historical cost.

Dual Aspect Concept

Every monetary transaction affects a minimum of two accounts/aspects, and value wise magnitude of this effect on both the accounts is equal. The dual aspect concept helps in establishing the principle of matching of books of accounts. The main emphasis of double-entry system is that after every monetary transaction, the sum total of assets and liability matches. The dual aspect concept helps in establishing the **balance sheet equation**, i.e.,

Total Liabilities = Total Assets

This can further be rewritten as

Owner's Capital + External Liabilities = Total Assets

The dual aspect concept facilitates the matching of balance sheet even after each monetary transaction.

USEFUL INFO

Dual aspect concept helps in imposing accounting equation, i.e., balance sheet equation.

Accounting Period Concept

The main purpose of accounting is to find out profit/loss and make as far as possible the correct presentation of assets and liabilities in the books of accounts. To evaluate the financial performance of the business organization, books of accounts are finalized at a regular interval, i.e., after every twelve months. Globally, the accounting period is from April 1 to March 31. This period of twelve months is called **accounting year** or **financial year.** At the end of every accounting year, books of accounts are closed to have an idea about the financial position at the end of the year and the financial result in the form of profit or loss for the accounting year. On the last day of the accounting year, books of accounts are finalized and presented in the form of final accounts—**income statement** (Trading Account and Profit & Loss Account) and **balance sheet**. Last day of the accounting year is also called the **balance sheet date**.

Revenue Recognition Concept

Revenue should be recorded in the books of accounts only when it has been received or there is a significant claim of the business organization to receive it from the other party. This implies that the final accounts should incorporate only the income that has been earned during the year whether received in cash or not. The adjustment of accrued income and unearned income is made by following this concept.

Matching Concept

While arriving at the profit for the year, all the expenses relevant for the current year's sales as well as for the current accounting period should be shown, irrespective of the fact whether these are cash or non-cash expenses or paid-in cash or not. By following this concept, depreciation is provided on different fixed assets and different intangible assets are amortized.

Amortization is the process through which the cost of an asset is spread across its useful life of the asset. As a result, the capital expenditure becomes an expense.

Accrual Concept

This concept implies that the final accounts should incorporate expenses and revenue that is relevant for the current accounting year whether settled in cash or not. Accordingly, adjustment for outstanding expense, pre-paid expense, unearned income and accrued income are made in the books of accounts.

Accounting Conventions

Accounting conventions are certain accounting policies and procedures that are followed as a matter of practice in the business organization. These are different from accounting concepts in the sense that

USEFUL INFO

Accounting conventions are followed as a matter of practice or precedence; these might not be applicable universally.

these might not be followed universally as accounting concepts are followed. The prominent accounting conventions are as follows:

Convention of Conservatism

> On the balance sheet date, **inventory** is displayed at cost or market price, whichever is less.

The **convention of conservatism** indicates towards the **accounting prudence**. It implies that an accountant should foresee future losses and provide for such losses in the books of accounts at the time of preparing final accounts. But he/she should never anticipate and provide for expected/future profits in the books of accounts. The profits are to be recorded in the books of accounts only when these have been earned. As a result of this, the following two effects are provided at the time of preparing final accounts:

(i) Inventory is shown in the final accounts (income statement and balance sheet) at the market price or book value, whichever is less.

(ii) Provision for bad/doubtful debts is made at the time of preparing the final accounts.

This convention is followed by majority of the business houses. The accounting standard providing for the **valuation of inventory** is based on this convention.

Convention of Consistency

Accordingly, once an accounting policy or procedure adopted should be followed continuously for a longer time period consistently without any significant change. If such change is inevitable then its impact on profit should be disclosed in the annual report of the company. Similarly, while following the revenue recognition concept, a particular system is to be adopted continuously without any change year after year.

Convention of Full Disclosure

> **Full disclosure** in the financial statements enhances reliability of the financial results.

The **conventions of full disclosure** imply that any change in the accounting policies and procedures should be disclosed properly along with the monetary implication of such change. This is required so that the users of financial statements can interpret the financial results appropriately. The disclosure about accounting policies and procedures also brings in transparency in the accounting reports of the business organization.

Convention of Materiality

While maintaining books of accounts, an accountant should follow the principle of management by exception. Although there is a practice that a separate account should be opened for each and every expense/item, sometimes few small–small similar items can be clubbed together in one account so as to have convenience in maintaining books of accounts. Similarly, depreciation on fixed assets is provided across their useful life. But in case of assets costing upto ₹ 5,000, 100% depreciation is provided in the year of purchase. The main purpose of following this convention is to avoid maintaining too much of accounts by maintaining the originality of the accounting work without having much effect on the reported profits.

USEFUL INFO

Substance over materiality implies that an item that has significant impact on the decision-making should be disclosed properly however value wise it may be immaterial.

Different accounting concepts and conventions are like foundation stones for accounting work. These not only facilitate preparation and finalization of books of accounts but also facilitate easy understanding and comparison of books of accounts.

COMPUTERIZED ACCOUNTING SYSTEM

The term **accounting** and **books of accounts** immediately frames an image in the mind about an accountant as a person with round spectacles and writing records in folded papers wrapped in a red cover and further the whole bunch of books of accounts is wrapped in a red cloth. But nowadays, all this has become a history and accounting work is being performed on computers in a computerized environment, replacing the old system of accounting. Under the manual system of accounting, an accountant was required to have complete knowledge of accounting work, whereas computerized accounting has changed the scenario completely. The initial work of maintaining accounting can be performed by a person having knowledge of data entry. Subsequently, the final accounts can be prepared under the supervision of an expert like a chartered accountant. Books of accounts are maintained in computerized accounting system by adopting the following sequential and logical steps (Fig. 2.1).

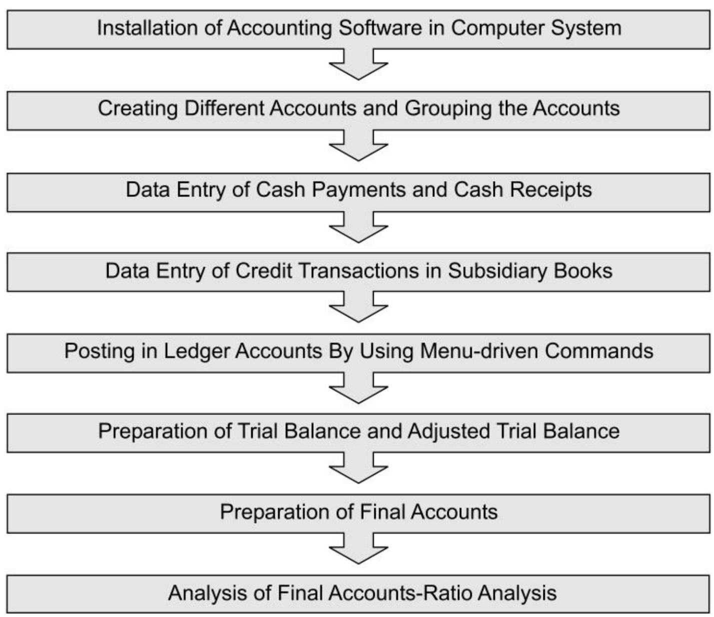

Fig. 2.1 Flow of Transaction in Computerized Accounting System

Preparation and finalization of books of accounts in a computerized accounting system is much easier as compared to manual system of accounting. This is much more convenient and offers the following benefits over manual system of accounting:

- Less Time Consuming
- Accurate
- Facilitates Finalization of Accounts at a Frequent Interval
- Less Paper Work
- Easy Handling and Convenient

Recap 1

So far, we have discussed the following topics:

- Financial Accounting
- Management Accounting—Managerial Toolkit
- Cost Accounting—Managerial Decision Tool
- Accrual System of Accounting
- Difference between Cash System and Accrual System
- Concept of Accounting Year and Accruals
- Short-term vs Long-term Accruals
- Accounting Concepts and Conventions—An Overview
- Computerized Accounting System

Self-assessment 1

1. Differentiate between financial accounting and management accounting.
2. Explain how going concern concept is the mother concept.
3. Differentiate between accrual system and cash system of accounting.

The following topics will be delved into next:

- Accounting Equation— Fundamental Accounting Identity
- Double-entry System of Accounting
- Debit–Credit Rules—Rules for Maintaining Books of Accounts
- Elements of Final Accounts—Assets, Liabilities, Income and Expense
- Financial Statements—Final Accounts
- Levels of Profit— Gross Profit Operating Profit, EBIT, Net Profit
- Linkage between Profit and Loss Account and Balance Sheet
- Accounting Policy and Accounting Standards Concerning Financial Statements
- Capital Maintenance

ACCOUNTING EQUATION—FUNDAMENTAL ACCOUNTING IDENTITY

Double-entry system of accounting is based on dual aspect concept that implies that every transaction has impact on minimum two accounts. If one account is debited then the other one is credited. When more than two accounts are affected then even the value wise magnitude on debit side accounts is equal to the credit side accounts. The second impact of this concept is that the total of assets becomes equal to total of liabilities every time even after every transaction that is called **accounting equation**. The accounting equation is as follows:

$$\boxed{\text{Total Liabilities} = \text{Total Assets}}$$

i.e.

$$\boxed{\text{Owner's Capital} + \text{External Liabilities} = \text{Total Assets}}$$

This equation can be used as a yardstick to testify the accuracy of books of accounts. An accountant can prepare the balance sheet in a logical manner by adopting accounting equation. Table 2.4 shows an accounting equation. Accounting equation is also known as **accounting identity** because it represents the complete identity of accounting system. While using this accounting equation, different accounting transaction finally group in the following six segments:

- Expenses
- Losses

- Assets
- Revenue
- Profit
- Liabilities

USEFUL INFO

If one prepares the balance sheet after every transaction, then even assets will equal the liabilities.

The different between revenue (including profits) and expenses (including losses) helps in arriving at net profit/loss, if difference is positive, it is net profit. Otherwise, it is a net loss. Net profit, being a reward for the owner, is added to the owner's capital, whereas net loss is deducted from the owner's capital.

TABLE 2.4 Accounting Equation

		Liabilities (in ₹)		Assets (in ₹)	
1	Started business with cash ₹ 1,00,000	Capital	1,00,000	Cash	1,00,000
2	Deposited cash into bank ₹ 30,000	Capital	1,00,000	Cash	70,000
				Bank	30,000
3	Purchased furniture and issued cheque ₹ 12,000	Capital	1,00,000	Cash	70,000
				Bank	18,000
				Furniture	12,000
4	Purchased goods and paid cash ₹20,000	Capital	1,00,000	Cash	50,000
				Bank	18,000
				Furniture	12,000
				Stock	20,000
5	Taken a loan from bank ₹ 1,20,000	Capital	1,00,000	Cash	50,000
		Loan	1,20,000	Bank	1,38,000
				Furniture	12,000
				Stock	20,000
6	Sold half of the goods for ₹ 45,000 and paid salary ₹ 2,000; wages ₹ 1,200	Capital	1,31,800	Cash	91,800
		Loan	1,20,000	Bank	1,38,000
				Furniture	12,000
				Stock	10,000
7	Owner withdrew cash for his personal use ₹ 6,000	Capital	1,25,800	Cash	85,800
		Loan	1,20,000	Bank	1,38,000
				Furniture	12,000
				Stock	10,000
8	Paid interest on loan ₹ 800	Capital	1,25,000	Cash	85,000
		Loan	1,20,000	Bank	1,38,000
				Furniture	12,000
				Stock	10,000

DOUBLE-ENTRY SYSTEM OF ACCOUNTING

The books of accounts are maintained using **double-entry system** that implies that every monetary transaction affects a minimum of two accounts, out of which one is debited and another is credited. If there are more than two accounts involved in a transaction then a few get debited and the rest gets credited. Still the verification is that amount wise, the sum total of **debit effects** is equal to the sum total of **credit effects**. Different books maintained under double-entry system are in the following:

- Journal
- Subsidiary Books
- Ledger
- Trial Balance
- Final Accounts

Journal

Journal is the elementary book for maintaining monetary transactions of a business at the **elementary level**. The transactions are recorded in the form of journal entries in a chronological manner, i.e., in a date wise manner. As soon as a monetary transaction takes place, an entry is passed in the journal. The rules for journal entry were given by Lukas Passiually and these are called **book keeping rules.** For passing the entries, different accounts are classified into three groups; first—real accounts, second—personal accounts and third—nominal accounts.

USEFUL INFO

Journal is the book to record the monetary transactions at the elementary stage. It is maintained in a chronological order. This is merely to keep the track record of the transactions.

Subsidiary Books

Subsidiary books are the result of subdivision of the journal. For a business organization, having a large number of transactions, finds it difficult to maintain these transactions in the journal. Therefore, it uses subsidiary books to make elementary recording of the monetary transactions. The subsidiary books of accounts are also known as **Day Books**. The following subsidiary books are maintained:

- Purchase Book
- Sales Book
- Purchase Return Book
- Sales Return Book
- Cash Book
- Bank Book
- Bills Receivable Book
- Bills Payable Book
- Journal Proper

USEFUL INFO

Subsidiary books are maintained to record the monetary transactions in a segmented manner. The transactions recorded in the subsidiary books need not be recorded in the journal.

Purchase Book

Purchase book is maintained to record only the transactions of credit purchase of goods made by the business organization. In this book, transactions are recorded in a chronological order and at a regular interval, the sum total of the amount column is debited to 'purchase account' and individual accounts of suppliers are credited with the respective amount in a date-wise manner.

Sales Book

Sales book is maintained by a business organization to record only credit sales transactions. In this book, transactions are recorded in a chronological order and at a regular interval, the sum total of the amount column is credited to 'sales account', whereas the individual account of customer is debited with the respective amounts.

Purchase Return Book

There are the incidences of returning the purchased goods to suppliers. The accounting process to record these transactions at the elementary level is completed by maintaining a separate book namely **purchase return book**. At a regular interval, the total of amount column is credited to purchase return account and the individual account of suppliers with the respective amount is debited.

Sales Return Book

Similarly, there might be the incidences of goods being returned by the customers out of the goods sold to them. Such transactions are called **sales return transactions**. A separate book is maintained to record these transactions in a chronological order. At a regular interval, the sum total of the amount column is debited to sales return account and the individual account of the customer returning the goods is credited with the respective amount.

Cash Book

A **cash transaction** is the one in which there is an exchange of cash at the time of transaction. Cash book is maintained to record cash receipts and cash payments by following a double-entry system. All the cash receipts are entered on the debit side of the cash book, whereas all the payments are shown on the credit side of the cash book. The business organization maintaining cash book is not required to maintain cash account in the ledger as the cash book is the replication of cash account. The transactions entered in the cash book are subsequently posted to the ledger accounts.

Bank Book

A **bank transaction** is the one in which there is an impact in the bank balance of the business house either a deposit or a withdrawal takes place. Bank book is like an asset account and it is maintained by following the mechanism of asset account. The bank account is debited as soon as the bank balance increases due to a transaction, whereas it is credited when the bank balance decreases due to a transaction. The different transactions entered in the bank book are further used to create accounts in the ledger by following the double-entry system of accounting.

USEFUL INFO

Bills of exchange is a negotiable instrument, written by the seller of goods and accepted by the buyer of goods.

Bills Receivables and Bills Payable Book

A business organization having frequent transactions in **bills receivables** and **bills payables** maintains a separate book to keep the record of bills receivables and bills payables. Apart from the details of the bills, such as name of drawer/drawee, date of writing, date of acceptance, amount, due date, certain other details such as status of payment or how the bill has been disposed are also recorded. The details from the bills receivable and bills payable book are posted to the ledger accounts.

USEFUL INFO

Being main source of preparing final accounts GENERAL LEDGER is recognized as principle book of accounts.

Journal Proper

Routine monetary transactions, such as purchase and sales of goods, payment of expenses, etc. are recorded in the books mentioned above. Still there are many transactions—opening entries to bring in the book value of assets and liabilities in the books of accounts in the beginning of the financial year, purchase and sale of assets, depreciation on assets, adjustments at the end of the year that cannot be recorded in the above mentioned books. Similarly, the closing entries to close the books of accounts at the end of the year, these transactions are recorded by passing journal entries in the journal proper. From journal proper, these are posted to the ledger accounts.

General Ledger

General ledger is a book in which different accounts are maintained. It is the principal books of accounts. This helps in having a classified summary of all the monetary transactions of a business organization in the form of a separate account for each item/aspect.

An account is the summary of all the monetary transactions related to an entity, aspect or an item. The transactions recorded in different subsidiary books/journal are posted to the ledger accounts by following the rules of posting. The rules of posting are shown in Table 2.5.

USEFUL INFO

An **account** is the summary of all the monetary transactions related to an aspect/object/entity.

TABLE 2.5 **Rules for Maintaining Ledger Accounts**

	When Increase	When Decrease
Assets, Expenses and Losses	Debit it	Credit it
Liabilities, Revenue (Income) and Profits	Credit it	Debit it

Table 2.5 shows that by nature asset, the expense and loss accounts have debit, balance. Therefore, these are to be debited whenever these increase in the business, whereas these are to be credited when these decrease on account of business activities. The nature of liability, revenue (income) and profit accounts is that these have credit balance; therefore, these are to be credited whenever these increase and debited as soon as these decrease.

Trial Balance

Trial balance is a statement showing summary of different accounts maintained in general ledger. Trial balance is prepared to achieve several objectives out of which, the objective, i.e., checking mathematical accuracy of books of accounts is the paramount and prominent. The total of debit column of trial balance must tally with the credit column of the trial balance, as soon as total of both of these columns tallies the accountant has a 'sigh of relief'. Trial balance is prepared at a regular interval by every business organization this helps in checking and maintaining mathematical accuracy of books of accounts. ***Matching of trial balance is only an elementary proof of mathematical accuracy of books of accounts and not the final proof***. Even, if the trial balance tallies there might be certain errors that still persist in the books of accounts. These errors might be as in the following:

- Errors of omission
- Errors of principle
- Compensatory errors

USEFUL INFO

Agreeing of trial balance is the elementary proof of mathematical accuracy of books of account but not the final proof.

Errors of omission, errors of commission, errors of principle, compensatory errors, errors of partial omission are the errors found in the ledger accounts.

(These errors have been explained in detail in Chapter 4.)

Financial Statements—Final Accounts

According to going concern concept, a business is likely to continue for an infinite time period, but still books of accounts are finalized at a regular interval, i.e., at the end of every accounting year to sum up the financial position of the business activities. The final accounts are prepared by using balances shown in the trial balance. These accounts include the following:

Trading Account

It is prepared to ascertain gross profit for the year. **Gross profit** is the difference between direct revenue—sales revenue and direct expenses. All the sales revenue is shown to the credit side of trading account and all the direct expenses—expenses incurred for the purchase/production of goods and services are shown to the debit side of the trading account. The difference of credit side and debit side show the gross profit. If direct revenue exceeds direct expense then it is gross profit; otherwise, it is gross loss.

$$\boxed{\text{Gross Profit} = \text{Direct Revenue} - \text{Direct Expenses}}$$

USEFUL INFO

Financial statements are prepared to depict profit/loss position and the status of assets and liabilities of the business enterprises.

Profit and Loss Account

It shows net profit for the year. **Net profit** is calculated by adding other revenues to the gross profit and deducting there from all the indirect expenses. Administrative, selling and distribution expenses are identified as **indirect expenses**, whereas the revenue other than the sales revenue is called **indirect revenue** (other income). This includes interest earned, discount earned, commission earned, etc. Gross profit and other income are shown to the credit side of profit and loss account and all the indirect expenses/losses are shown to the debit of profit and loss account.

$$\boxed{\text{Net Profit} = \text{Gross Profit} + \text{Indirect Revenue} - \text{Indirect Expenses and Losses}}$$

Profit and Loss Appropriation Account

It shows the apportionment of profit among different heads. The net profit for the current accounting year and surplus of the previous accounting year are distributed as provisions, proposed dividend, transfer to general reserve, etc. Any amount left out after this apportionment is transferred to the balance sheet under the heading 'Surplus'.

Balance Sheet

It is a statement showing assets and liabilities of the business at the end of the year. In the balance sheet, all the assets and liabilities maintained on the date of balance sheet are shown in the balance sheet. As per the dual aspect concept, the total of assets must equalize the total of liabilities.

DEBIT–CREDIT RULES—RULES FOR MAINTAINING BOOKS OF ACCOUNTS

Accounting transactions, i.e., monetary transactions are recorded in the books of accounts by using a set of fundamentals and a sequential procedure. The accounting records are first maintained in the elementary books of accounts—journal and subsidiary books. Thereafter, these are posted to the ledger accounts. The balances of different ledger accounts are shown in the trial balance that helps in preparing final accounts. Every firm has to prepare final accounts to ascertain profit/loss for the year arising on account of the business activities taking place throughout the year, whereas balance sheet provides a snap shot of assets and liabilities as at the end of the year.

Rules for Making Journal Entries

Monetary transactions are recorded in the journal by using rules of debit and credit as applicable for three types of accounts (see Table 2.6).

TABLE 2.6 Types of Accounts and Debit–Credit Rules

Account Type	Description	Debit (Dr.)–Credit (Cr.) Rules
Personal Accounts	Accounts of individuals and other business entities	Debit the receiver and credit the giver
Real Accounts	Accounts of all the assets	Debit what comes in and credit what goes out
Nominal Accounts	Accounts of expenses, losses, revenue and profits	Debit all the expenses & losses and credit all revenue & profits

The flow diagram in Fig. 2.2 for maintaining either journal entries or ledger accounts is to be followed so as to have a trial balance:

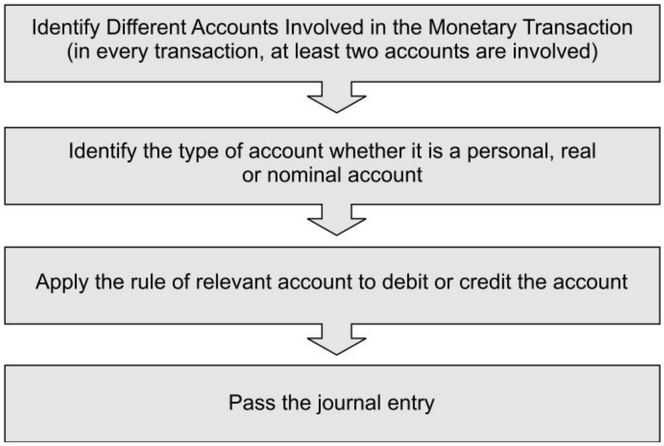

Fig. 2.2 Process of Journal Entry

USEFUL INFO

When the word 'cash' is not given and the name of another party is given in the transaction then it is a **credit transaction.** And account of another party is affected.

EXAMPLE 1 Show journal entries for the following transactions:

(i) Ramesh started business with a cash ₹ 2,50,000
(ii) Deposited cash into the bank ₹ 1,20,000
(iii) Purchased furniture for ₹ 35,000 in cash
(iv) Purchased goods from Deepak of ₹ 15,000 in cash
(v) Purchased goods from Deepak of ₹ 12,000
(vi) Paid salary for the month ₹ 7,500
(vii) Sold goods to Mohan of ₹ 37,000 in cash
(viii) Sold goods to Mohit of ₹ 18,000
(ix) Received commission ₹ 3,000 by cheque
(x) Paid to Deepak ₹ 12,000 by cheque
(xi) Received cheque from Mohit of ₹ 15,000
(xii) Paid rent for the month by cheque ₹ 8,000

SOLUTION Solution has been depicted by explaining logic in the column **Accounting Effect**.

S. No.	Name of Accounts Involved	Type of Account	Accounting Effect (logic for the entry)	Entry
1	Cash Capital	Real Personal	Cash is coming in the business Owner is giver	Dr. it Cr. it
2	Bank Cash	Personal Real	Bank is receiver Cash is going out	Dr. it Cr. It
3	Furniture Cash	Real Real	Asset is coming in the business Asset is going out of business	Dr. it Cr. it

(*Contd*)

(*Contd*)

4	Purchase Cash[1]	Nominal Real	Purchase of goods is an expense Asset is going out of business	Dr. it Cr. it
5	Purchase Deepak[2]	Nominal Personal	Purchase of goods is an expense Deepak is giver	Dr. it Cr. it
6	Salary Cash	Nominal Real	Salary is an expense Cash is going out	Dr. it Cr. it
7	Sales Cash	Nominal Real	Sales is revenue Cash is coming in	Cr. it Dr. it
8	Sales Mohit	Nominal Personal	Sales is revenue Mohit is receiver	Cr. it Dr. it
9	Bank Commission Received	Real[3] Nominal	Asset in bank increases Commission received is income	Dr. it Cr. it
10	Deepak Bank	Personal Real	Deepak is receiver Asset in bank is decreasing	Dr. it Cr. it
11	Bank Mohit	Real Personal	Asset in bank is increasing Mohit is giver	Dr. it Cr. it
12	Rent Bank	Nominal Real	Rent is an expense Asset in bank is decreasing	Dr. it Cr. it

Journal

Particulars		Amount	
		Debit	Credit
Cash a/c	Dr.	2,50,000	
To Capital a/c			2,50,000
(Started business with cash)			
Bank a/c	Dr.	1,20,000	
To Cash a/c			1,20,000
(Deposited cash into bank)			
Furniture a/c	Dr.	35,000	
To Cash a/c			35,000
(Purchased furniture)			
Purchase a/c	Dr.	15,000	
To Cash a/c			15,000
(Purchased goods in cash from Deepak)			
Purchase a/c	Dr.	12,000	
To Deepak's a/c			12,000
(Purchased goods from Deepak on credit)			

(*Contd*)

[1]Despite the name of another party, it is a cash transaction because the word 'cash' is present.
[2]Since the word 'cash' is not given and the name of another party is given in the transaction, it is a credit transaction.
[3]Bank account can be viewed as an asset account also because the money deposited in the bank is an asset

(*Contd*)

Salary a/c	Dr.	7,500	
To Cash a/c			7,500
(Paid salary in cash)			
Cash a/c	Dr.	37,000	
To Sales a/c			37,000
(Sold goods in cash)			
Mohit's a/c	Dr.	18,000	
To Sales a/c			18,000
(Sold goods to Mohit on credit)			
Bank a/c	Dr.	3,000	
To Commission Received a/c			3,000
(received commission by cheque)			
Deepak's a/c	Dr.	12,000	
To Bank a/c			12,000
(Paid to Deepak by cheque)			
Bank a/c	Dr.	15,000	
To Mohit's a/c			15,000
(Received cheque from Mohit)			
Rent a/c	Dr.	8,000	
To Bank a/c			8,000
(Paid rent by cheque)			
Total		5,32,500	5,32,500

POSTING TO GENERAL LEDGER ACCOUNTS

In the preceding section, rules for elementary recording have been explained. By using the same rules, a direct entry or posting to different accounts can be made. General ledger is also called **ledger**. The rules for posting the transactions to different accounts are summarized in Table 2.7.

TABLE 2.7 Rules for Maintaining Ledger Accounts

	When Increase	When Decrease
Assets, Expenses and Losses	Debit it	Credit it
Liabilities, Revenue (Income) and Profits	Credit it	Debit it

EXAMPLE 2 By taking the transactions of Example 1, make posting to ledger accounts and balance the accounts.

(i) In the first transaction, cash account is debited because cash, i.e., an asset is increasing. Therefore, the entry is to be made to the debit of cash account. The second account involved in this transaction is the capital account that is a liability. Here, liability is increasing; therefore, the corresponding liability account—capital account is to be credited.

(ii) In this transaction, cash is decreasing; hence, cash account has been credited and balance in the bank is increasing; therefore, it has been debited.
(iii) Furniture is an asset and it is increasing in the transaction; hence, it has been debited the corresponding opposite account is the cash account that is decreasing; hence, it has been credited.
(iv) Purchase of goods is like an expense. Such purchase is debited to purchase account and cash is going out of the business; hence, it has been credited.
(v) Here goods have been purchased from Deepak on credit, the purchase of goods is debited to purchase account and Deepak is the giver and givers account has been credited.

Likewise, the rest of the transactions have been posted to ledger accounts.

Balancing of an Account

At the end of the accounting year or otherwise also, each account maintained in the ledger needs to be balanced. **Balancing** means taking out the difference between the sum total of debit amounts and the sum total of credit amounts. The core principle of balancing an account is as follows:

- Make a total of both the sides of an account in rough.
- The difference between these is the balance of the account.
- The difference is shown on the side where deficiency is observed.
- If debit total is more than the credit total then it is called **debit balance**; otherwise, it is **credit balance**.

Dr. **Cash A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Capital a/c	2,50,000		By Bank a/c	1,20,000
	To Sales a/c	37,000		By Furniture a/c	35,000
				By Purchase a/c	15,000
				By Salary a/c	7,500
				By Balance c/f	1,09,500
		2,87,000			2,87,000

Dr. **Bank A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	1,20,000		By Deepak's a/c	12,000
	To Commission a/c	3,000		By Rent a/c	8,000
	To Mohit's a/c	15,000			
				By Balance c/f	1,18,000
		1,38,000			1,38,000

Dr. **Capital A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
				By Cash a/c	2,50,000
	To Balance c/f	2,50,000			
		2,50,000			2,50,000

Dr. **Furniture A/C** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	35,000			
				By Balance c/f	35,000
		35,000			35,000

Dr. **Salary A/C** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	7,500			
				By Balance c/f	7,500
		7,500			7,500

Dr. **Purchase A/C** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	15,000			
	To Deepak's a/c	12,000			
				By Balance c/f	27,000
		27,000			27,000

Dr. **Deepak's A/C** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	12,000		By Purchase a/c	12,000
		12,000			12,000

Dr. **Sales A/C** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
				By Bank a/c	37,000
				By Mohit's a/c	18,000
	To Balance c/f	55,000			
		55,000			55,000

Dr. **Mohit's A/C** Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To sales a/c	18,000		By Bank a/c	15,000
				By Balance c/f	3,000
		18,000			18,000

Dr. **Commission Received A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
				By Bank a/c	3,000
	To Balance c/f	3,000			
		3,000			3,000

Dr. **Rent A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	8,000			
				By Balance c/f	8,000
		8,000			8,000

PREPARATION OF TRIAL BALANCE

At a regular interval, accounts maintained in the ledger are balanced by taking the closing balance. The balance of an account might be debit or credit, depending upon the amounts reflected in the debit and credit side of the account. If the sum total of credit amounts is greater than the sum total of debit amounts then the account has credit balance. Otherwise, it is debit balance. The closing balance of each of the account is shown in the trial balance;, the amount is shown to the debit column of trial balance when an account has debit balance, whereas it is shown to the credit column when the balance is credited.

Trial Balance

As on …………

S. No.	Name of Account	L.F.	Debit Amount (in ₹)	Credit Amount (in ₹)
1	Cash a/c		1,09,500	
2	Bank a/c		1,18,000	
3	Capital a/c			2,50,000
4	Furniture a/c		35,000	
5	Salary a/c		7,500	
6	Purchase a/c		27,000	
7	Sales /ac			55,000
8	Mohit’s a/c		3,000	
9	Commission Received a/c			3,000
10	Rent a/c		8,000	
	Total		3,08,000	3,08,000

Recap 2

So far, we have discussed the following topics:

- Financial Accounting
- Management Accounting— Managerial Toolkit
- Cost Accounting—Managerial Decision Tool
- Accrual System of Accounting
- Difference between Cash System and Accrual System
- Concept of Accounting Year and Accruals
- Short-term vs Long-term Accruals
- Accounting Concepts and Conventions—An Overview
- Computerized Accounting System
- Accounting Equation—Fundamental Accounting Identity
- Double-Entry System of Accounting
- Debit–Credit Rules—Rules for Maintaining Books of Accounts

Self-assessment 2

1. Explain the basis of accounting equation.
2. Explain different types of accounts and rules for journalization.

The following topics will be delved into next:

- Elements of Final Accounts—Assets, Liabilities, Income and Expense
- Financial Statements—Final Accounts
- Levels of Profit—Gross Profit Operating Profit, EBIT, Net Profit
- Linkage between Profit and Loss Account and Balance Sheet
- Accounting Policy and Accounting Standards Concerning Financial Statements
- Capital Maintenance

ELEMENTS OF FINANCIAL STATEMENTS—ASSETS, LIABILITIES, INCOME AND EXPENSES

By following the rules of accounting mentioned in the previous section, different monetary transactions are recorded in the books of accounts. The final outcome is the trial balance that depicts the balances of different accounts maintained in the ledger. The different accounts as these appear in the trial balance are finally grouped in the following four segments:

- Assets
- Liabilities
- Income
- Expenses

USEFUL INFO

An expense which results into the acquisition of an item/object which is likely to give the utility over a long-time period, generally exceeding current financial year is identified as an **asset.**

Assets

An expense that results into the acquisition of an item/object that is likely to give the utility over a long-time period, generally exceeding the current financial year is identified as an **asset**. For example, purchase of building, plant, machinery, etc. gives the utility over a long-time period. From accounting viewpoint this expense is regarded as **capital expenditure**. As per the accounting standard, an item of asset must satisfy the following:

- It is being controlled by the business enterprise, and
- Used for the business purpose and
- Realization of economic benefit beyond current accounting year also.

Classification of Assets

Different asset items are classified as **fixed assets, current assets, intangible assets** and **fictitious assets.** This classification is based on the type of asset, but one factor common to all these asset items is that these are subject to control by the business enterprise and are likely to generate economic benefit beyond the current accounting year also.

Non-Current Assets Assets for use in business and not for sale.

- **Fixed assets** These are the assets that generate the utility even beyond next financial year like building plant, furniture, etc. These are in physical substance.
- **Intangible assets** Assets like goodwill, patents, logo and trademark which are not in physical substance.
- **Fictitious assets** Deferred revenue expenses like preliminary expenses, discount on debentures, loss carried forward.

Current Assets Assets in the form of cash or likely to be converted into cash in one year like inventory debtors, short-term investment, etc. (Details about these has been given in Chapter 3.)

Recognition of Expenditure—Asset vs Expense

As soon as a business enterprise uses certain goods and services, it either reduces cash balance or creates an obligation to pay in future. This is called **expenditure.** The use of goods and services implies receiving economic utility either immediately or such economic utility is to be received in the future also. The expenditure is further classified as (i) capital expenditure and (ii) revenue expenses.

Capital Expenditure is the one that results in obtaining the economic utility not only in the short-term but also in the coming years. The item procured by spending this money generates the economic utility over the long-term period; for example, building, plant and machinery, furniture, equipments, etc. These are called **assets**, particularly fixed asset for the business enterprise. These expenditure are non-recurring in nature and do not get consumed immediately. Therefore, these are not shown as an expense directly in the income statement, instead these are shown as an expense by the process of amortization. The capital expenditure provides production capacity for the business enterprise. The expired portion of the assets called **depreciation in the value of asset** is shown as an expense in the income statement. By providing depreciation on fixed assets, the company follows matching concept and an accurate level of profit is recognized. At the same time, the depreciation helps in providing for the replacement of asset in the future also.

Revenue Expenses are the one that are incurred on routine basis to generate revenue for the business enterprise. These expenses are recurring in nature, such as payment for raw material consumed, wages, salary, supervision charges, administrative, selling and distribution expenses. These expenses are deducted directly from the revenue for the year. These do not result into the creation of an asset; instead these result into economic utility immediately or during the short-term, generally not exceeding one year.

Liability

The amount owed by the business organization to others is liability for a business enterprise. It should be the obligation to pay on the date of balance sheet and its value can be reasonably assessed as a present obligation to pay. Such obligation is expected to result into an outflow of resources and entails some economic benefit for the business enterprises. The economic benefit has either been obtained or definitely to be obtained in the years to come. A liability is considered only when

- The obligation to pay is definite on the date of preparing books of accounts or balance sheet;
- The obligation to pay is not conditional;
- The valuation of obligation to pay is possible and such valuation is reasonably accurate;
- The economic benefit for business purpose has either been obtained or likely to be obtained with surety.

Classification of Liabilities

Liabilities are classified into two categories:

- **Non-current liabilities** Non-current liabilities are such liabilities which are to be paid off not in the next financial year but later than this, like long-term loan, debentures, etc.
- **Current liabilities** Liabilities that are to be paid off during next financial year, like sundry creditors, bills payables, outstanding expenses, etc. (Details about these have been given in Chapter 3.)

RECOGNITION OF ASSETS AND LIABILITIES

Recognition of Asset: An item of expenditure is recorded as an asset in the balance sheet only when it can be valued with reliability and verifiability. **Reliability** implies that the economic benefit from the expenditures can be measured with accuracy. Valuation is accurate when different experts arrive at almost similar value for an asset item with very little variability in the valuation. **Verifiability** indicates about the authenticity of the source of valuation, such as in case of financial assets—shares and debentures stock exchange quotation is an authentic source of valuation. The items that fail the test of reliability and verifiability cannot be shown in the balance sheet as an asset.

Recognition of Liability: An item of obligation to pay is shown as a liability in the balance sheet when the incidence of paying an obligation and the amount of obligation can be assessed precisely. The incidence of paying an obligation implies about the certainty of paying an obligation. An item for which obligation to pay depends upon the outcome of future event is a **contingent liability** and it cannot be recorded as liability in the balance sheet. Contingent liabilities are shown outside the balance sheet as a foot note to balance sheet. Similarly, a definite obligation to pay with uncertainty about the value to pay cannot be shown as a liability in the balance sheet. However, it can be shown as a **provision** on the liability side of the balance, provision is not a liability but appropriation of profits.

Income

An increase in the economic benefits during the current accounting period is identified as income. Income is said to be earned only when it results into either an increase in the assets or decrease in the external liability. Income helps in maintaining the capital of owners. Therefore, an income can also be recognized, when owner's stake has increased for reasons other than the fresh contribution by owners. The income encompasses revenue and profits (gains), revenue is the gross inflow on account of core business activities—revenue from sales of goods and services. Income and profits are recognized in the books of accounts only when these have been earned whether received or not. For an income/profit item to be recognized in the books of accounts, the following is observed:

- The activity results into economic benefit during the current accounting year and such benefit is sure and possible.
- Claim of business enterprise as income/profit is sure, i.e., it has been earned.
- The economic benefit to be received in the next year or beyond the current accounting year is not to be recognized as income.
- Incidence of receiving cash is immaterial.

USEFUL INFO

Revenue/income is the gross inflow of cash on account of core activities, whereas profit/gain is the net inflow on account of activities other than the core activities.

Income and Accrual Concept

While preparing final accounts at the end of the accounting year only the income relevant for the current accounting year should be shown in the income statement whether settled in cash or not. Accordingly, the following is provided as an adjustment in the final accounts:

Loan Advanced and Accrued Interest Such income that has been earned but not received so far. It is shown as an income in the profit and loss account and as a current asset in the balance sheet.

ILLUSTRATION A fixed deposit of ₹ 50,000 @ 6% p.a. is made on Feb. 1, 2010 for six months duration. Here bank will pay the interest on the maturity but the interest for February and March has been earned on the balance sheet date, i.e., March 31, 2010. This interest of two months ₹ 500 is to be shown as income in the profit and loss account and as a current asset namely accrued interest in the balance sheet.

Loan Advanced and Unearned Interest It is the income that has been received during the current accounting year but relevant for the next accounting year. Such income is not to be shown as income in the profit and loss account rather to be shown as current liability in the balance sheet.

ILLUSTRATION Interest on loan advanced ₹ 10,000 received on January 1, 2010 for one year. Out of this interest for the period from January to March ₹ 2,500 is relevant for the year ending March 31, 2010 and rest ₹ 7,500 is relevant for the next accounting year. Therefore, only ₹ 2,500 is to be shown in the profit and loss account and ₹ 7,500 as current liability namely unearned interest is to be shown in the balance sheet on March 31, 2010.

Expenses

An expense is considered when it results into decrease in the economic benefit, increase in liability, decrease in equity except distribution to equity owners or depletion in the value of asset on account of business activities. An expense when incurred on recurring basis by a business enterprise to generate revenue, therefore, it is called **revenue expense**. The economic benefit from such expense is realized or likely to be realized during the current accounting year. Expired portion of expenditure is considered an **expense**. To recognize an item as an expense, the following is must:

- There is a reasonable obligation to pay for it or it has been paid.
- The economic benefit relates to current accounting year.

Revenue expenses are broadly classified as cash expense and non-cash expense. **Cash expense** is the one for which the business enterprise has made the cash payment during the current accounting year or it was prepaid in the beginning of current accounting year or is outstanding at the end of the current accounting year. **Non-cash expense** is the one for which payment is not paid as specified in the case of cash expense, but it is simply the amortization of assets. **Depreciation** is a non-cash expense. Both of these expenses are further classified according to the further application while calculating profit. Mainly, these are classified as direct expenses and indirect expenses.

Direct vs Indirect Expenses

Direct expenses are the one which are incurred in the production/procurement of goods and services, these are the expenses incurred at the factory level, such as material consumed, wages and salary of factory staff, power and fuel consumed and factory expenses. **Indirect expenses** are the one that are incurred in the administration, selling and distribution of goods and services. These can further be identified with the help of law of exclusion, i.e., the expenses other than factory expenses are identified as indirect expenses.

Example 3 Show whether the following items are an expenses or not.

(a) Purchased building of ₹ 2,00,000 and issued cheque
(b) Purchased equipment of ₹ 50,000 from Mahesh Enterprises
(c) Purchased goods of ₹ 30,000 and issued cheque
(d) Paid rent for the month ₹ 10,000 in cash
(e) Paid advertising expenses ₹ 1,00,000 by cheque for the current year
(f) Paid research and development expenses ₹ 45,000 that will generate economic benefit over next 5 years.
(g) Provided depreciation on building ₹ 40,000 during the year.

Solution

Classification of Item as Expense or Asset

Transaction	Assets	Liabilities	Equity/Expense	Description
(a)	+2,00,000 [Building] −2,00,000 [Bank]			Asset: Building will generate economic benefit over long-term period.
(b)	+50,000 [Equipment]	+50,000 [Creditors]		Asset: Equipment will generate economic benefit over long-term period. Liability: Payment for equipment will be paid in future.
(c)	−30,000 [Bank]		−30,000 [Purchase expense]	Expense: goods purchased will be consumed during the year and generate economic benefit during the current year. This will reduce the equity also.
(d)	−10,000 [Cash]		−10,000 [Rent expense]	Expense: rent paid will generate economic benefit during the current year. This will reduce the equity also.
(e)	−100,000 [Bank]		−1,00,000 [Advertising expense]	Expense: advertising expense paid will generate economic benefit during the current year. This will reduce the equity also.

(*Contd*)

(*Contd*)

(f)	-45,000 [Bank] + 45,000 [Fictitious asset—R & D Expenses]			Asset: R & D expense will generate the benefits over long-term period hence an asset. Every year, one-fifth of it will be shown as an expense and then it will reduce equity.
(g)	−40,000 [Building]		−40,000 [Depreciation expense]	Expense: Asset reduces and equity also.

Expenses and Matching Concept

Matching concept implies that all the expenses cash or non-cash both should be shown in the final accounts so as to arrive at accurate profit/loss. There are the expenses, such as depreciation on assets, amortization of intangible and fictitious assets and outstanding expenses are shown in the final accounts to abide by this concept as well as accrual concept.

Property, Plant and Equipment and Depreciation Non-current assets are shown as an expense in the profit and loss account by providing depreciation on these assets. **Depreciation** is charged on fixed assets to record the diminution in the value of asset on account of their use in the business. Depreciation is the result of amortization. **Amortization** means spreading the cost of an asset across the useful economic life of the asset. Depreciation is shown as an expense to the debit of profit and loss account and the book value of the assets decreases by the amount of depreciation. Prominent methods of providing depreciation are **straight line method** and **written down value method**.

ILLUSTRATION Cost of plant is ₹ 5,00,000 with an economic life of 5 years and estimated salvage value ₹ 50,000 at the end. Here, an annual amount of ₹ 90,000 can be shown as depreciation from year one to five. The amount of depreciation has been calculated using **straight line method.** Accordingly, annual depreciation amount is calculated as follows:

Annual Depreciation = (Original cost of asset − estimated salvage value)/ economic life

Annual depreciation = (5,00,000 − 50,000)/5 = 90,000

Borrowed Capital and Outstanding (Accrued) Interest The books of accounts are finalized on March 31 every year. On this date, certain expenses might have become due but not paid for. For example, a loan from bank on which interest is being paid on May 1 and on November 1 every year. Then the amount of interest for the period from November to April has become due but has not been paid at the end of accounting year; however, this pertains to the year ending on March 31. This amount of interest is to be shown as an outstanding expense in the final accounts.

ILLUSTRATION A loan of ₹ 2,00,000 @ 12% with a provision for interest payment at the end of April and October was taken on May 1, 2009. Here, first interest is paid on November 1 and the second interest is to be paid on May 1. The amount of interest ₹ 10,000 from November 1 to March 31 has become due but not paid so far. This is to be adjusted in the amount of interest shown in the profit and loss account, and the corresponding outstanding amount of ₹ 10,000 is to be shown as a liability in the balance sheet.

Pre-paid Expense Expenses that have been paid in advance for the next accounting year are called **pre-paid expenses**. The economic benefit of these expenses arise in the next accounting year. These are shown as an asset in the balance on the balance sheet date.

ILLUSTRATION Insurance premium of ₹ 18,000 paid on January 1, 2010 for complete one year. On March 31, 2010 it shows that ₹ 13,500 for the period from April 1 to December 31 is relevant for the next financial year and not to be shown in the profit and loss account; rather it is to be shown as a current asset in the balance sheet on March 31, 2010.

EXAMPLE 4 The following items relate to Safety Valve Enterprises. Group these items in the different categories of assets, liabilities, income and expense.

Owners capital	Long-term loan	Commission received
Opening stock	Purchase of material	Wages
Power and fuel	Carriage inwards	Carriage outwards
Factory supervision	Sales	Advertising expenses
Sales promotion expenses	Freight charges	Factory rent
Office rent	Interest on loan	Repairs and maintenance
Building	Plant and machinery	Cash and Bank balance
Closing stock	Sundry debtors	Sundry creditors
Bills receivables	Bills payables	Pre-paid expenses
Salary	R & D expenses	Depreciation of assets
Goodwill	Preliminary expenses	Copyrights
Interest earned	Commission earned	Outstanding expenses
Accrued interest	Furniture	Short-term loan
Bank overdraft	Discount allowed	Electricity charges

SOLUTION:

Group	Reasoning	Item
Opening stock, purchase of raw material, wages, power and fuel, factory, supervision, factory rent, carriage inwards, freight charges.	The economic benefit from these is realized during the current accounting year. These are related to the factory for the production and procurement of goods and services.	Direct expenses
Carriage outwards, sales promotion expenses, office rent, salary, interest on loan, repairs and maintenance, electricity charges, depreciation on assets, advertising expenses, discount allowed.	The economic benefit from these is realized during the current accounting year. These are related to administrative, sales and distribution activities.	Indirect expenses
Sales, interest earned, commission earned, discount earned.	Economic benefit is realized during the current accounting year.	Income
Building, plant and machinery, furniture	Economic benefit is to be realized over long-time period and the business enterprise has control over it. These are in tangible form.	Fixed assets
Cash and bank balance, sundry debtors, bills receivables, closing stock, pre-paid expenses, accrued interest.	These are in the form of cash or likely to be converted into cash during one accounting period. The economic benefit lasts for one accounting period.	Current assets

(*Contd*)

(*Contd*)

Copyrights, goodwill	Economic benefits to be received over long-term period but not in a physical/tangible form.	Intangible assets
R & D expenses, preliminary expenses	Revenue expenses but benefits are deferred over the years to come.	Fictitious assets
Long-term loan	Obligation to pay but not during the current accounting period or within one accounting year.	Long-term liabilities
Owners' capital	Has residual claim and provides safety net against risk	Owner's equity risk capital
Sundry creditors, bills payables, outstanding expenses, short-term loan, bank overdraft.	Obligation to pay in one accounting year and obligation to pay is sure and not contingent.	Current liabilities

FINANCIAL STATEMENTS—FINAL ACCOUNTS

Financial statements are prepared by every business enterprises to know the financial results and financial position of the business enterprises. A company has the legal obligation to follow twelve months accounting period that starts from April 1 to March 31, and at the end of the year, it is required to finalize its books of accounts, from the starting of next accounting year it maintains new set of books of accounts. Certainly, these new set of books of accounts are linked to previous years' books of accounts. Financial statements are also called **final accounts**.

A company whose shares are listed on a stock exchange is required to prepare the final accounts at the end of each quarter as well as at the end of accounting year, this is mandatory as per listing rules of the stock exchanges. By preparing final accounts, a business enterprise not only comes to know about the financial result—estimation of profit/loss incurred but these final accounts also give information about different assets and liabilities maintained by the business enterprise as at the end of the accounting year. The final accounts include the following:

- Trading Account
- Profit and Loss Account
- Profit and Loss Appropriation Account
- Balance Sheet

Levels of Profits

Gross Profit: It is the difference of revenue from core activities and all the direct expenses. In case of manufacturing/trading business, sales revenue is considered as the revenue and in case of service industry, gross cash inflow from providing services is considered as the revenue. Direct expenses are the expenses incurred in the production/procurement of goods and services. These are generally incurred at the factory level.

Operating Profit: Operating profit is arrived at by deducting operating expenses from gross profit. **Operating expenses** are the expenses incurred in the administrative, selling and distribution activities. These include both the cash and non-cash administrative, selling and distribution expenses.

Earning Before Interest and Tax (EBIT): EBIT is arrived at by adjusting other income to operating profit. Other income is such income that is incidental to the business activities but does not relate to the core business activities. This includes profit/loss from sale of assets, interest earned, discount earned, commission earned, etc.

Net Profit (EAT): Once interest on borrowing/debenture and tax is deducted from EBIT, the result is net profit, i.e., earning after tax (EAT). Net profit is further appropriated by distributing certain proportion of profit as the dividend and the rest is retained in the business for reinvestment purpose.

Linkage Between Profit and Loss Account and Balance Sheet

Financial statements include two prominent set of accounts, i.e., income statement and balance sheet. Income statements include (i) Trading Account and (ii) Profit and Loss Account. Both of these are the accounts prepared to ascertain profit/loss incurred for the financial year ending. The balance sheet is not an account. Rather it is a statement showing status of assets and liabilities at the end of the financial year. The balances of different accounts as shown in the trial balance are categorized as follows:

- Revenue/Profit
- Expense/Loss
- Assets
- Liabilities

Revenue/profit as well expenses/losses are the result of different monetary transactions that take place round the year, such as purchase of goods, sale of goods, providing services and payment of expenses. These are considered as a flow concept and the difference of these is called **profit**. The profit so calculated is the net result for the current year. Out of the total profit, a certain amount is distributed among the owners as reward called **dividend** and the rest is maintained as retained profit. The **retained profit** is such proportion of the net profit that is not distributed among shareholders; instead, it is retained in the business organization with the objective of reinvestment.

The amount of retained profit or loss is like a **linkage between profit and loss account and balance sheet**. Without showing retained profit/loss a balance sheet never agrees. This is one of the important link. However, there are certain more linkage, such as

- Valuation of Inventory, and
- Provision for Depreciation

Valuation of Inventory and Linkage between Profit and Loss Account and Balance Sheet

Inventory is the unsold/unused stock of goods; its valuation affects both the calculation of profit/loss as well as the presentation of assets in the balance sheet. The overvaluation of inventory will show higher profits; at the same time current assets namely closing inventory will be shown at a higher value as compared to its real value. Therefore, the conservative concept is followed while showing inventory in the final accounts. Accordingly, it is shown at the cost or market price, whichever is less.

Provision for Depreciation and Linkage between Income Statements and Balance Sheet

Depreciation is provided on fixed assets. It is a mechanism which shows the fixed assets as an expense in the income statement. By providing depreciation, the matching concept gets followed. Appropriate provision for depreciation is desired. However, there are incidences when the wrong amount of depreciation gets charged. This has two impacts—one, the amount of profit is false as compared to the real level of profit and second, the fixed assets gets shown at a wrong value as compared to its actual value.

Accruals and Linkage between Income Statements and Balance Sheet

Certain adjustments-outstanding/prepaid expenses, accrued/unearned income also affect both the profit/loss and assets/liabilities.

Therefore, the retained profit, inventory valuation practice, provision for depreciation and adjustments are considered as an important linkage between the income statement and the balance sheet.

Example 5 Prepare an income statement by using the following trial balance.

Trial Balance as on March 31, 2009

Account Name	Amount (₹)	Account Name	Amount (₹)
Opening Stock		Sales	10,00,000
Finished goods	1,00,000	*Closing Stock*	
Raw material	50,000	Finished goods	1,50,000
Purchase of raw material	5,00,000	Raw material	1,00,000
Direct wages	2,00,000	Profit on sale of shares	50,000
Manufacturing expenses	1,00,000		
Administrative expenses	30,000		
Depreciation	20,000		
Preliminary expenses Written off	10,000		
Selling and distribution expenses	40,000		
Loss on sale of plant	55,000		
Interest on debentures	10,000		

Solution:

Income Statement

For the year ending March 31, 2009

Particulars	Details	Amount (₹)
Sales		**10,00,000**
Less: **Cost of Goods Sold (COGS)**		
Raw Material Consumed		
Opening stock of R.M.	50,000	
(+) Purchase of R.M.	5,00,000	
(–) Closing stock of R.M.	1,00,000	
Raw Material Consumes	4,50,000	
Direct Wages	2,00,000	
Manufacturing Expenses	1,00,000	
	7,50,000	
Add: Opening stock of finished goods	1,00,000	
Less: Closing stock of finished goods	1,50,000	
Cost of Goods Sold	7,00,000	(7,00,000)
Gross Profit		**3,00,000**
Less: **Operating Expenses**		
Administrative expenses	30,000	
Selling and Distribution expenses	40,000	(70,000)

(*Contd*)

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Cash Operating Profit (EBDAIT)		2,30,000
Less: **Depreciation and Amortization**		
Depreciation	20,000	
Preliminary expenses written off	10,000	(30,000)
Operating Profit		**2,00,000**
Add: Non-operating Income (profit on sale of shares)	50,000	
Less: Non-operating expenses/losses (loss on sale of plant)	55,000	(5,000)
Earning Before Interest and Tax (EBIT)		**1,95,000**
Less: Interest		10,000
Earning Before Tax (EBT)		1,85,000
Less: Tax (Assumed)		50,000
Earning After Tax (EAT)		1,35,000

ACCOUNTING POLICY AND ACCOUNTING STANDARDS CONCERNING FINANCIAL STATEMENTS

Accounting Policy

It refers to the application of accounting concepts and convention in preparing books of accounts and preparation of financial statements. The level of transparency and disclosure depends upon the accounting policies adopted while preparing financial statements. Accounting policies are the guiding principles in making projection in the financial statements. Without these, a true and fair view of the financial position of a business organization is not possible.

Accounting Standards

Accounting standards are the guidelines prepared by the Institute of Chartered Accountants of India (ICAI) for the preparation of books of account and also for making projection in the financial statements. The preparation of financial statements—final accounts at the end of the accounting year is governed by accounting standards suggested by ICAI. *The adoption of accounting standards brings in the uniformity in the books of accounts, facilitates easy interpretation and comparison of financial results*. There are thirty two accounting standards developed by ICAI. Out of these, the following **accounting standards** are prominent and to be adopted while preparing the final accounts:

- Disclosure of Accounting Policies: AS-1
- Valuation of Inventory: AS-2
- Contingencies and Events Occurring after the Balance Sheet Date: AS-4
- Net Profit or Loss for the period, prior period Items and Changes in Accounting Policies: AS-5
- Revenue Recognition: AS-9

Although adoption of all the accounting standards is must, the standards mentioned above are the most common and prominent accounting standards. Recently ICAI and Ministry of Corporate Affairs (MCA) have finalized Indian Accounting Standards (Ind ASs). These have been introduced to make the accounting standards at par with IFRS. Ind AS are 35 in number. (Refer Appendix III for further details.)

Disclosure of Accounting Policies: AS-1

Diversity in accounting practices and dynamic nature of business transactions make it difficult to comply with all the accounting standards by every business enterprise. At the same time, there are some of the aspects that are not covered by the accounting standards. Even the prescribed accounting standards permit the adoption of more than one accounting policy for a single aspect. Due to these reasons, it is necessary that the business enterprise should comply with the accounting policies while maintaining books of accounts. At the time of presentation of final accounts, they should be disclosed properly with reasoning for the adoption of a particular policy. Such disclosure is to help the readers to have appropriate interpretation of the financial results of the company. At the same time, it facilitates comparison of the financial results.

The accounting standard one (AS-1) recognizes three accounting assumptions. These are as follows:

- Going Concern
- Consistency
- Accrual Basis of Accounting

Going Concern This assumption implies that a business enterprise will continue its operations for a significantly longer time period in the future and there is no scope to assume the curtailment of the business activities in the near future. The straightway implication of this is that all the monetary transactions are recorded in the books of accounts at the historical cost and assets (particularly fixed assets) are depreciated over their economic useful life, and shown in the balance sheet at the historical cost less depreciation. If a business enterprise prepares its accounts by showing the assets at some other value, such as net realizable value then such fact is to be disclosed at the time of presentation of the final accounts.

Consistency This assumption makes it a binding on a business enterprise to follow particular accounting policy continuously over long time period without making frequent changes. The consistency helps in carrying a uniform interpretation of financial results and facilitates the comparison. Although a business enterprise can change its accounting policy only when such change is imposed by law/regulation or the change is required on account of changing business/economic scenario. A proper disclosure is required as soon as there is a change in the accounting policies.

Accrual Basis of Accounting This is considered superior over the cash basis of accounting. The accrual basis of accounting is applicable for revenue and for expenses. It implies that a revenue/profit is to be recognized and recorded in the books of accounts as soon as there is a reasonable claim to receive it whether received or not.

USEFUL INFO

Revenue and expenses related to the current accounting year should be shown in the financial statement, whether dealt in cash or not.

Similarly, all the expenses, which are relevant for the revenue of the current accounting year should be shown in the books of accounts whether paid or not. The adoption of this assumption helps in making accurate calculation of profits. Although it has one danger of recognizing an income that has not been received so far and such income might also get distributed by the way of dividends among shareholders. Still the accrual basis is superior over the cash basis because it helps in arriving at an accurate level of the profit as compared to the cash basis.

Accounting Prudence

In view of the uncertainty associated with the future events such as realization of profits/assets in the future, the accountants are of the opinion that a suitable provision should be made in the final accounts for losses and future known liabilities. This is complied with on account of convention of conservatism. The result of this is that business enterprises make provision for doubtful debts, provision of contingencies, provision for likely devaluation in the assets, etc.

Substance over Form

Final accounts are also called **financial statements**. These should disclose different transactions in accordance to their substance (importance) and not in accordance to their materiality. This implies that it is the importance of an item which should be considered while making presentation in the financial statements and not it's monetary value. Accordingly, all the items, irrespective of their monetary implication that are likely to have influence on the decision-making, should be disclosed properly. For example, expenses that account for 1 per cent of the total revenue of the company or ₹ 5,000, whichever is higher should be disclosed in the income statements under separate heading so as to facilitate control and analysis. Similarly, the purchase item may be shown in one account as consolidated amount but the items that account for about 10 per cent or more of the total material consumed should be shown separately.

USEFUL INFO

Items should be disclosed with respect to their importance for decision-making and not by considering their size/value.

Valuation of Inventory: AS-2

The closing inventory, i.e., unsold as well as unused goods are the asset of the business enterprise likely to generate economic benefits in the next year. This includes stock of raw material, stock of work-in-process and stock of finished goods. The closing stock of one year becomes the opening stock of next financial year and to be shown as an expense in the next financial year. Therefore, the closing stock affects the calculation of profit and valuation of assets for two consecutive financial years. Its valuation should be done appropriately and the mechanism of valuation should be disclosed properly.

Contingencies and Events Occurring after the Balance Sheet Date: AS-4

Balance sheet is presented as at the end of accounting year, but publication of balance along with income statement is made at a later date in the annual report. The annual report contains certain more facts, such as director's report, auditor's report, business progress, future scenario and other related facts. These are the facts that help in easy understanding of financial statements. There are certain events that take place after the balance sheet date but before the date of presentation of such balance sheet. These events certainly have a bearing on the financial results as well as on the status of assets and liabilities as depicted in the financial statements. The events occurring after the balance sheet date are classified as follows:

- Contingencies (contingent events)
- Adjusting events
- Non-adjusting events

Contingencies are such incidences/items that are not certain and the outcome of these completely depend upon certain future outcome/decision. There may be some court case pending decision against the business enterprise. If such outcome/decision goes against the company then the profits, assets and liabilities as stated in the financial statements might get affected adversely. As these items are contingent and cannot be shown in the financial statements, these certainly have a bearing on the financial results as depicted in the financial statements. The accounting standard requires that these contingent items should be properly disclosed in the annexure forming the part of the annual report. Such disclosure facilitates the proper interpretation of the financial results.

Adjusting events are such activities that take place after the balance sheet date. There is sufficient evidence of their existence on balance sheet date but could not be noticed and recorded in the books of accounts on the balance sheet date. Some examples of such events are given below:

(i) Certain dues from customers become bad debts just after the balance sheet date and there is a significant evidence about it becoming bad debts on the date of balance sheet but could not be provided in the financial statements.

(ii) Wrong valuation of inventory due to some error or lack of sufficient information on the date of balance sheet, and there is a significance evidence that the error existed on the balance sheet date.

(iii) Error in reporting foreign exchange income and there is a significant evidence about it that such error existed on the date of balance sheet.

All these adjusting events have an impact on the financial results as depicted in the financial statements. Hence, it requires an adjustment in the financial statements.

Non-adjusting events are the events that occur after the balance sheet date and there is no significant evidence about its existence on the balance sheet. These items do not have an impact on the financial results of the even date. Therefore, they do not require any adjustment in the financial statement. Still these events make significant impact on the financial result for the future. Such impact should be disclosed in the director's report forming the part of annual report. For example, certain assets are damaged due to fire but after the balance sheet date, such damage is likely to impair operating activities for the next accounting year. This is certainly issue of concern for the decision makers/stakeholders, therefore, should be disclosed in the annual report. *These and not adjusted in the financial statements due to the lack of significant evidence about their existence on the balance sheet date*.

Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies: AS-5

The financial implications of monetary transactions relating to the calculation of profit/loss for the accounting year differ with regard to their practical implication. Different items are considered while arriving at the profit/loss for the accounting year and are classified as regular, rare, prior period items, adjusting items and items relating to changes in accounting policies. These items may be regarding revenue/profit as well as regarding expenses/losses. Out of these, only regular items are the one that are expected to be repeated not only in the next accounting year but in the years to come also. On the contrary to this, the rest of the items are not expected to be repeated time and again.

The provisions of this accounting standard provide that the income statement should disclose all these items distinctly in the income statements (Trading Account and Profit & Loss Account) so as to facilitate an easy understanding of the financial statements and make the comparison meaningful. Accordingly, different revenue and expense items should be classified as (i) ordinary (ii) ordinary but exceptional (iii) extra-ordinary (iv) prior period items (v) changes in accounting policies. The aim of such classification and disclosure in the financial statement is to provide a clear view about the special nature of different items.

The **ordinary items** are the one that relate to the regular course of business activities or these are incidental to these business activities. These items are expected to continue in the future and support the regularity of income in the future also. Items of routine activities are ordinary but these are exceptional only when there size or magnitude is comparatively larger than the normal routine; then these should be disclosed distinctly as **ordinary but exceptional** items so that the impact of these is clearly interpreted and analysed. The revenue and expenses that arise from non-routine activities are called **extraordinary items**, as these are non-recurring in nature. Therefore, these items should be presented in the financial statements clearly and distinctly so that one can have a clear interpretation about the financial results of the company.

Prior period items are the one that are shown in the current year's financial statements as a result of an error in preparing financial statements of one or more prior financial years. The impact of these items should be shown under a separate heading so that one can make a clear interpretation about the financial result of the current accounting year. **Changes in accounting policies** like changes in making provision for doubtful debts, changes in inventory valuation, etc. are accounting policy-related items affecting the presentation of profit for the year. The provisions of AS-5 require that the monetary implication of these items should be disclosed properly in the financial statements.

Revenue Recognition: AS-9

Revenue is the gross receivables or consideration arising on account of sales of goods, rendering of services or the charge made by the business enterprise against its customers for using business assets/facilities. The most important aspect is the realization of revenue, irrespective of the incidence of receiving it in cash. According to the provisions of this standard, the revenue is to be recognized and recorded in the books of accounts only when there is a certainty of receiving the claim raised against the customers. The certainty of receiving revenue arises in the following situation:

- When supplier of the goods has transferred the goods in the favour of buyer and at the same time ownership related risk and rewards have also been transferred in the favour of buyer.
- In case of rendering service to the customers, the service provider has performed its duty as per the specification of service acceptable to the customer and it has been acknowledged by the customer.
- Receiving cash for the revenue realized or recognized is not important.

Provision for uncertainty: An item of revenue is not recognized in the books of account if there is an uncertainty about the collection of revenue. Similarly, there are incidences when uncertainty about the collection of revenue recognized arises subsequently. In such cases, a sufficient provision is to be made by debiting profit and loss account. *The practical implication can be observed when a bank makes a provision for non-performing asset (NPA) in the income statement.*

CAPITAL MAINTENANCE

Capital of a firm means the net asset value of the firm. The capital is used to perform business operations. Therefore, a firm should always try to have sufficient amount of capital so as to continue at least the same level of business operations year after year. The capital is a source to create operative capacity for the business enterprise, an increase in the capital from one year to another year helps in making an enhancement in the operative capacity for the coming year, whereas a decrease in the capital from one year to another year implies a reduced level of operative capacity for the coming year. Here, capital implies the equity capital. The capital of a firm is maintained when its retained earning is not negative. To have an enhanced capital, it must have at least a positive-retained earning. A **positive-retained earning/profit** will be generated only when the closing capital (excluding further contribution by owners) is greater than the opening capital. A **negative-retained earning/profit** implies that the company has distributed the dividend out of the capital. This is not justified as per accounting fundamentals. Whether a firm has positive or negative-retained earning, it can be worked out from the following equations:

Equity Capital (Net Assets) = Assets − Liabilities[1]

Retained Earning = Closing Equity Capital − Opening Equity Capital

[1]Here, liabilities include the external liabilities, i.e., all the liabilities except equity owners contribution in the business.

From the viewpoint of capital maintenance, the following concepts are relevant:

- Financial Capital Maintenance at Historical Cost
- Financial Capital Maintenance at Current Purchasing Power
- Physical Capital Maintenance at Current Costs

Equity capital is equal to the net asset value. Maintaining capital implies maintaining the operating capacity for future also.

Financial Capital Maintenance at Historical Cost

According to this convention, both opening and closing equity capitals are valued at the respective historical costs. While calculating the retained earning/profit, a fresh capital contribution by the equity owners is excluded from the closing capital. The books of accounts are maintained at the historical cost. Therefore, the value of opening equity capital is the net asset value as per the opening balance sheet and the closing equity capital is the closing net asset value. The moment capital is maintained at the end of the accounting year. It implies that the business enterprise will be able to sustain at least the same level of business operations and at the same time, it will be feasible to replace the assets at the historical cost only, but not at the replacement cost.

USEFUL INFO

Financial capital maintenance at historical cost implies providing for the replacement of resource at least at the historical cost, so as to sustain the current operating capacity in the future also.

Financial Capital Maintenance at Current Purchasing Power

Under this convention of measuring capital maintenance, the opening and closing equity capitals are restated in terms of closing prices, using the average price level change. Both the opening and closing equity capitals are restated, using average closing price index. For example, the opening equity at a historical cost is ₹ 5,00,000 and the average price index has increased from 100 to 130 by the end of the year. Then the restated value of opening equity capital will be ₹ 6,50,000 (5,00,000 × 130/100). Now a positive-retained profit at this level implies that the firm has enough resources (equity capital) to replace the assets at the prevailing Prices. And a negative-retained earning implies that the firm will not be able to replace its assets at the prevailing prices. The main drawback of this convention is that the single index is applied to all the balance sheet items that might not be logical because different items might have shown a change in the price level with different magnitude as compared to the average price level change.

USEFUL INFO

Financial capital maintenance at purchasing power implies providing for the replacement of resources at the average current cost at present.

Physical Capital Maintenance at Current Costs

Physical capital maintenance implies providing for the replacement of assets at the specific current market price. Under this convention, the opening equity capital and closing equity capital are restated using specific price indices. This gives an accurate idea about the replacement cost of the assets.

USEFUL INFO

Physical capital maintenance implies providing for the replacement of resources at specific cost for the replacement of the individual resources.

The value so calculated is the physical capital. It is the physical capital in the sense that the firm gets an idea about the requirement of capital to replace the physical resources at the current specific prices. A positive-retained earning/profit implies that the firm will be able to replace its assets and repay the liabilities at the current specific costs. This convention is more superior as compared to the rest of the views.

Example 6 A businessman started a business on April 1, 2009 with ₹ 5,00,000 represented by 1,000 units of a product costing ₹ 500 each. During the year, he sold these items at the rate of ₹ 750 per unit and the owner also withdrew ₹ 2,50,000 for his personal purpose. The general price level in the beginning was 100 that increased to 120 at the end of the year, whereas the specific price level applied to this commodity increased to 130. Calculate the amount of capital maintained using all the three conventions.

Solution: *Financial capital maintenance at historical cost*

Opening equity ₹ 5,00,000, represented by 1000 units costing ₹ 500 each

Closing equity ₹ 5,00,000 (7,50,000 − 2,50,000)

Retained profit = 5,00,000 − 5,00,000 = 0

This implies that the firm has successfully maintained the financial capital at the historical cost and it will be able to replace its resources at the historical cost.

Financial capital maintenance at current purchasing power

Opening equity at historical cost = 5,00,000 represented by 1000 units costing ₹ 500 each.

Opening equity at the current purchasing power = 5,00,000 × 120/100 = 6,00,000
(represented by 1,000 units costing ₹ 600 each)

Closing equity at closing prices = 5,00,000 (7,50,000 − 2,50,000)

Retained profit = 5,00,000 − 6,00,000 = (−) 1,00,000

Negative-retained profit implies that the businessman has failed to maintain the capital. As a result, it will be difficult for him to again buy 1000 units of the same commodity at the current price of ₹ 600 each. The businessman would have maintained had he withdrawn only ₹ 1,50,000 and not ₹ 2,50,000; this implies the distribution of the capital to the owner as dividend.

Physical capital maintenance at current cost

Opening equity at historical cost = 5,00,000 represented by 1000 units costing ₹ 500 each.

Opening equity at the current cost = 5,00,000 × 130/100 = 6,50,000
(represented by 1000 units costing ₹ 650 each)

Closing equity at closing prices = 5,00,000 (7,50,000 − 2,50,000)

Retained profit = 5,00,000 − 6,50,000 = (−) 1,50,000

Here, again it is negative-retained earning, the implication of which is that the businessman would not be able to replace its resources at the current cost of ₹ 650 per unit. Had he only distributed ₹ 1,00,000 to owner then only it would have been possible to replace the 1000 units at the current cost of ₹ 650 per unit.

The concept of maintaining the financial capital at the current purchasing power or maintaining physical capital is not followed in practice while preparing financial statements. However, it is considered while discharging dividend decision so that the operating capacity of the business enterprise can at least be maintained year after year.

SOLVED EXAMPLES

Example 7 Show the following transactions by using accounting equation:

(i) Ramesh started business with cash ₹ 3,00,000
(ii) Deposited cash into bank ₹ 1,20,000
(iii) Purchased furniture for ₹ 35,000 in cash
(iv) Purchased goods from Deepak of ₹ 15,000 in cash
(v) Sold half of goods to Mohan for ₹ 37,000 in cash and paid salary ₹ 7,000
(vi) Purchased goods from Deepak of ₹ 12,000
(vii) Sold goods costing 7,500 to Mohit for ₹ 28,000 and paid commission ₹ 2,500
(viii) Received commission ₹ 3,000 by cheque
(ix) Paid to Deepak ₹ 12,000 by cheque
(x) Received cheque from Mohit of ₹ 15,000
(xi) Paid rent for the month by cheque ₹ 8,000

Solution Accounting Equation

Transaction No.	Liabilities (in ₹)		Assets (in ₹)	
(i)	Owner's Capital	3,00,000	Cash Balance	3,00,000
(ii)	Owner's Capital	3,00,000	Cash Balance	1,80,000
			Bank Balance	1,20,000
(iii)	Owner's Capital	3,00,000	Cash Balance	1,45,000
			Bank Balance	1,20,000
			Furniture	35,000
(iv)	Owner's Capital	3,00,000	Cash Balance	1,30,000
			Bank Balance	1,20,000
			Furniture	35,000
			Stock (Goods)	15,000
(v)	Owner's Capital	3,22,500[2]	Cash Balance	1,60,000
			Bank Balance	1,20,000
			Furniture	35,000
			Stock (Goods)	7,500
(vi)	Owner's Capital	3,22,500	Cash Balance	1,60,000
			Bank Balance	1,20,000
	Sundry Creditors	12,000	Furniture	35,000
			Stock (Goods)	19,500
(vii)	Owner's Capital	3,40,500[3]	Cash Balance	1,57,500
			Bank Balance	1,20,000
	Sundry Creditors	12,000	Furniture	35,000
			Stock (Goods)	12,000
			Sundry Debtors	28,000

(Contd)

[2]Profit on sale of ₹ 22,500 (37000 − 7000 – 7500 the cost of 1/2 goods) has been added as a reward to the owner.
[3]Profit of ₹ 18,000 (28,000 − 7500 − 2500) on sales has been added to the capital.

(*Contd*)

(viii)	Owner's Capital	3,43,500	Cash Balance	1,57,500
			Bank Balance	1,23,000
	Sundry Creditors	12,000	Furniture	35,000
			Stock (Goods)	12,000
			Sundry Debtors	28,000
(ix)	Owner's Capital	3,43,500	Cash Balance	1,57,500
			Bank Balance	1,11,000
			Furniture	35,000
			Stock (Goods)	12,000
			Sundry Debtors	28,000
(x)	Owner's Capital	3,43,500	Cash Balance	1,57,500
			Bank Balance	1,26,000
			Furniture	35,000
			Stock (Goods)	12,000
			Sundry Debtors	13,000
(xi)	Owner's Capital	3,35,500[4]	Cash Balance	1,57,500
			Bank Balance	1,18,000
			Furniture	35,000
			Stock (Goods)	12,000
			Sundry Debtors	13,000

Example 8 Pass journal entries and make ledger accounts.

(i) Started business with cash ₹ 3,50,000
(ii) Deposited cash into bank ₹ 1,10,000
(iii) Purchased machinery for ₹ 33,000 in cash
(iv) Paid rent ₹ 5,500 by cheque
(v) Purchased goods of ₹ 45,000 from Ashok
(vi) Paid wages for the month ₹ 3,500
(vii) Paid electricity bill ₹ 1,200 by cheque
(viii) Sold goods to Neeraj of ₹ 98,000
(ix) Paid ₹ 10,000 for advertising by cheque
(x) Issued a cheque of ₹ 40,000 to Ashok
(xi) Received a cheque of ₹ 70,000 from Neeraj
(xii) Paid salary ₹ 12,000 for the month by cheque
(xiii) Bank credited our account with ₹ 300 for interest
(xiv) Purchased goods of ₹ 25,000 and issued cheque
(xv) Sold goods of ₹ 42,000 and received cheque.

[4]The expenses of ₹ 8,000 is not charged earlier—have now been charged and accordingly, the profit has been reduced.

SOLUTION:

Journal

Particulars		Amount (in ₹) Debit	Credit
Cash a/c	Dr.	3,50,000	
To Capital a/c			3,50,000
(Started business with cash)			
Bank a/c	Dr.	1,10,000	
To Cash a/c			1,10,000
(Deposited cash into bank)			
Machinery a/c	Dr.	33,000	
To Cash a/c			33,000
(Purchased machinery)			
Rent a/c	Dr.	5,500	
To Bank a/c			5,500
(Paid rent by cheque)			
Purchase a/c	Dr.	45,000	
To Ashok's a/c			45,000
(Purchased goods from Ashok on credit)			
Wages a/c	Dr.	3,500	
To Cash a/c			3,500
(Paid wages in cash)			
Elect. Charges a/c	Dr.	1,200	
To Bank a/c			1,200
(Paid elect. charges by cheque)			
Neeraj's a/c	Dr.	98,000	
To Sales a/c			98,000
(Sold goods to Neeraj on credit)			
Advertising a/c	Dr.	10,000	
To Bank a/c			10,000
(Paid advertising charges by cheque)			
Ashok's a/c	Dr.	40,000	
To Bank a/c			40,000
(Paid to Ashok by cheque)			
Bank a/c	Dr.	70,000	
To Neeraj's a/c			70,000
(Received cheque from Neeraj)			

(*Contd*)

(*Contd*)

Salary a/c	Dr.	12,000	
To Bank a/c			12,000
(Paid salary by cheque)			
Bank a/c	Dr.	300	
To Interest earned a/c			300
(Received interest from bank)			
Purchase a/c	Dr.	25,000	
To Bank a/c			25,000
(Purchased goods and issued cheque)			
Bank a/c	Dr.	42,000	
To Sales a/c			42,000
Total		8,45,500	8,45,500

Posting to Ledger Accounts

Dr. **Cash A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Capital a/c	3,50,000		By Bank a/c	1,10,000
				By Machinery a/c	33,000
				By Wages a/c	3,500
				By Balance c/f	2,03,500
		3,50,000			3,50,000

Dr. **Bank A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	1,10,000		By Rent a/c	5,500
	To Interest earned a/c	300		By Elect. Charges a/c	1,200
	To Neeraj's a/c	70,000		By Advertising Exp. a/c	10,000
	To Sales a/c	42,000		By Ashok's a/c	40,000
				By Salary a/c	12,000
				By Purchase a/c	25,000
				By Balance c/f	1,28,600
		2,22,300			2,22,300

Dr. **Capital A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
				By Cash a/c	3,50,000
	To Balance c/f	3,50,000			
		3,50,000			3,50,000

Dr. Machinery A/C Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	33,000			
				By Balance c/f	33,000
		33,000			33,000

Dr. Rent A/C Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	5,500			
				By Balance c/f	5,500
		5,500			5,500

Dr. Purchase A/C Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Ashok's a/c	45,000			
	To Bank a/c	25,000			
				By Balance c/f	70,000
		70,000			70,000

Dr. Ashok's A/C Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	40,000		By Purchase a/c	45,000
	To Balance c/f	5,000			
		45,000			45,000

Dr. Wages A/C Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Cash a/c	3,500			
				By Balance c/f	3,500
		3,500			3,500

Dr. Elect. Charges A/C Cr.

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	1,200			
				By Balance c/f	1,200
		1,200			1,200

Dr. **Sales A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
				By Neeraj's a/c	98,000
				By Bank a/c	42,000
	To Balance c/f	1,40,000			
		1,40,000			1,40,000

Dr. **Neeraj's A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Sales a/c	98,000		By Bank a/c	70,000
				By Balance c/f	28,000
		98,000			98,000

Dr. **Salary A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	12,000			
				By Balance c/f	12,000
		12,000			12,000

Dr. **Advertising Expenses A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
	To Bank a/c	10,000			
				By Balance c/f	10,000
		10,000			10,000

Dr. **Interest Earned A/C** **Cr.**

Date	Particulars	Amount	Date	Particulars	Amount
				By Bank a/c	300
	To Balance c/f	300			
		300			300

Preparation of Trial Balance

Trial Balance

As on …………

S. No.	Name of Account	L.F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		2,03,500	
2	Bank a/c		1,28,600	
3	Capital a/c			3,50,000
4	Machinery a/c		33,000	
5	Rent a/c		5,500	
6	Purchase a/c		70,000	
7	Ashok's a/c			5,000
8	Wages a/c		3,500	
9	Electricity Charges a/c		1,200	
10	Sales /ac			1,40,000
11	Neeraj's a/c		28,000	
12	Salary a/c		12,000	
13	Advertising Expenses a/c		10,000	
14	Interest Earned a/c			300
	Total		4,95,300	4,95,300

Example 9 Show whether the following items are an expenses or asset:

(i) Purchased furniture of ₹ 2,00,000 and issued cheque
(ii) Purchased machinery of ₹ 50,000 from DD Enterprises
(iii) Purchased goods of ₹ 1,30,000 from Dilip Enterprises
(iv) Paid wages for the month ₹ 10,000 in cash
(v) Paid research expenses ₹ 1,00,000 by cheque for the current year
(vi) Paid royalty ₹ 1,50,000 which will generate economic benefit over next 3 years.
(vii) Provided depreciation on machinery ₹ 40,000 during the year.
(viii) One-third of royalty written off

Solution

Classification of Item as Expense or Asset

Transaction	Assets	Liabilities	Equity/Expense	Description
(i)	+2,00,000 [Furniture] −2,00,000 [Bank]			**Asset:** Furniture will generate economic benefit over long-term period.
(ii)	+50,000 [Machinery]	+50,000 [creditors]		**Asset:** Machinery will generate economic benefit over long-term period. **Liability:** Payment for equipment will be paid in future

(*Contd*)

(*Contd*)

(iii)		+ 1,30,000 [Creditors]	−1,30,000 in equity [Purchase]	**Expense:** Goods purchased will be consumed during the year and generate economic benefit during the current year. ***This will reduce the equity also***.
(iv)	−10,000 [Cash]		−10,000 in equity [Wages expense]	**Expense:** Wages paid will generate economic benefit during the current year. ***This will reduce the equity also***.
(v)	−100,000 [Bank]		−1,00,000 in equity [R&D expenses]	**Expense:** Research expense paid will generate economic benefit during the current year. ***This will reduce the equity also***.
(vi)	−1,50,000 [Bank] +1,50,000 [Fictitious asset—Royalty]			**Asset:** Royalty expense will generate the benefits over long-term period hence an asset. Every year 1/3 of it will be shown as an expense then it will reduce equity.
(vii)	−40,000 [Machinery]		−40,000 in equity [Depreciation expense]	**Expense:** Asset reduces and equity also.
(viii)	−50,000 [Royalty]		−50,000 in equity [Fictitious asset written off]	**Expense:** Asset reduces and equity also.

KEY TERMS

Financial accounting
Cash system of accounting
Money measurement concept
Dual Aspect concept
Matching concept
Convention of consistency
Journal
Trial balance
Accounting equation
Revenue/profits
Balance sheet
Accounting standards
Management accounting
Accrual system of accounting
Going concern concept
Accounting period concept
Accrual concept
Convention of full disclosure
Subsidiary books
Final accounts
Assets
Trading account
Financial capital maintenance
Prior period items
Cost accounting
Separate entity concept
Cost concept
Revenue recognition concept
Convention of conservatism
Convention of materiality
Ledger
Computerized accounting system
Liabilities expenses/losses
Profit and loss account
Physical capital maintenance
Events occurring after the balance sheet date

FINAL RECAP

- **Financial Accounting** is the basic accounting system that deals with the identification, recording, classification, summarization, presentation, analysis and interpretation of monetary transactions of a business organization.
- **Management Accounting** is that branch of accounting that aims at providing information to managers for decision-making.
- **Costing** is the technique and process of ascertaining cost. It has the important objective of ascertaining the cost of goods and services being produced and sold.
- **Cash system of accounting** is such accounting system in which accounting transactions are recorded in the books of accounts as soon as cash is received or paid for the transactions and not at the time when transaction takes places.
- **Accrual system of accounting**, also known as **mercantile accounting system**, focuses on both the cash transaction and credit transactions, including accruals.
- **Accounting concepts** are like scientific rules, which are time-tested and applicable universally across the boundaries and in different situations.
- **Accounting conventions** are certain accounting policies and procedures that are followed as a matter of practice in the business organization.
- The impact of **accounting equation** is that the total of assets becomes equal to total of liabilities at every time even after every transaction.
- **Journal** is the elementary book for maintaining monetary transactions of business at the elementary level.
- **Purchase book** is maintained to record only the transactions of credit purchase of goods made by the business organization. In this book, all the transactions of credit purchase of goods are recorded.
- **Sales book** is maintained by a business organization to record only the credit sales transactions.
- **Cash book** is maintained to record cash receipts and cash payments by following a double-entry system.
- **Bank book** is like an asset account and it is maintained by following the mechanism of asset account.
- **A bills of exchange** is an unconditional order by the seller of goods to buyer of goods for the payment of goods on a pre-specified future date.
- **Ledger** is the book in which different accounts are maintained.
- **Trial balance** is not an account but a statement showing summary of different accounts maintained in the ledger.
- **Trading Account** is prepared to ascertain gross profit for the year. Gross profit is the difference between direct revenue—sales revenue and direct expenses.
- **Profit and Loss Account** shows net profit for the year. Net profit is calculated by adding other revenue to the gross profit and deducting there from all the indirect expenses.
- Administrative, selling and distribution expenses are identified as **indirect expenses;** whereas the revenue other than sales revenue is called **indirect revenue** (other income). This includes interest earned, discount earned, commission earned, etc.
- **Balance Sheet** is a statement showing assets and liabilities of the business at the end of the year.
- **Gross Profit** is the difference of revenue from the core activities and all the direct expenses.
- **Operating Profit** is arrived at by deducting the operating expenses from the gross profit. **Operating expenses** are the expenses incurred in the administrative, selling and distribution activities.
- **Earning Before Interest and Tax (EBIT):** EBIT is arrived at by adjusting other income to the operating profit.
- **Net Profit (EAT):** Once interest on borrowing/debenture and tax is deducted from EBIT, the result is the net profit, i.e., earning after tax (EAT).
- **Balance sheet** is always prepared at the historical cost. The book value of assets must equalize the book value of liabilities.

- An expense that results into the acquisition of an item/object that is likely to give the utility over a long-time period, generally exceeding current financial year is identified as an **asset.**
- **Fixed assets** are movable as well as immovable assets that are in tangible form and provide production capacity to the business enterprise to generate goods and services.
- **Current assets** are the assets that are either in the form of cash or likely to be converted into cash within a period of the next accounting year from the date of balance sheet.
- The amount owed by the business organization to others is **liability** for a business enterprise.
- **Long-term liabilities** are such liabilities in which the obligation to pay is to be settled not in the current accounting year. Rather it is to be settled beyond the current accounting year.
- **Current liabilities**—Sundry creditors, bills payable, outstanding expenses, unearned income, tax payable, etc. are such liabilities the obligation to pay is to be settled during the current/next accounting year.
- An increase in the economic benefits during the current accounting period is identified as **income.**
- **Revenue**/income is the gross inflow of cash on account of core activities, whereas income is the net inflow on account of activities other than the core activities.
- An expense when incurred on recurring basis by a business enterprise to generate revenue, therefore, it is called **revenue expense.**
- **Capital** of a firm means the net asset value of the firm; capital is used to perform business operations.
- For calculating **Financial Capital at Historical Cost** both the opening and closing equity capitals are valued at the respective historical costs.
- **Physical capital** implies providing for the replacement of assets at the specific current market price.
- **Physical capital maintenance** implies providing for the replacement of resources at specific cost for the replacement of the individual resources.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Due to which of the following concepts, the capital contribution by an owner is a liability for business enterprise?
   (a) Going concern concept
   (b) Separate entity concept
   (c) Accrual concept
   (d) None of these
2. Which of the following concepts makes is binding for a business enterprise to record different monetary transactions at the historical cost only?
   (a) Cost concept
   (b) Convention of materiality
   (c) Accounting period concept
   (d) Dual aspect concept
3. Accrual concept implies
   (a) Showing only such income and expense which have been paid in cash.
   (b) Showing all the income and expenses that relate to the current accounting year, whether dealt in cash or not.
   (c) All the fixed assets are shown at the historical cost, whereas the current assets are shown at the market price.
   (d) None of these.

4. On account of which of the following conventions, stock is shown in the balance sheet at cost or market price, whichever is less?
   (a) Convention of conservatism
   (b) Convention of materiality
   (c) Accrual concept
   (d) Going concern concept
5. Physical capital is calculated by considering
   (a) Historical cost of assets and liabilities
   (b) Average cost of assets and liabilities
   (c) Current specific cost of assets and liabilities
   (d) None of these

Descriptive Questions

1. Financial accounting is such an accounting mechanism that helps in making aggregate presentation of monetary transactions to arrive at the financial result of the business enterprise. Explain.
2. Management Accounting is that branch of accounting that aims at providing information to managers for decision-making. Discuss.
3. Costing is the technique and process of ascertaining cost. It has the important objective of ascertaining the cost of goods and services being produced. Explain.
4. Explain cash system of accounting how it is different from accrual system of accounting.
5. "Accounting concepts are like scientific rules, which are time-tested and applicable universally across the boundaries and in different situations, whereas accounting conventions are certain accounting policies and procedures, which are followed as a matter of practice in the business organization." Discuss.
6. "Balance sheet is like corporate bikini, which conceal more than what it reveals." Do you agree? Explain.
7. Differentiate between financial capital maintenance and physical capital maintenance.
8. Write short notes on the following:
   (a) Going concern concept
   (b) Accrual concept
   (c) Separate entity concept
   (d) Convention of conservatism
   (e) Convention of consistency
9. Explain different concept related to profit calculation.

Numerical Problems

1. Pass the following journal entries and make ledger accounts:
   (i) Started business with cash ₹ 6,50,000
   (ii) Deposited cash into bank ₹ 2,10,000
   (iii) Purchased machinery for ₹ 93,000 in cash
   (iv) Paid rent ₹ 15,500 by cheque
   (v) Purchased goods of ₹ 85,000 from Amit
   (vi) Paid wages for the month ₹ 13,500
   (vii) Paid electricity bill ₹ 11,200 by cheque
   (viii) Sold goods to Naveen of ₹ 78,000

(ix) Paid ₹ 10,000 for advertising by cheque
(x) Issued a cheque of ₹ 80,000 to Amit
(xi) Received a cheque of ₹ 70,000 from Naveen
(xii) Paid salary ₹ 32,000 for the month by cheque
(xiii) Bank credited our account with ₹ 300 for interest
(xiv) Purchased goods of ₹ 45,000 and issued cheque
(xv) Sold goods of ₹ 32,000 and received cheque.

2. Pass necessary journal entries and prepare trial balance for the following transactions:

1	Started business with cash ₹ 1,00,000	9	Sold goods of ₹ 20,000 to Mohan
2	Deposited cash into bank ₹ 30,000	10	Purchased goods of ₹ 12,500 from Rohit
3	Purchased furniture and issued cheque ₹ 12,000	11	Paid commission ₹ 1,000 by cheque
4	Purchased goods and paid cash 20,000	12	Received a cheque of ₹ 20,000 from Mohan
5	Taken a loan from bank ₹ 1,20,000	13	Issued a cheque of ₹ 12,500 to Rohit
6	Sold half of the goods for ₹ 45,000 and paid salary ₹ 2,000; wages ₹ 1,200	14	Paid rent for the month ₹ 2,000
7	Owner withdrew cash for his/her personal use ₹ 6,000	15	Bank credited us with ₹ 250 for interest
8	Paid interest on loan ₹ 800	16	Paid bank charges ₹ 50

3. Suzain Danial, after retirement, helped her son in starting his new business by contributing a capital of ₹ 25,00,000. After the opening ceremony of the business, she never intervened in the business decisions. All the business activities were managed by her son, Dileep Danial. After one year, the total asset of the business was ₹ 45,00,000 and the external liabilities were ₹ 16,00,000. During the year, Suzain also contributed a further capital of ₹ 3,50,000. The average price index in the beginning of the year was 100, that became 120 at the end of the year.

Did this business firm maintain (i) financial capital at historical cost and (ii) financial capital at purchasing power?

4. From the following trial balance, prepare an income statement:

Trial Balance as on March 31, 2009

Account Name	Amount (₹)	Account Name	Amount (₹)
Opening Stock		Sales	18,00,000
Finished Goods	2,00,000	**Closing Stock**	
Raw Material	20,000	Finished Goods	1,70,000
Purchase of Raw Material	7,00,000	Raw Material	1,20,000
Direct Wages	2,35,000	Profit on sale of shares	15,000
Manufacturing Expenses	90,000		
Administrative Expenses	80,000		
Depreciation	20,000		
Preliminary expenses Written off	40,000		
Selling and Distribution Expenses	45,000		
Loss on Sale of Plant	75,000		
Interest on Debentures	20,000		

5. Show whether the following items are expenses or asset:
   (a) Purchased furniture of ₹ 1,00,000 and issued cheque
   (b) Purchased machinery of ₹ 1,50,000 from DD Enterprises
   (c) Purchased goods of ₹ 1,80,000 from Dilip Enterprises
   (d) Paid wages for the month ₹ 30,000 in cash
   (e) Paid research expenses ₹ 1,00,000 by cheque for the current year
   (f) Paid royalty ₹ 1,50,000 that will generate economic benefit over next 5 years.
   (g) Provided deprecition on machinery ₹ 20,000 during the year.
   (h) 1/5 of royalty written off
6. Using the following data, prepare financial statements—trading account, profit and loss account and balance sheet:

Account	Amount (₹)	Account	Amount (₹)
Opening stock	20,000	Owner's Capital	2,00,000
Purchase	1,70,000	Sales	4,50,000
Wages	35,000	Bank loan	75,000
Power	15,000	Creditors	25,000
Salary	35,000	Commission Earned	45,000
Advertising Expenses	70,000	Interest Earned	5,000
Building	2,50,000		
Machinery	65,000		
Debtors	35,000		
Patents	70,000		
Commission Paid	2,000		
Rent Paid	23,000		
Interest Paid	3,500		
Insurance Premium	6,500		

7. Sam Disuja helped his son in starting his new business by contributing a capital of rupees twenty lakh. After the opening ceremony of the business, he never intervened in the business decisions. All the business activities were managed by his son, Ding Dong Disuja. After one year, the total assets of the business was thirty five lakh and the external liabilities was fourteen lakh. During the year, Sam also contributed a further a capital of rupees two lakh fifty thousand. The average price index in the beginning of the year was 120 that became 132 at the end of the year.

   Did this business firm maintain (i) financial capital at historical cost (ii) financial capital at purchasing power?

Answers

Multiple Choice Questions

1. (b) 2. (a) 3. (b) 4. (a) 5. (c)

Numerical Problems

1. Total of journal: ₹ 14,25,500
2. Total of trial balance: 2,85,250
3. (i) Opening capital (equity): ₹ 25,00,000; closing capital (equity), excluding further contribution of capital: ₹ 25,50,000. Capital at historical cost has been maintained. (ii) Opening capital: ₹25,00,000; closing capital at current purchasing power should have been ₹ 30,00,000 but it is only ₹ 25,50,000. Therefore, the firm has not maintained the capital at the current purchasing power.
4. Gross profit: ₹ 5,55,000; Net profit: ₹ 2,90,000
5. (c), (d), (e), (g) and (h) are expenses; (a), (b) and (f) are assets.
6. Gross profit: ₹ 2,10,000; Operating profit: ₹ 73,500; EBIT: ₹ 1,23,500; Net profit: ₹ 1,20,000;Total of balance sheet: ₹ 4,20,000
7. Retained profit at historical cost is (−) 1,50,000, whereas retained profit at average purchasing power is (−) 3,50,000.

CASE

Window Dressing of Accounts and Financial Statements

March 12, 2010—Sach International Corporation

Badam Gussain, Vice-President (Accounts) of Sach International Corporation, Singapore was taken aback when he reviewed the financial performance of the company. He noticed that the sales for the current financial year was trailing behind the sales figures of the previous financial year. It was less as much as about 10% as compared to the sales figures of the previous financial year. The same was the position of the profit for the year. He immediately retrieved the facts of the previous financial year as well as Chairman's speech published in the previous annual report that depicted the following facts:

Income Statement

For the year ending March 31, 2009

Particulars		Details	Amount (₹ in Crore)
Sales			10,00,000
Less : Cost of Goods Sold (COGS)			7,00,000
Gross Profit			**3,00,000**
Less : **Operating Expenses**			
Administrative expenses	25,000		
Selling and Distribution expenses	45,000		70,000

(*Contd*)

(*Contd*)

Cash Operating Profit (EBDAIT)		2,30,000
Less: Depreciation and Amortization	30,000	30,000

Operating Profit		**2,00,000**
Add : Non-operating Income (profit on sale of shares)	20,000	
Less : Non-operating expenses/losses (loss on sale of plant)	25,000	(5,000)
Earning Before Interest and Tax (EBIT)		**1,95,000**
Less : Interest	50,000	
Less : Tax	55,000	1,05,000

Earning After Tax (EAT)		90,000

Along with this, he recalled the facts from the previous year's address of Chairman delivered at AGM. Accordingly, the sales and EAT for the current year should have shown an increase of 30% and 12%, respectively over the last year's performance. He immediately called his subordinates and held a meeting to review the situation. His team members updated him by providing the figures of the provisional income statement for the year as on March 12, 2010 that revealed the following facts:

Income Statement

For the year ending March 31, 2010 (as on March 12, 2010)

Particulars	Details	Amount (₹ in Crore)
Sales		**8,99,000**
Less : Cost of Goods Sold (COGS)		6,89,000
Gross Profit		**2,10,000**
Less : **Operating Expenses**		
Administrative expenses	25,000	
Selling and Distribution expenses	60,000	(85,000)
Cash Operating Profit (EBDAIT)		1,25,000
Less: Depreciation and Amortization	30,000	(30,000)
Operating Profit		**95,000**
Add : Non-operating Income (profit on sale of shares)	20,000	20,000

Earning Before Interest and Tax (EBIT)		**1,15,000**
Less : Interest	50,000	
Less : Tax	25,000	75,000

Earning After Tax (EAT)		40,000

Meeting of Vice-Presidents

As Badam Gussain was also holding the charge of CEO of the company, he coordinated a meeting with George Danny, Vice-President (Marketing) and Dean Jone, Vice-President (Production). In the meeting, everyone was apprehensive about projecting a poor show as compared to the previous year's financial result and this was surely to be taken as a negative remark on the performance of the executives. George Danny was of the opinion that his marketing team was negotiating the deal with a few clients and he was hopeful that his team would be able to procure the orders for as much as ₹ 5,00,000 crore during the month of March 2010. This would not only help in achieving the targets but even would surpass the target. However, Dean Jone, Vice-President was not confident in fulfilling the target of an additional ₹ 5,00,000 crore of goods to be manufactured and dispatched to the customers. To resolve the issue concerning production, Daisy Dazzling, Vice-President (HR & Personnel) was invited. Badam Gussain moved a proposal of running the factory in three shifts and other offices in two shifts for rest of the working days of March 2010. But Daisy Dazzling had her own limitations saying, thereby that it would be difficult to get additional workers and staff members at such a short notice that too for only about 18 working days. While they kept on discussing the issue like this and finally concluded that it was the responsibility of middle-level executive staff to achieve the targets in time and passed a resolution of issuing strict warning to middle-level executive stating *Either achieve the targets or face the consequences of a reprimand or stern action by the chairman*. The outcome of the meeting stating this warning was circulated as office memo among the middle-level executives, and everyone in the company kept his/her fingers crossed hoping for the best outcome.

April 4, 2010—Sach International Corporation

Venue: Meeting Hall

Activity: Presentation by Middle-Level Executives in the presence of Chairman

Theme: Progress Report of Financial Year Ending March 2010

S. M. Joseph, Senior Executive, Accounts presented the following brief note on the progress of the year ended on March 31, 2010.

"I feel pride in presenting the progress report in the honour of Chairman Sir. Sir, as guided by your leadership style and under the efficient leadership of our senior management team, we have successfully not only achieved the targets but surpassed the benchmarks. These results have created a specific platform for our company in the market place and our market share has increased tremendously and we rank 2nd in terms of market share in the industry as compared to 5th rank in the previous year. I request my colleague Mr. Biju Joseph to present the snapshot of the progress report."

Then Biju Joseph presented the following facts before the house:

"This year net profit has shown a record breaking increase of 100% over previous year's profit. This all happened on account of simultaneous effect of managing the top line as well as bottom line. Sales for the year ended were higher by 50% over previous year's sales and we could cut down our expenses by about 17% as compared to last financial year." In support of these facts, the following un-audited income statement was presented:

Income Statement

For the year ending March 31, 2009 and March 31, 2010

Amount (₹ in Crore)

Particulars	March 31, 2009	March 31, 2010
Sales	10,00,000	15,00,000[5]
Less : Cost of Goods Sold (COGS)	7,00,000	8,50,000[6]
Gross Profit	3,00,000	6,50,000
Less : *Operating Expenses*		
Administrative expenses,		
Selling and Distribution expenses	70,000	1,00,000
Cash Operating Profit (EBDAIT)	2,30,000	5,50,000
Less: Depreciation and Amortization	30,000	30,000
	---------	----------
Operating Profit	2,00,000	5,20,000
Add : Non-operating Income (profit on sale of shares)		
Less : Non-operating expenses/losses (loss on sale of plant)	(5,000)	(25,000)
Earning Before Interest and Tax (EBIT)	1,95,000	4,95,000
Less : Interest and Tax	1,05,000	3,15,000
	-----------	---------
Earning After Tax (EAT)	90,000	1,80,000

All the senior management team members headed by Badam Gusain were surprised at the figures presented by the middle-management executives. However, they could interpret the accounting jugglery but kept quiet and everyone clapped. At the end, the Chairman congratulated all the employees and announced a productivity bonus for the employees.

Discussion Questions

1. Analyse the case from the viewpoint of accounting fundamentals.
2. Comment on the accounting policy of the company.
3. Also evaluate how middle-level executives could show a better performance in contrast to the apprehension of the senior management team headed by Badam Gusain.

[5] Order worth ₹ 4,59,000 crore received on March 25, 2010 and yet to be processed for manufacturing and delivery.

[6] Provisional expenses relating to the orders yet to be completed have been shown the similar adjustment has been made in the operating expenses.

CHAPTER

3

Classification of Assets and Liabilities

Learning Objectives

After reading this chapter, you will be able to

- Understand the meaning of assets and liabilities
- Explain current and non-current assets
- Identify current and non-current liabilities
- Gain an insight into the assets and liabilities under Indian Generally Accepted Accounting Principles (GAAP)
- Identify valuation practices for assets and liabilities

Plant, Property and Equipments vs Intangible Assets

Hexagon was appointed as the Credit Manager in Development Credit Finance Bank. He was evaluating a credit proposal of the following two clients:

Client A: Having a total non-current assets of ₹ 500 crore and total current assets of ₹ 300 crore. Current liabilities were ₹ 200 crore and non-current liabilities (excluding the owner's equity) were ₹ 100 crore.

Client B: Having a total non-current assets of ₹ 500 crore and total current assets of ₹ 300 crore. Current liabilities were ₹ 200 crore and non-current liabilities (excluding the owner's equity) were ₹ 100 crore.

Hexagon equally judged the short-term liquidity and long-term solvency of both the companies and recommended the sanction of loan to both the clients. His recommendations were cross-verified by the credit granting board by using more details. The board found that the long-term solvency as well as short-term liquidity of client 'B' was stronger as compared to client 'A'. The board also observed that the non-current assets of 'A' comprised more of intangible assets, whereas non-current assets of 'B' comprised more of property, plant and equipments. The intangible assets have a very low recoverable value as compared to property, plant and equipments. Similarly, the current assets of 'A' included more proportion of inventory and pre-paid expenses that are non-quick assets and would hamper the liquidity of the company.

The board guided Hexagon that a larger component of property, plant and equipment has more recoverable value as compared to intangible assets; hence, these indicate a sound long-term solvency. Similarly, inventory and pre-paid expenses weaken the short-term liquidity of the borrower.

CLASSIFICATION OF ASSETS AND LIABILITIES

For a business enterprise, assets are the items owned by it and liabilities are its obligations to pay to others. Assets are considered as an application of funds, whereas liabilities are the source of funds. Both assets and liabilities are shown in the balance sheet by following a set pattern of classification. All the assets and liabilities are classified under the broad heading, i.e., current and non-current items. This classification of assets and liabilities facilitates the assessment of liquidity position and the assessment of long-term solvency of the business enterprise.

Liquidity implies the availability of sufficient current assets to repay current liabilities. **Current assets** are also called **short-term assets.** These include cash, cash equivalents marketable securities and the assets convertible into cash within one year from the date of balance sheet—stock, debtors, bills receivables, marketable securities, pre-paid expenses, accrued income, etc. **Current liabilities** also called **short-term liabilities** are the liabilities to be paid off within one year from the date of balance sheet—sundry creditors, bills payables, outstanding expenses, income received in advance, tax payable, dividend payable, etc. The adequate availability of current assets indicates sound liquidity, whereas the inadequate availability of current assets indicates poor liquidity. Liquidity is also referred to as **short-term solvency**.

Liquidity refers to the availability of sufficient current assets for the repayment of current liabilities. **Absolute liquidity** implies the availability of cash and cash equivalents for the immediate repayment of current liabilities.

Long-term solvency, also called **solvency**, is evaluated with the help of (i) availability of long-term assets to repay long-term liabilities, and (ii) the proportion of owner's funds and debt funds.

ASSETS

Assets are economic resources, whether tangible or intangible. Anything that can be owned or controlled to generate economic value by using it is called an **asset**. Assets are what a business enterprise owns, such as building, plant, machinery, furniture, cash, stock, sundry debtors and others. The assets provide operating capacity as well facilitate utilization of the operating capacity. Different **non-current assets** also termed as **long-term assets**—property, plant, equipment, copyrights generate operative capacity, whereas **current assets** also termed as **short-term assets** get created during the capacity utilization provided by the non-current assets. The current assets, such as cash, bank, stock, debtors, pre-paid expenses and others get created when the production and sales activity passes through the operating cycle.

An **operating cycle** is the flow concept, indicating cycle from the raw material to cash through routine-operating activities of producing/procuring goods and services and selling these in the market. The Broad classification of the assets is as follows:

- Current Assets
  - Cash
  - Cash Equivalent—Marketable Securities
  - Short-term investment
  - Sundry Debtors
  - Bills Receivables
  - Inventory
  - Accruals—Pre-paid expenses, Accrued income
  - Loans and Advances
  - Deposits

- Non-Current Assets
  - Property Plant and Equipment
  - Intangible Assets—Intangible and Fictitious Assets
  - Investment

Current Assets

Assets held in the cash form or likely to be converted into cash within a period of one accounting year—twelve months of operating cycle are identified as **current assets**. These are the assets that come into existence on account of the operating cycle of the business enterprise as well as keep the operating cycle moving. Operating cycle starts from the introduction of raw material and ends with the realization of cash from the sale of goods and services.

Operating cycle is the duration during which raw material gets converted into cash by passing through the production and sales process.

The flow of this cycle creates assets, such as stock of raw material, stock of work-in-process, stock of finished goods, debtors, bills receivables, cash in hand, cash at bank, marketable securities, short-term investment, pre-paid expenses and accrued assets. All the assets created on account of operating cycle are likely to be converted into cash within the duration of the operating cycle that generally does not exceed twelve months' time period. The sum total of current assets is also called **gross working capital**.

Irregular Operating Cycle

When the duration of the operating cycle is shorter than twelve months then twelve months' concept is used to classify the assets as current assets. When the operating cycle is of a longer duration than twelve months period then it is the duration of the operating cycle that is used to classify the assets as current assets.

Factors Affecting Current Assets and Its Constituents

The level of current assets and their composition will differ from firm to firm even when two firms are identical in nature. Few organizations have heavy investment of funds in the current assets; others have very little investment of funds in the current assets. Similarly, the composition, i.e., constituents as discussed above might be different from firm to firm. In general, the duration of the operating cycle affects the level of the current assets (Fig. 3.1).

Cash

Cash includes cash in hand and deposits held in the bank account. It is the most liquid current asset, providing an instant capacity to pay. Cash is maintained by all the business enterprises to pay for the cash purchase of goods and expenses. It is vulnerable to misuse and, if maintained in excess as compared to the requirement, has an adverse impact on the profitability also.

USEFUL INFO

Constituents of current assets:

- Cash • Cash Equivalent—Marketable Securities • Short-term Investment • Sundry Debtors
- Bills Receivables • Stock • Accruals—Pre-paid Expenses, Accrued income • Loans and Advances
- Deposits

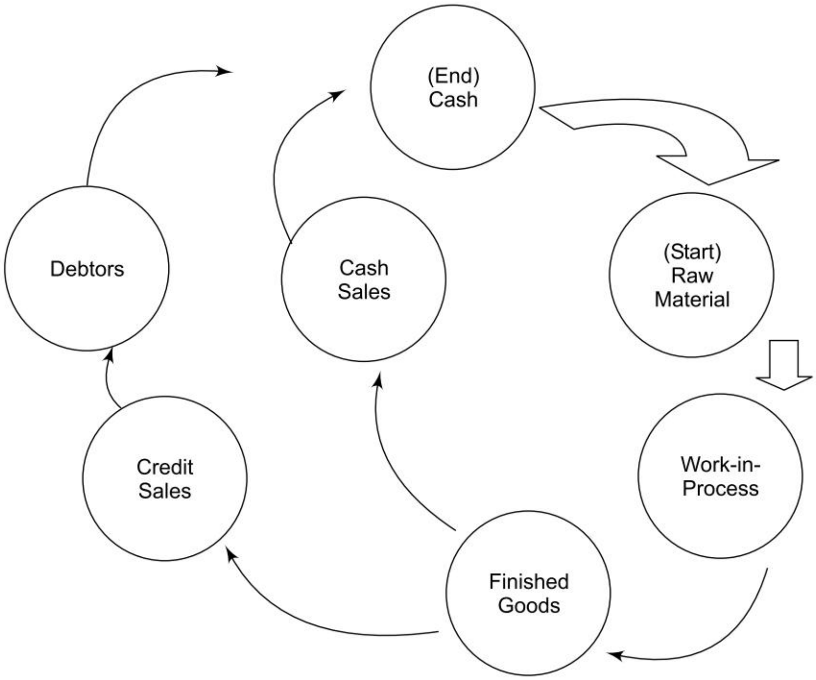

Fig. 3.1 *Operating Cycle*

Cash Equivalent—Marketable Securities

Marketable securities are the one that are highly liquid in nature. The element of safety along with the liquidity makes these securities as **gilt-edged securities**—having liquidity and safety at par with investment in gold.

Cash equivalents are the investments held in the form of marketable securities. Treasury bills, government securities and certain money market instruments are categorized as **marketable securities**. These are highly safe and liquid—can be converted into cash at an appropriate value without much delay. **Treasury bills** are issued by Reserve Bank of India (RBI) on behalf of the central government. The maturity of these is not more than a year. With respect to the payment of maturity value, these carry a guarantee of the government. Therefore, these are free from the default risk. Due to a high level of safety and marketability, these bills qualify as statutory liquidity ratio (SLR) securities. Hence, banks make a good market for these bills.

RBI functions as a regular market maker in these securities. Both of these facts bring in the element of good liquidity for these securities. **Government securities** are the one that are either issued by the central or state government or guaranteed by any of these governments individually or collectively. Due to this element of guarantee, these are safe, i.e., free from default risk.

Short-Term Investment

Surplus cash invested in different securities for a short-term duration, not exceeding one year are classified as **short-term investment**. These investments are either made in commercial papers, certificate of deposit or equity shares of companies. As the ready market is available for these securities, therefore, these are highly liquid in nature. The purpose of making short-term investment is to generate return from the surplus cash. Buying and selling of securities with short-term holding period is called **treasury function**. Treasury function requires significant knowledge about the money market and capital market.

Trade Receivables—Sundry Debtors

These are customers/clients of the company to whom goods have been sold on credit and the money is yet to be recovered. The personal accounts of the customers with debit balance on the balance sheet are individually classified as **debtors** and collectively classified as **sundry debtors** or **accounts receivables**. As these originate on account of trade activities of the business, therefore, these are also called **trade debtors**. These trade debtors are likely to be realized within twelve months' time period from the date of balance sheet or completion of the operating cycle, whichever is applicable.

> **Trade Debtors** are the debit account balance of the entities to whom the goods and services have been sold on credit.

Debtors are the result of the credit policy of the business enterprise; a liberal credit policy might result into a high volume of sundry debtors, whereas a tough (stringent) credit policy is likely to result into a very low volume of sundry debtors.

Bills Receivables

A **bills receivables** is a negotiable instrument evidencing acknowledgement by a debtor to make the payment on the pre-specified future date for the value received by him/her. This is the document against which the holder of the bill is to recover the money from the acceptor of the bill on the due date specified in the bill. Such bills have a maturity period not exceeding twelve months from the date of balance sheet. The debtors on whom bills of exchange is written by the seller and duly acknowledged by the respective debtor becomes bills receivable and name of such individuals is transferred from the list of sundry debtors to the list of bills receivables. Such transfer is executed with the help of a journal entry in the books of accounts.

> **Bills of exchange** is an unconditional order drawn by creditor on his/her debtors. It becomes bills receivable/bills payable only after acceptance by the drawee.

Inventory

Inventory includes the goods that remain either unused or unsold by the end of the accounting year. This includes the stock of raw material, stock of work-in-process (WIP), i.e., semi-finished goods and stock of finished goods.

These are likely to be used or sold in the next accounting year and get converted into cash within twelve months' time period. Inventory is also called **stock**. At the end of the accounting year, it is **closing inventory/stock** and it becomes **opening inventory/stock** for the next accounting year. In the operating cycle, the stock is the item that gets converted into cash much later than the rest of the items, such as debtors. Therefore, it is also defined as **non-quick asset**.

USEFUL INFO

Inventory items:

- Stock of raw Material
- Stock of WIP
- Stock of finished goods

The level of stock in a business enterprise much depends upon the inventory management policy of the business enterprise. The objective of maintaining inventory is to have liquidity—profitability trade-off.

Accruals—Pre-paid Expense and Accrued Income

Pre-paid expenses are the expenses that have been paid during the current accounting year but not due, i.e., these are relevant for the next accounting year. Pre-paid expenses are shown as a current asset in the financial statements and these generate the utility during the next twelve months from the date of balance sheet. Books of accounts are prepared by following the accrual concept that implies showing only the expenses that are relevant for the current accounting period, whether paid or not.

By following this concept, all the pre-paid expenses are shown as a current asset and not as an expense in the income statement for the year as it is not the expense for the current accounting year.

As a matter of general business practice, the pre-paid expenses do not get converted into cash but these generate the economic benefit within twelve months' time period from the date of balance sheet date. As the economic benefit from these is generated much later than the benefits from the debtors, therefore, these are classified as **non-quick assets**.

> **Accruals** are such expenses or revenue items that have become due but not settled in cash. These also include the expense or revenue items settled in cash but not relevant for the current accounting year.

Accrued income is the income that has been earned during the current accounting year and not received so far. It is likely to be received during the next twelve months from the date of balance sheet. Therefore, it is a current asset on the balance sheet date.

Loans and Advances

Loan to employees, advance to suppliers, and advance against salary that is likely to generate the economic benefit during the next twelve months from the balance sheet date is classified as a **current asset**. The loans and advances that are not to be recovered or not likely to generate the economic benefit during the next twelve months from the date of balance sheet are classified as **non-current asset**.

Deposits

Deposits with other companies and with certain authorities that are realizable within twelve months from the date of balance sheet are called **deposits**. The deposits with certain authorities that are not realizable into cash or do not generate economic benefit within twelve months' time period from the date of balance sheet are not put in the category of the current asset; rather these are long-term assets.

Non-Current Assets

Non-current assets do not get converted into cash during the routine-operating cycle. These are the assets that are purchased in the business enterprises to use them in the business and not for sale. These form the part of basic infrastructure that provides the production capacity to produce goods and services.

> Assets that generate operating capacity are the **non-current assets**. These are not meant for sales during the normal course of business.

USEFUL INFO

Non-current assets:
- Property, plant and equipment
- Intangible assets
- Investment
- Fictitious assets

Property, plant, equipment, intangible assets—goodwill, patents, copyrights, etc. are the non-current assets. Investments, deposits, loan and advances that are not convertible into cash within next twelve months from the date of balance sheet are also included in the non-current assets.

Property, Plant and Equipment

Property, plant and equipment provide production capacity to the business organization. Property includes the **infrastructure** on which production facilities have been installed, such as plant, equipments and machinery, furniture, fixtures and office equipments. In case of airlines companies, the infrastructure will include land on which runway, office building, fencing, airstrip siding, aircrafts, vehicles, elevators, equipments, cash machines, computers, and other facilities have been set up. Infrastructure comprises land and building, such as factor land and building, and office land and building. Different mechanical and electronic devices, such as tools and machines are grouped as **plant and equipments**. The property, plant and equipment are purchased by the business organization with the aim to use it and not to sell it. By using it, the organization intends to generate regular cash inflows. However, these might be sold if these are not fit to generate the production capacity as desired; the cash flow generated at the time of sale of these assets is termed as **terminal cash inflow**.

Non-current assets are the **cash-generating units** as these collectively help in realizing the cash inflow when utilized through operating cycle.

Property, plant and equipment work on the principle of synergy. These items are called **group of assets** capable of generating cash flows. Therefore, these are also termed as **Cash-generating Units (CGU)**. None of the items of property, plant and equipment generate cash flow individually but it is a collective contribution of all the items.

Non-current assets, in the process of construction or installation and likely to provide operating capacity and generate cash in the future, are classified as **capital work-in-process.**

The productivity of property, plant and equipment is measured in terms of the amount of cash inflow generated by the group of assets and not by the size or value of the asset. The items classified as property, plant and equipment except land are subject to depreciation. The items of property, plant and equipment that are in the process of construction or installation on the date of balance sheet do not generate cash but are likely to generate the cash in future. These are shown separately in the balance sheet under the heading **capital work-in-process**.

Intangible Assets

Assets enhancing the earning capability of property, plant and equipment but not in physical/tangible form are called **intangible assets**. Intangible assets alone cannot generate cash inflows and these are incidental to property, plant and equipment and enhance the cash inflow-generating capacity of property, plant and equipment. Goodwill, patents, copyrights, trademark, logo, brand etc. are the examples of intangible assets.

Non-monetary assets in non-physical form are the **intangible assets.** These enhance the cash-generating capacity of non-monetary physical assets.

Intangible assets are non-monetary assets in non-physical form in the sense that these do not realize a precise monetary value; instead the economic benefits likely to be realized from these are highly subjective upon the assessment of the management. For telecom companies, the license provided to the company by Telecom Regulatory Authority of India (TRAI) is also an intangible asset. Similarly, in case of a transport agency or airlines agency, the license to operate the vehicle on a route is also categorized as an intangible asset.

Investments

Investments refer to putting the surplus cash in the securities (share, debentures and bonds) issued by the other companies and government. This investment is not to be realized in cash within twelve months' period from the date of balance sheet. These assets are not expected to contribute directly in the cash inflow-generating capacity of the other assets. The main purpose of investment is to earn regular income in the form of interest/dividend and capital appreciation in the invested capital.

When a firm has accumulated surplus funds and does not find a profitable project for the investment of such funds then these funds are invested in buying securities issued by the other companies for longer tenure so that the surplus cash can generate some benefits—regular income and capital appreciation.

Investments and Corporate Relationships

Investment in the securities issued by other companies binds investing company—the company making investment and the investee company—the company whose securities are purchased in a specific relationship, this relationship has an impact on the controlling and decision-making in investee company. When a company/firm holds 20% or more shares with voting power in the other company/firm, the company holding such shares can have a significant role in the functioning and financial decision of the company in which such shares are held. In this case, the latter is called the **associate company** of the first. Similarly, when the first company holds 51% or more shares with the voting power of the second company then the first company is called the **holding company** and the second company is called the **subsidiary company**. The subsidiary of subsidiary is also the **subsidiary of the first company.**

Example: Zeta Limited holds 51% equity shares of Alpha Limited, the equity shares carry the voting power. Here, decision-making of the Alpha Limited is controlled directly by Zeta Limited. Therefore, Zeta Limited is the holding company and Alpha Limited is the subsidiary of Zeta Limited. Further, Alpha Limited holds 51% equity shares of Gama Limited. Here, Alpha is the holding company and Gama is the subsidiary of Alpha; at the same time, Gama is also the subsidiary of Zeta because the decision-making in Gama is indirectly affected by Zeta Limited.

Example 1 ABL Ltd holds 60% shares with voting rights of Deepak Agro Ltd (DAL) and 51% shares of Amit Agro Ltd (AAL). DAL holds shares of the following companies:

(i) XY Ltd 10% shares with voting rights
(ii) LKL Ltd 75% shares with voting rights
(iii) AAL holds 65% shares with voting rights of WWW Ltd.

Show how these companies are related to one another.

Solution

(i) ABL Ltd is holding more than 50% shares (with voting rights) of DAL and of AAL as well. Therefore, both of these are the direct subsidiaries of ABL Ltd., and ABL Ltd is the holding company.
(ii) DAL is holding more than 50% shares (with voting rights) of LKL Ltd. Therefore, LKL is the direct subsidiary of DAL and DAL is the holding company. As holding of DAL in XY Ltd is only 10%, therefore, there is no relationship of the holding and the subsidiary companies between these two.
(iii) WWW Ltd is the direct subsidiary of AAL and AAL is the holding company of WWW Ltd.
(iv) The subsidiary of subsidiary is also called subsidiary of the first holding company. Therefore, in this case, LKL and WWW Ltd are also the subsidiaries of ABL Ltd.

Investment Property Investment in the property, plant and equipment, especially in the land and building to earn income from rentals and royalty is identified as **investment property**. Such investment property is not held to generate regular cash inflow or to assist in the cash inflow-generating capability of property, plant and equipment. When such investment is made by a real estate firm, having business of dealing in rental property, it will be classified as **property, plant and equipment**.

Investment of funds in different tangible assets to generate rental income is termed as **investment property.**

CLASSIFICATION OF ASSETS UNDER INDIA GAAP

Generally Accepted Accounting Principles (GAAP) are the guiding principles in preparing and presenting financial statements of business organizations in India. GAAP can be viewed in the form of Indian Accounting Standards (AS). These standards are to be adopted in recognition of the monetary transactions and their valuation.

USEFUL INFO

Assets under Indian GAAP:
- Fixed assets
- Investments
- Current assets

Property, plant and equipment are considered as the part of **fixed assets**. Different intangible assets are also the part of fixed assets. Investments are different financial assets; these are classified as trade and non-trade investments.

Trade investments are the one that are obtained on account of the routine business activities, whereas **non-trade investments** are such investments that are created to generate capital appreciation or to hedge the risk of non-business activities.

The assets other than fixed assets and investments are recognized as **current assets**. This is also termed as **recognition of asset** by residual identification approach. Due to this identification, certain assets get classified as current assets that are otherwise not the current asset. For example, a contractor deposits the earnest money at the time of getting a contract to be completed in the long term. This earnest money is recoverable only at the end of such long term. *Therefore, it is not a current asset but under Indian GAAP, it gets grouped under the heading, current asset*.

EXAMPLE 2 Classify the following items into different categories of assets as provided under India GAAP.

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Capital	19,00,000	Land & Building	15,30,000
Secured Bank Loan	11,50,000	Plant & Machinery	11,10,000
Bank Overdraft	70,000	Furniture	2,20,000
Sundry Creditors	30,000	Investment	90,000
Tax payable	2,85,000	Stock	95,000
Outstanding Expenses	1,50,000	Sundry Debtors	1,75,000
		Bills Receivables	25,000
		Cash and Bank	80,000
		Pre-paid Expenses	15,000
		Marketable Securities	20,000
		Preliminary Expenses	40,000
		Goodwill	1,10,000
		Patents	75,000
	35,85,000		35,85,000

SOLUTION **Fixed Assets:**
Tangible Assets: Land & Building, Plant & Machinery, Furniture.
Intangible Assets:_Goodwill, Patents
Fictitious Assets: Preliminary Expenses
Current Assets: Stock, Sundry Debtors, Bills Receivables, Cash and Bank, Pre-paid Expenses, Marketable Securities
Investments

Recap 1

So far, we have discussed the following topics:

- Classification of assets and liabilities
- Assets
- Current assets
- Non-current assets
- Classification of assets under India GAAP

Self-assessment 1

1. Explain the basis for classifying different assets.
2. Discuss the differences between current and non-current assets.
3. Discuss classification of assets under India GAAP.

The following topics will be delved into next:

- Current liabilities
- Refinance or Rollover of Current Liabilities
- Non-current liabilities
- Accruals, provision and contingent liabilities
- Comparison: Accruals, Provisions and Contingent Liabilities
- Classification of liabilities—Indian GAAP
- Monetary items
- Financial instruments
- Measurement principles
- Liabilities under Indian GAAP
- Capital expenditure, revenue expenditure and fictitious assets
- Solved illustrations
- Analysis of transactions

CURRENT LIABILITIES

These are the monetary obligations of a business enterprise to be paid off either within the duration of the operating cycle or twelve months' period from the date of balance sheet. These liabilities originate from the operating cycle, such as amount due to suppliers of goods and services, amount due to employees, i.e., wages and salary due on the balance sheet date but not paid and other similar items. *For example, trade creditors, bills payables, outstanding expenses, tax and dividend payable are the most common current liabilities*.

The main focus in the identification of liabilities is the operating cycle. Obligations that are due for the payment within the duration of operating cycle are current liabilities otherwise these are non-current liabilities. Situations where the duration of the operating cycle cannot be calculated precisely, it is taken as twelve months. Even the long-term loan and debentures that were part of non-current liabilities on the previous balance sheet date but the proportion, which is due for the repayment within the twelve months' period from the current balance sheet date, are categorized as current liabilities. Installments of **deferred credit** payable within the time period of twelve months from the date of balance sheet are also identified as current liabilities.

Deferred credit agreement is a mechanism to acquire an asset, particularly fixed asset on hire purchase system or on installment payment system.

Current liabilities are the important source of financing working capital, i.e., financing of current assets. This financing is generated spontaneously during the flow of operating cycle. Therefore, these are also called **source of spontaneous finance**. Spontaneous finance includes trade creditors, outstanding expenses, tax and dividend payable.

Operating Items

Liability items generated due to the flow of operating cycle are the operating liability items, such as trade creditors, overdue expenses, advances from customers and certain income received in advance. These are to be paid off within the operating cycle duration.

If the operating cycle is not defined clearly then its duration is taken as twelve months.

All the operating items are part of the **working capital**; the most common operating items are as follows:

USEFUL INFO

Operating items:

- Trade creditors
- Bills payables
- Outstanding/ Overdue expenses
- Unearned income
- Liabilities held for trading

Trade Creditors

Trade creditors include the amount due to be paid to the suppliers from whom goods and services have been obtained on credit and the payment is due to be made within next twelve months from the date of balance sheet. Trade creditors are also termed as **sundry creditors or accounts payables**. These result from the operating activities and these are one of the prominent sources of spontaneous finance.

Bills Payables

A bills of exchange upon acceptance by the drawee becomes **bills payables** for the drawee. The drawee is also called acceptor of the bill having accepted the obligation to make the payment for the bill. Upon acceptance of bill, the amount due to be paid to the supplier is transferred from the list of the trade creditor to the list of the bills payables. Generally, these bills have a maturity period not exceeding twelve months. Bills payables are similar to the trade creditors and identified as current liability.

Outstanding/Overdue Expenses

Overdue expenses are the expenses that have become due for the payment but not paid till the date of balance sheet. These are also called **outstanding expenses** or **accrued expenses**, such as wages due but not paid and telephone charges due but not paid. Similarly, the tax and dividend that have become due and not paid by the end of the year are also identified as current liabilities. These are surely to be paid during the next accounting year.

Unearned Income

The income received during the year but not earned till the date of balance sheet is the **unearned income**. It is to be recognized as the revenue in the next accounting year or to be refunded; hence, it is a current liability at the end of the current accounting year. For example, the interest received in advance, the commission received in advance. It is also called **income received in advance**.

Liabilities Held for Trading

LIABILITIES HELD FOR TRADING

Current liabilities also include liabilities resulting from the active and frequent trading, i.e., buying and selling of securities—shares and debentures. Trading activity results into certain liabilities to be settled within twelve months' period. Liabilities held for trading include the following:

- Derivative Instruments
- Short Selling
- Bonds with Repurchase Option/Obligation

Theses liabilities might help in funding the business activities or sometimes executed as a part of treasury function.

Derivative Instruments

A derivative instrument is the one that derives the value from an underlying asset. The underlying asset might be a share, a commodity, an index having some economic value. The widely used derivative instrument is the option transaction. The **buyer** of the option, also called **holder** of the option, has all the right without any obligation to buy or sell the underlying asset at the pre-specified price on or before the expiry date. The pre-specified price is called the **exercise price**. The writer of the option, also called **seller** of the option, has only the obligation towards the holder to honour the commitment resulting from the option transaction. It is a **call option** when the holder has the right to buy the underlying asset, and it is a **put option** when the holder of the option has the right to sell the underlying asset. To have this right, the holder of the option makes an upfront payment of premium to the writer of the option.

For example, X Ltd buys a call option on **one lot** (one kilogram, it is decided by the concerned exchange where such transaction is executed) of gold from Y Ltd with an exercise price of ₹ 20,000 per ten gram with 30 days-expiry period. X Ltd pays ₹ 100 per ten gram to Y Ltd as premium. Here, X Ltd, being the buyer of the call option, has the right to be exercised on or before the expiry of 30 days to buy from Y Ltd one kilogram of gold at the exercise price mentioned above. If option happens to be in-the-money by the end of expiry period then X Ltd will exercise the option; otherwise, it will lapse at the end of the expiry. This option generates a **liability held for trading** for the writer of the option, i.e., for Y Ltd to be settled within in thirty days' time.

For example,_X Ltd buys a put option on **one lot** (one kilogram, it is decided by the concerned exchange where such transaction is executed) of silver from Y Ltd with an exercise price of ₹ 50,000 per kilogram with 30 days-expiry period. X Ltd. pays ₹ 1,000 per kilogram to Y Ltd as premium. Here, X Ltd, being the buyer of the put option, has the right to be exercised on or before the expiry of 30 days to sell to Y Ltd one kilogram of silver at the exercise price mentioned above. If option happens to be in-the-money by the end of expiry period then X Ltd will exercise the option; otherwise, it will lapse at the end of the expiry. This option generates a liability held for trading for the writer of the option, i.e., for Y Ltd to be settled within thirty days' time.

Short selling means selling something that is not owned by the seller. The main object is to book profit through a short covering at a later date.

Short Selling

Short selling means selling something that is not owned by the seller. The seller delivers the securities sold by borrowing it from someone else and intends to buy it in future to return it to the party from where it has been borrowed. This transaction results into buying obligation for the short seller to be fulfilled within short-time duration. This time duration usually does not exceed ninety days' time. The main objective here is to gain from the expected decline in the prices of securities short-sold. Such profit is booked when shares are bought back at a price lower than the short-selling price. But it will result into a loss, if securities are bought back at a price higher than the short-selling price. This probability of having a loss makes the short selling a **risky** transaction.

For example, Gama Enterprises foresees that the shares of SBI are overvalued and expects the price of SBI to decline in the near future. With this expectation, it sells 100 shares of SBI at the current price of ₹ 3,500 per share on March 28, 2010. To deliver 100 shares of SBI, the company borrows it from Alpha Ltd for a period of 60 days. Here, Gama has the obligation to deliver 100 shares of SBI to Alpha at the end of next 60 days. Therefore, it is a current liability for Gama on the balance sheet date, i.e., March 31, 2010.

Bonds with Repurchase Option/Obligation

A firm may issue bonds/debentures with a repurchase option, i.e., a call option to be settled within near short term. If this repurchase option is to be settled without an alternate for roll over then it is a current liability. Similarly, a firm might sell certain bonds to another party with an obligation to buy it back from the same party in the near future, and it results into a current liability for the present seller. The most common repurchase option in the money market and in the banking industry is **REPO** (repurchase obligation/agreement). A REPO deal is a combination of one spot deal and one forward deal executed simultaneously between the same parties on the same bond/debenture. This deal results into a repurchase obligation for the spot seller. It is also known as **ready forward deal**.

> A **REPO** deal is a combination of one spot deal and one forward deal executed simultaneously between the same parties on the same bond/debenture.

For example, Syndicate Bank enters into the following two deals with Dena Bank on March 21, 2010:

Spot transaction: Syndicate Bank sells 1,000 treasury bills to Dena Bank at a rate of ₹ 980 per bill.

Thirty Days' forward transaction: Syndicate Bank agrees to buy 1,000 treasury bills from Dena Bank at a rate of ₹ 1,020 per bill.

This forward transaction generates repurchase obligation for Syndicate Bank on March 21, 2010 and to be shown as a current liability in the balance sheet on March 31, 2010.

Banks execute REPO deals very frequently for SLR and CRR requirements.

Refinance or Rollover of a Current Liability

Refinance means arranging for another source of finance to repay an existing liability. When such refinance option is available for a current liability and the business firm plans to exercise such option then such liability need not to be classified as current liability; rather it is deemed as non-current liability. **Rollover** means extending the maturity duration with the consent of another party involved. When such option is available and is likely to be exercised with regards to an item of current liability then such item is not to be classified as current liability but as non-current liability.

Example 3 The following deals were executed between SBI and PNB on January 21, 2011:

Deal 1: Ten thousands GOI-2012 Series bonds of face value ₹ 100 each were purchased by SBI from PNB at a price of ₹ 95 per bond deal is to be settled immediately.

Deal 2: Twenty thousands GOI-2015 Series bonds of face value ₹ 1,000 each were purchased by SBI from PNB at a price of ₹ 980 per bond deal to be settled immediately. On the same day, both these parties entered into a 30 days' forward on the same securities at a price of ₹ 1010 per bond. In this deal, SBI was the seller and PNB was the buyer.

Are both deals 1 and 2 REPO deals? Explain.

Solution A **spot deal** is the one in which both the negotiation of the deal and the settlement of the deal are done simultaneously. In the deal, (i) negotiation and settlement are taking place hand in hand. Therefore, it is a spot deal.

In a REPO deal, two parties enter into two deals simultaneously on the same underlying asset. Out of the two deals, one is the spot deal and another is the forward deal. The selling party (spot seller) of the spot deal is the buying party in the forward deal that results into a repurchase obligation of the spot seller. In the second deal, the condition is being fulfilled— PNB is the spot seller and it is the buyer in the forward transaction as well. Therefore, it results into a repurchase obligation (REPO) for PNB.

Hence, deal 1 is a spot deal and deal 2 is a REPO, also known as **ready forward deal**, between SBI and PNB on GOI-2015 Series.

NON-CURRENT LIABILITIES

The liabilities to be settled beyond a period of twelve months from the date of balance sheet are classified as non-current liabilities. These are also called **long-term liabilities**. Examples of non-current liabilities are long-term borrowings from financial institutions and banks repayable after twelve months from the balance sheet date. Similarly, debentures issued by the company with the remaining maturity period exceeding twelve months on the balance sheet date are also non-current liability. **Deferred credit agreement** to the extent of installments falling due beyond the twelve months period from the balance sheet date is also classified as long-term liability.

Long-term liabilities are grouped as the owner's capital and borrowed capital. Liability accruing towards owner–shareholder is called **owner's capital.** It includes paid equity and preference share capital and the net amount of reserve and surplus. Liability accruing towards the entities other than the shareholders is called **borrowed capital.** On this, the business firm has the obligation to pay interest as per the provision of borrowing/issue of bonds/debentures.

Secured vs Unsecured Liabilities

Secured liabilities are the one that are raised against the collateral of a certain asset or group of assets of the business enterprise. The assets offered as **collateral** are the business assets offered in the form of mortgage or hypothecation. In the event of non-payment or default by the business enterprises (borrower), the money lender, bank, financial institution has the recourse to sell the asset offered as collateral and recover their dues. Example is loan taken against the hypothecation of plant and machinery, or cash credit secured by the hypothecation of inventory or term loan secured by the mortgage of land and building.

An **unsecured liability** is the one for which no security is offered by the borrower except the personal guarantee of the individual. **Public deposit** is the most common form of unsecured liability used by the companies as a source of finance. These create high degree of risk for the loan provider depositor.

ACCRUALS, PROVISION AND CONTINGENT LIABILITIES

In the identification of a liability item, the incidence of timing and accuracy of the amount of liability is more important. The liabilities for the goods and services received or consumed is certain. Similarly, the liability to pay a known compensation is also a certain liability. But on the date of balance sheet, there are the incidences when (i) timing for the payment of liability, and/or (ii) the amount to be paid for a possible liability are not know precisely. Such items are uncertain liabilities. These uncertain liabilities are classified as accruals, provisions and contingent liabilities.

Contingent Liability

A **contingent liability** is the one that is not the liability on the balance sheet date but it might become a liability in the future, subject to the happening of a certain event. A contingent liability is disclosed as a footnote to the financial statements but it does not become the part of the balance sheet.

Accruals

An accrual is the item originating from the credit purchase of goods or services for which payment has not been claimed by the supplier or the service provider but it has become due. The financial obligation with respect to this transaction can be assessed with a fair estimation and the probable timing is also within the next twelve months from the balance sheet date. If probable timing exceeds twelve months then it should be classified as a long-term liability. Since the claim for such transaction has not been raised by the counter party, therefore, it cannot be classified as trade creditor but can be shown as an **outstanding liability** in the balance sheet. Here, the level of uncertainty is comparatively lower then the uncertainty with regards to the provisions.

Provisions

Provisions are the items relating to a known item of liability that may arise in future, depending upon certain circumstances. The timing and amount of this as a liability is more uncertain as compared to accruals. Examples are provision for repairs and renewals of machinery, provision for tax, provision for dividend, etc. These are the items for which the timing and amount of liability cannot be assessed with precision. Hence, these are provided in the balance sheet by using an expert opinion or an estimate, depending upon the past experience of business enterprises. Few of the provisions are shown separately under the broad heading of current liability, such as provision for tax and provision for dividend.

The provisions are created by debiting the profit and loss account for which the following entry is passed:

Profit and Loss a/c Dr.
To Provision for ....a/c

This entry results in lowering the profit and creating a provision for a known liability for which amount and timing are not known precisely. The common examples are provision for the repairs and renewal of plant and machinery. Such repairs might take place in future time period. In the future, when actual repair expense is incurred then it is not debited to profit and loss account. Instead it is charged to the provision account by passing the following journal entry:

Provision for Repairs & Renewal a/c Dr.
To Repairs & Renewal a/c

Provision and Contingent Liabilities

Contingent liability is a probable obligation to pay resulting from some events/transactions of the past, the outcome of which is dependent on the happening of one or more future events. Example is the payment of compensation to a supplier or customer who has filled a case in the court against the business enterprise. Neither the timing nor the amount of this obligation can be assessed precisely; it completely depends upon the judgement of the court; therefore, it is a contingent liability on the balance sheet date.

Such liabilities are not shown in the balance sheet but shown outside the balance sheet while making disclosure to final accounts.

The accounting prudence implies that a provision for such contingent liabilities is to be provided while making financial statements. By making this provision, divisible profits get lowered and a certain amount is kept in abeyance for the payment of the liability in case it arises in future. Whether an item is the item of provision or a contingent liability depends upon the recognition by the management. If management recognizes an unknown obligation and foresees that the payment for such obligation may be paid in future then it is identified as a **provision** and provided for it in the final accounts. If the management fails to recognize an unknown obligation and foresees that the payment for such obligation may not be paid in future then it is identified as a **contingent liability**. The provision for contingent liability is created by passing the following journal entry:

Profit and Loss Appropriation a/c   Dr.
  To Provision for Contingent Liability a/c

Contingent liabilities do not find any place in the balance sheet but the provision so created is shown in the **liability side** of the balance sheet. Subsequently, when the liability actually arises and paid then it is debited to the provision for contingent liability account.

PROVISION VS CONTINGENT LIABILITY

Provision: It is a present liability of certain and known nature with uncertainty about the timing and amount but the head i.e. account of obligation to pay is known, such as expected repairs to machinery.
Contingent Liability: The item of obligation is unknown in nature and depends upon some future happenings. Incidence of payment and timing are also not known precisely.
Provision: Provision is provided when the management recognizes an item of obligation as a liability on the balance sheet date.
Contingent Liability: When the management does not recognize an item as a liability on the balance sheet date then it is identified as contingent liability.
The fact that both are expected to take place in future is common for both of these.

Comparison: Accruals, Provisions and Contingent Liabiliteis

Point of Difference	Accruals	Provisions	Contingent Liabilities
Timing	It is known in advance.	Not known in advance.	Depends upon future outcome/decision.
Precision in estimation	Amount can be estimated with high level of precision.	Accuracy is lower in comparison to accruals but higher then the contingent liability.	Estimation depends upon future outcome that is completely uncertain.
Projection in the balance sheet	Shown generally as a current liability.	Shown as a separate item under the heading current liabilities.	Shown outside the balance sheet.
Recognition	Recognition is easy and objective.	Recognition depends upon the vision of management.	Recognition depends upon the vision of management.

CLASSIFICATION OF LIABILITIES—INDIAN GAAP

Under Indian GAAP, the liabilities of a business enterprises are grouped under two broad headings, i.e., owner's equity—share capital as well as reserve and surplus, secured and unsecured loans comprising different loan obligation and debentures falling due for the repayment in the long term. The rest of the liabilities are classified as current liabilities and provisions. These include various short-term liabilities to be settled within twelve months' time period from the balance sheet date; the provision for tax and dividend are also shown separately under the heading, current liabilities and provisions.

EXAMPLE 4 Taking the data of Example 2, classify different liability items as provided under Indian GAAP.

SOLUTION **Long-Term Liabilities:** Owner's Capital, Secured Bank Loan
Current Liabilities: Bank Overdraft, Sundry Creditors, Tax payable, Outstanding Expenses

EXAMPLE 5 Differentiate between accruals and sundry creditors. How are both of these projected in the balance sheet?

SOLUTION **Accruals** are the items of current liability. These arise when goods or services have been received from the supplier/service provider but the supplier/service provider has not raised his/her claim for the goods supplied or the service provided. The level of certainty about the amount of claim is not precise as compared to the case of sundry creditors; therefore, these items cannot be classified as sundry creditors but as **outstanding expense** to be shown in the balance sheet under the heading, current liability.

Sundry creditors are accounts of such suppliers from whom goods/services have been received and the supplier has also raised the claim for the goods/service provided. The amount owed towards the supplier is certain. Therefore, it is shown as a current liability, namely **sundry creditors** in the balance sheet.

Monetary Items

Monetary items are assets and liabilities to be received or paid in a pre-determined amount in the future. **Monetary assets** realize a pre-determined monetary value for the business enterprises; for example, trade receivables, deposits, loans and advances, etc. **Monetary liabilities** result into a pre-determined monetary value as an outflow for the business enterprises; for example, trade payables, loan payable, debenture payable, outstanding expenses, dividend payable, tax payable, loans and advances payable, etc.

> Monetary assets result into a pre-determined cash inflow and monetary liabilities result into a pre-determined outflow for the business enterprises.

Monetary items are also called **financial assets** and **financial liabilities.** The valuation of monetary items can be done precisely and objectively, whereas assets, such as inventory, investments, property, plant and equipment cannot be valued precisely and with objectivity. Therefore, these are called **non-monetary items** or **non-financial assets**.

Financial Assets (Instruments)

Financial assets are like contractual right to receive the money value for one party and contractual obligation for the other party to pay. The corresponding monetary magnitude is the same for both the parties involved in the contractual agreement. Financial instrument is like a financial asset for the investing company and for the company that has the obligation to pay for it is a financial liability. When it is a contract to receive a particular monetary value, it is a **financial asset** and when it results into a contractual obligation to pay, it is a **financial liability**.

A financial asset includes the following:

(i) Cash and bank balance
(ii) Shares and debentures of another company held as an investment
(iii) Accounts receivables or bills receivables
(iv) Deposits, loans and advances extended

A financial liability includes the following:

(i) A contractual obligation to pay cash or deliver other financial asset
(ii) Trade payables or bills payables
(iii) Deposits accepted to be settled in definite monetary value
(vi) Loans and advances accepted
(v) Bonds and debentures payables

Illustration Alok Industries (AI) buys a futures contract from Agro Dutch Ltd (ADL) for a value aggregating ₹ 3,50,000. Now when market value (price) of this contract is more than ₹ 3,50,000, then it is favourable for AI and unfavourable for ADL. Now AI will record it as a financial asset (futures contract) and ADL will record it as a financial liability (futures contract).

When market value of this contract falls below ₹ 3,50,000, then it is unfavourable for AI and it will show it as a financial liability and for ADL, it will be favourable and it will show as a financial asset in the balance sheet.

Illustration Sigma Enterprises sells goods valuing ₹ 5,00,000 on credit to Beta Ltd. Here, Sigma will record it as a financial asset, namely trade debtors with ₹ 5,00,000 and Beta Ltd will record it as a financial liability, namely trade creditors with ₹ 5,00,000.

Illustration TPT Ltd issues debentures and out of the issued amount, certain debentures are purchased by KT Ltd as an investment. Now TPT Ltd will show all the debentures issued as financial liability, namely debentures in the balance sheet, and KT Ltd will show as financial assets in the balance sheet, namely investments.

Illustration Gypsy Ltd (GL) borrows ₹ 9,50,000 from UCO Bank. GL will record it as a financial liability, namely loan payable and UCO Bank will record it as a financial asset, namely loan advanced.

Illustration Kamal Ltd (KL) buys a property of ₹ 10,00,000 from Deepak Ltd (DL). For this, it issues promissory notes to DL. Now for KL, this promissory note is a financial liability and for DL, it is a financial asset. A **promissory note** is a financial instrument showing promise of the issuer to pay a particular monetary value to the party named in the note or its bearer.

Recap 2

So far, we have discussed the following topics:

- Classification of assets and liabilities
- Assets
- Current assets
- Non-current assets
- Classification of assets under India GAAP
- Current liabilities
- Refinance or rollover of current liabilities
- Non-current liabilities
- Accruals, provision and contingent liabilities
- Comparison: accruals, provisions and contingent liabilities
- Classification of liabilities—Indian GAAP
- Monetary items
- Financial instruments

Self-assessment 2

1. Discuss the basis of classifying different liability items.
2. Compare accruals, provision and contingent liabilities.

The following topics will be delved into next:

- Measurement principles
- Liabilities under Indian GAAP
- Capital expenditure, revenue expenditure and fictitious assets
- Solved illustrations
- Analysis of transactions

MEASUREMENT PRINCIPLES

Assets and liabilities are measured by considering a business entity as a going concern. A business entity is viewed as going concern if it neither has the possibility nor the compulsion to wind up the business in the foreseeable future. The time duration beyond twelve months is considered as a foreseeable future time period. All the measurement principles, whether discussed under Indian GAAP (Generally Accepted Accounting Principles), US GAAP or under IFRS (International Financial Reporting Standards), are based on the premises of **going concern concept**. Going concern concept implies that a business enterprise will continue to operate for a very long time in the future. The measurement principles discussed here under are based on this concept of going concern.

USEFUL INFO

Measurement bases:

- Historical cost
- Current cost
- Realizable/settlement value
- Present value
- Fair value of an asset and liability

Valuation practice for assets and liabilities:

- Value of property, plant and equipment
- Value of intangible assets
- Value of inventory
- Value of monetary assets
- Value of financial assets
- Value of investment property
- Value of financial liability

Measurement Bases

Measurement of assets and liabilities in accounting is done by adopting certain concepts and convention. The proper scientific method for measurement of assets and liabilities is not available. Different measurement basis have been provided by Indian GAAP, US GAAP, IFRS and IASC (Indian Accounting Standard Committee). These are as follows:

Historical Cost

Assets are recorded at the cost paid in the procurement of an asset item. The term cost includes consideration paid to the supplier of the asset, construction cost, asset purchase expenses, such as cost of technical assessment, cost of technical knowhow, carriage and transportation cost and all the expenses incurred in bringing the asset at the productive/functional stage.

Liabilities are recorded at the gross amount of proceeds realized in exchange for the obligation; for example, a company issuing debentures or taking a loan records at the gross amount of debenture/loan without considering the cost incurred in bringing the issue. The issue expenses are shown as fictitious asset to be amortized over its useful life. Certain liabilities are recorded at the estimated/expected amount likely to be paid for it, such as for tax payable, an estimated amount is shown as a liability; same is applicable for the dividend payable.

Current Cost

It is the cost of an asset that is likely to be paid at present if an asset or its equivalent asset is purchased during the current period at the current market price. In case of liabilities, it is the estimated monetary value to be paid at present to settle an obligation. This monetary value is also called **undiscounted value of liability.**

Realizable/Settlement Value

The **realizable value** of an asset is the value that would be realized if it is disposed off at present in the normal circumstances. This is the net of disposal expenses. **Settlement** value of a liability is the value that is to be paid off to settle an obligation at present as a going concern.

Present Value

It is the discounted value of the future cash inflow likely to be generated from an asset. In estimating the future cash inflows likely to be generated from an asset, the business enterprise is considered as a going concern. The present value of an asset calculated like this is called **recoverable value** of the asset also.

Present value of a liability item is the discounted value of future cash outflows likely to be paid to settle the obligation in future as per the maturity plan of the liability during normal course of business activities. The present value is called **discounted value**. The discounting is done at an appropriate discount rate; this discount rate is usually the cost of capital or required rate of return estimated by the business enterprises during the normal course of business.

> **Recoverable Value** is the present value of future cash inflows likely to be realized from a financial asset.

The estimation of present value requires precision in estimating (i) the cash inflows likely to be generated from an asset, (ii) the cash outflows to be paid to settle an item of liability and (iii) the discount rate for calculating present value. All these estimates are done by considering normal course of business activities, i.e., by following the assumption of going concern concept.

Out of all these measurement basis, the **historical cost** basis of measuring assets is most widely accepted basis. All the assets are recorded at the historical cost. The present value and current cost basis are more logical but the standard setting committees have not reached at the consensus to show the assets in the financial statements at these values. However, in certain cases, the standard setting committees have agreed to accept the present value estimation as an initial recognized value of an asset and fair value estimation as the subsequent assessment of an asset. **IAS-39** requires valuation of property, plant and equipment at the fair value which can be considered as **fresh-start measurement** of an asset.

Fresh-start measurement implies making an estimation at the current market value without considering the existing valuation base.

Fresh-start measurement implies making an estimation at the current market value without considering the existing valuation base. For example, the valuation of derivatives contracts is carried at the market value on the balance sheet date. This market value may be taken at par with fresh-start measurement or fair value of the asset. Provision of IFRS and Indian GAAP also provide for similar valuation concept for certain items of property, plant, equipment, derivative items. The mark to market provision for derivative obligations is also like a fresh-start measurement of assets and liabilities.

Fair Value of an Asset and Liability

For an asset item, the fair value is the present negotiable value of an asset at which the asset can be transacted between knowledgeable and willing parties. This value is the value for which both the willing parties are ready to accept as consideration without any force. For a liability item, the fair value is the present monetary amount at which such liability can be settled between two knowledgeable and willing parties without any force. The fair value is also termed as **fresh-start measurement**.

The best estimation of fair value is the current market price at which an asset can be exchanged, i.e., sold or a liability can be settled or transferred to another party. This current market price is fair enough because it considers the prevailing market conditions and normal course of business activities.

Current cost and realizable value are also considered synonymous with the fair value.

VALUATION PRACTICE FOR ASSETS AND LIABILITIES

As per the provisions of Indian GAAP, different assets and liabilities are valued by using the appropriate valuation basis for each of the asset and liability. The purpose of such valuation practices is to have a fair and consistent view about the financial position—assets and liabilities on the balance sheet date.

Property, Plant and Equipment

All the items of property, plant and equipment are measured at the historical cost incurred in procuring such assets less depreciation and impairment adjustment. The procurement cost includes all the costs incurred in bringing the asset to operative/functional status. The book value of these assets is adjusted for the impairment loss so as to have an accurate valuation of the assets. The **impairment loss** is the diminution in the book value of the asset either on account of the market factors or on account of the performance factor. When the recoverable value of an asset falls short of the carrying cost, the difference between these two is recognized as **impairment loss**. The impairment loss is to be recorded in the books of accounts only when the valuation is reliable and relevant. The impairment loss results into a decrease in the value of asset and such decrease is shown as a loss in the profit and loss account. **Reliability** of value much depends upon the source from where the value has been derived. If the value is derived from an organized market, such as a stock exchange then it is more reliable as compared to an unorganized market. **Relevance** implies whether the value being used for the purpose of valuation is relevant or not. This issue arises when more than two valuation bases are available for an asset. The relevant base out of the two will be the one that is more feasible.

Intangible Assets

All the intangible assets are shown in the balance sheet at the historical cost less till date accumulated amortized amount and accumulated impairment adjustments. An intangible asset is amortized across its useful life. **Amortization** is the process to spread the cost of an asset over its useful economic life.

As per the provisions of Indian GAAP, all the intangible assets except goodwill should be amortized over their useful economic life as estimated by the management. Goodwill is to be amortized over a period not exceeding five years. If the economic life of an intangible asset is considered to be of infinite time period then Indian GAAP provides that it should be amortized over ten years' period.

Inventory

Accounting Standard AS-02 provides that an inventory item should be shown in the balance sheet at the cost or market price, whichever is less. The current market price is also called **net realizable value** (NRV). The cost of inventory item is the cost incurred in bringing the inventory item at its current location. In case of finished stock and semi-finished stock, i.e., work-in-progress (WIP) it includes the cost of raw material and the conversion cost. The **conversion cost** comprises wages and factory overheads. The administrative overheads are not included in it, whereas in case of raw materials, it is the procurement cost only. The procurement cost includes purchase consideration and ordering cost. The **Ordering cost** includes the cost incurred in bringing the raw material to the warehouse, such as transportation cost, in-transit insurance, loading and unloading charges.

Monetary Assets

Monetary assets, such as sundry debtors, accounts receivables, deposits and loan and advances are measured at the current realizable value. These items are projected in the balance sheet by making a fair provision for the doubtful debts or loan loss likely to take place in future.

Financial Assets

Financial assets are certain financial instruments in which a business enterprise has invested its funds to realize certain gain in future. The normal measurement principle is to value the financial assets at the monetary value on the balance sheet date. For the purpose of measurement of financial assets, the following classification is appropriate and in practice.

USEFUL INFO

Classification of financial assets:
- Financial assets held for trading
- Investments held till maturity
- Loans and receivables
- Financial assets available for sale

Financial Assets Held for Trading

These are the investments in different securities with the prime objective to have gain from the frequent trading—buying and selling of these securities. The initial recognition of the **financial asset held for trading** is done at the cost incurred in acquiring these assets, such as investment in the shares or debentures. At the subsequent valuation date, i.e., the balance sheet date, these financial assets held for trading are to be measured at a '**fair value through profit or loss**'. The fair value may be taken as the prevailing market price on the date of valuation or net recoverable value, whichever is higher. The difference between the book value, (initial recognized value or opening fair value) also known as **carrying cost**, and the fair value on the subsequent valuation date is booked to the profit and loss account as profit or loss. This system of recognizing profit or loss with the help of fair value on the valuation date is termed as '**fair value through profit or loss**'.

ILLUSTRATION Ritco Ltd. (RL) buys 12% bonds of a face value ₹ 2,00,000 at a price of ₹ 1,98,000 on April 1, 2009, and classifies it as a financial asset held for trading. At the end of the year, i.e., on March 31, 2010, its market value is ₹ 1,96,250 and the recoverable value is ₹ 1,97,000. In this situation, the initial recognition of these bonds on April 1, 2009 is done at ₹ 1,98,000. At the end of the year on March 31, 2010, it is valued at ₹ 1,97,000 and the difference between 1,97,000 (recoverable value) and 1,98,000 (carrying cost) is recorded as a loss in the income statement—profit and loss account. If on the valuation date, the recoverable value is ₹ 1,95,500, then it is to be valued at ₹ 1,96,250 and the difference between 1,96,250 (current market price) and 1,98,000 (carrying cost) will be booked as a loss to the sprofit and loss account.

Investment 'Held till Maturity'

These are such financial assets that are intended to be held by the company till the entire maturity period of the asset. The company has no intention or willingness to dispose the asset before the original maturity period. The initial recognition of such assets is done at the acquisition cost and at the subsequent valuation date it is recognized using the method of **amortization using effective interest rate**. Every year's amortized value is adjusted to the profit and loss account.

AMORTIZATION USING EFFECTIVE INTEREST RATE

Financial assets held till maturity are recognized in the balance sheet by using the method of amortization using the effective interest rate. *The* **amortized value** for each of the year is the difference between the actual amount of interest received and the amount of interest calculated at the effective interest rate on the carrying cost of the financial asset. It can also be considered as the difference between the carrying cost of the financial asset and the recoverable value on the valuation date. In this, the crucial fact is the estimation of the effective interest rate for finding out the recoverable value of the asset on valuation date. The **effective interest rate** may be taken as the prevailing yield expected from the category of financial assets under valuation. It can also be considered as **internal rate of return** to be realized from the financial asset.

EXAMPLE 6 DDL Ltd. purchased 10% bonds of face value ₹ 50,000 on April 1, 2006 at a market price of ₹ 53,310. These are redeemable at par after four years. The implied interest rate for these types of bonds on the date of purchase was 8% per annum. DDL Ltd. categorized these bonds to be 'held-till-maturity'. How will be interest shown in the books of accounts in the financial statements over the complete maturity? Also show how the difference between the maturity value of ₹ 50,000 and the purchase price will be amortized over the holding period.

SOLUTION The current market price of the bond represents the discounted value of interest and maturity amount to be received over the holding period of four years using the current market yield of 8% per annum, which is as follows:

Year	Inflow	PVF @ 8%	Present Value of Inflow
2006–07	5,000	0.926	4,630
2007–08	5,000	0.857	4,285
2008–09	5,000	0.794	3,970
2009–10	55,000[1]	0.735	40,425
Total			53,310

Therefore, the current market value, i.e., the carrying amount on April 1, 2006 is ₹ 53,310 is the discounted value of the future cash inflows from the bonds discounted at the prevailing interest yield in the market that is 8% per annum. If the investment is made in these bonds at the current market value that is also the recoverable value from the investment discounted using current market yield of 8%, this 8% can be considered as internal rate of return from the investment.

The difference between the purchase price of ₹ 53,310 and the maturity value of ₹ 50,000 is ₹ 3,310. It is the premium and to be amortized to the profit and loss account by the following effective interest rate method of amortization. The premium to be amortized over the holding period of four years will be as follows:

Year	Year Opening Carrying Amount (₹)	Interest @ 8% on Opening Carrying Amount	Premium to be Amortized	Year End Carrying Amount (₹)
2006–07	53,310	4,265	735[2]	52,585
2007–08	52,585	4,207	793	51,765
2008–09	51,765	4,142	858	50,930
2009–10	50,930	4076	924	50,000
			3,310	

The total premium to be amortized over the holding period of four years is ₹ 3,310 that is the difference between the purchase price and the maturity value. The total amortized value can also be calculated and verified from the difference of the interest received from the company and the amount of interest calculated on the opening carrying amount, using the effective interest yield of 8% per annum.

Year end carrying amount at the end of 2006–07 is the discounted value @ 8% of interest receivable in next three years and the maturity value.

Loans and Receivables

These are the monetary items that are recoverable at the contractual monetary amount on the maturity. The initial recognition is done at the monetary value and on the subsequent valuation date, it is recognized at the carrying cost less provision for loan loss, using standard method of making provision of expected losses in the future. The losses may be on account of the default risk or likely downgrading of the creditworthiness of the investment avenue.

Financial Assets Available for Sale

These are the residual financial assets. These are the one that do not get classified as (i) financial assets held for trading, (ii) financial assets held till maturity and (iii) loans and receivables. The initial valuation is carried at the cost and on the subsequent valuation date, these are valued at the fair value and the loss or profit on valuation is not passed on to the profit and loss account; rather it is directly adjusted in the equity.

[1]Interest for the fourth year and maturity value, i.e., 5,000 + 50,000 = 55,000.

[2]Difference between the interest amount to be received from the company, i.e., ₹ 5,000 and the interest calculated @8% on the opening carrying amount of the bonds.

Investment Property

Investment property includes land, building and other fixed assets that are held to earn rental income. The initial and subsequent valuation is done at the historical cost less depreciation.

Investment Under Indian GAAP

Investment in the securities are done by every type of business enterprise, whether a finance company or a non-finance (trading) company. Investments are broadly classified as follows:

- Long-Term Investment
- Short-Term Investment—Current Asset

Long-term investments are the one that are intended to be held for a period more than twelve months from the balance sheet date, whereas **short-term investments** are the one for which the intended holding period is within twelve months. Due to this, short-holding period these are classified as **current assets**.

The valuation practice for long-term investments is that the initial valuation is to be done at the cost and the revaluation is to be done at the subsequent reporting date by adopting the method of **valuation through revaluation reserve**. If the value increases then the profit is transferred to the revaluation reserve and subsequently, a decrease in value is debited to the revaluation reserve. If the revaluation reserve amount falls short then it can be charged to the general reserve. Such valuation on the subsequent valuation date is to be carried out only when it is reliable and relevant. The problem of reliability and relevance does not arise in case of the quoted securities but it is more in case of the non-quoted securities. The **reliability** of the valuation source, i.e., the source from which the value is derived depends upon the structure of the market, whereas the **relevance** depends upon the appropriateness of the valuation base. If an asset has both the current cost and the recoverable cost, the cost that is more feasible is considered relevant for the valuation.

Quoted vs Non-quoted Securities

Quoted securities are the one that are listed on a stock exchange or these are traded in an organized market, such as money market. For the listed securities, the value is reliable and relevant because the trading is done under the supervision and control of a recognized stock exchange or in the money market under the supervision of RBI.

Non-quoted securities are the one for which an organized market is not available. The valuation of these poses a difficulty and it is highly subjective. In this case, the reliability of the valuation source is paramount and the relevance also.

Financial Liability

Different financial liabilities are recognized as follows:

(i) Financial liabilities 'held for trading'—'at fair value through profit or loss'
(ii) Monetary financial liabilities—not classified 'at fair value through profit or loss'

The common practice is to show all the financial liabilities at the monetary value, i.e., the contractual amount to be paid to discharge the liability. However, the financial liabilities held for trading are the derivative instruments. These are measured by using the method of **amortization using effective interest rate**. This method of amortization has been discussed in the previous section.

Liabilities, such as **retirement benefits** are affected by the changing interest rate scenario. These are valued at the discounted value of the expected monetary benefits payable on maturity. The discounted value is the present value of the estimated retirement benefits to be paid in monetary terms to discharge the liability on due date. The present value of such liabilities is calculated by considering the appropriate discount rate.

Liabilities Under Indian GAAP

The provisions of Indian GAAP provide that all the liabilities except retirement benefits and long-term benefits payable to the employees are to be valued at the monetary value. The retirement benefits and long-term benefits payable to employees are to be valued at the discounted value of the expected benefits payable in monetary terms.

CAPITAL EXPENDITURE, REVENUE EXPENDITURE AND FICTITIOUS ASSETS

Capital expenditure results into the acquisition of an asset that is likely to generate the economic benefits over a long-term period. These assets are purchased for use in the business and not for sale. For example, land, building, plant, machinery, equipment, furniture, tools, patents, trademark and logo. These are shown in the balance sheet as an asset. This expenditure is non-recurring in nature and provides the operating capacity to the business enterprise. The amount spent on these assets is not matched directly against the revenue for the year but these are **amortized** over the useful life of these assets. The result of amortization is depreciation provided on the fixed assets and writing off the intangible assets. The depreciation provided on the assets is shown as an expense in the profit and loss account (income statement).

Revenue expenditure is incurred to use the operating capacity generated by the capital expenditure. These are recurring in nature, i.e., incurred again and again on a routine basis. Some examples of revenue expenditure are payment of wages, factory expenses, salary, rent, advertising expenses, administrative, selling and distribution expenses. These expenses are incurred to generate the revenue. Therefore, these are called revenue expenditure and show directly in the income statement (Trading Account and Profit & Loss Account) by following the matching concept. This implies that an expenditure that cannot be recognized as an asset is recognized as a revenue expenditure.

Certain revenue expenditure is paid in bulk by the business enterprises. The benefit of such expenditure is deferred for the future period. The economic benefit from this expenditure is to be realized over the long-time period beyond twelve months from the balance sheet date. As the economic benefit is deferred for future time period, therefore, this is called **deferred revenue expenditure**. The deferred revenue expenditure is recognized as **fictitious assets**. Fictitious assets are certain expense items that are actually not an asset item but certain expenditure having the debit balance to be carried for a longer time period in future. Preliminary expenditure, advertising expenditure, research and development (R & D) expenditure, all this expenditure ‘to the extent not written off’ are shown as the fictitious asset in the balance sheet, for example, the advance payment of the advertising expenditure for five years. Here, the benefit will be realized not only in the next financial year but also during the period beyond the next financial year. Here, the economic benefits have been deferred for the future period. Therefore, this is recognized as deferred revenue expenditure. It is recognized as a fictitious asset in the balance sheet.

EXPENDITURE VS EXPENSE

When an enterprise purchases an asset, it results either in the reduction in the assets or increases liability for the business enterprises. The amount spent for asset is an **expenditure** and recorded as an asset in the balance sheet. The asset so acquired is consumed over its economic life and generates the productive capacity. The consumed proportion of the asset is called an **expense**. Therefore, the expired proportion of an expenditure-asset is an expense. This expense is shown as a depreciation in the income statement at the end of the accounting year.

SOLVED EXAMPLES

Example 7 Classify the following items into different assets and liabilities as these would appear in the balance sheet. Also identify expense and income items.

S. No.	Item	S. No.	Item	S. No.	Item
1	Land	2	Building	3	Plant
4	Equipments	5	Cash	6	Bank
7	Bank overdraft	8	Marketable securities	9	Closing stock of finished goods
10	Long-term investment	11	Furniture	12	Goodwill
13	Patents	14	Copyrights	15	Preliminary expenses
16	Capital	17	Debentures	18	Mortgage loan
19	Sales for the year	20	Purchase	21	wages
22	Salary	23	Royalty	24	Accounts payables
25	Outstanding expenses	26	Pre-paid expenses	27	Accrued commission
28	Commission received	29	Unearned interest	30	General reserve
31	Advertising expenses	32	Power and fuel	33	Tax payable

Solution

1. Fixed Assets (tangible): Land, Building, Plant, Equipments, Furniture.
2. Intangible Assets: Patents, Copyrights, Goodwill.
3. Fictitious Assets: Preliminary expenses.
4. Current Assets: Cash, Marketable securities, Pre-paid expenses, Bank, Closing stock of finished goods, Accrued commission.
5. Investments: Long-term investment.
6. Owner's Equity: Capital, General reserve.
7. Long-term Liabilities: Debentures, Mortgage loan.
8. Current Liabilities: Bank overdraft, Outstanding expenses, Unearned interest, Accounts payables, Tax payable.
9. Income: Sales for the year, Commission received.
10. Expenses: Salary, Advertising expenses, Royalty, Purchase, Power and fuel, Wages.

Example 8 DXL Ltd purchased 10% bonds of face value ₹ 50,000 on April 1, 2006 at a market price of ₹ 46,990. These are redeemable at par after four years. For these types of bonds, the effective (implied) interest rate on the date of purchase was 12% per annum. DXL Ltd. categorized these bonds to be 'held-till-maturity'. How will the interest be shown in the books of accounts in the financial statements over the complete maturity? Also show how the difference between the maturity value of ₹ 50,000 and the purchase price will be amortized over the holding period.

Solution The current market price of the bond represents the discounted value of interest and maturity amount to be received over the holding period of four years using the current market yield of 12% per annum, which is as follows:

Year	Inflow	PVF @ 12%	Present Value of Inflow
2006–07	5,000	0.893	4,465
2007–08	5,000	0.797	3,985
2008–09	5,000	0.712	3,560
2009–10	55,000[4]	0.636	34,980
Total			**46,990**

Therefore, the current market value, i.e., the carrying amount on April 1, 2006 is ₹ 46,990. It is the discounted value of the future cash inflows (interest and maturity value) from the bonds discounted at the prevailing interest yield in the market that is 12% per annum. If the investment is made in these bonds at the current market value that is also the recoverable value from the investment discounted using current market yield of 12%, this 12% can be considered as internal rate of return from the investment.

The difference between the purchase price of ₹ 46,990 and the maturity value of ₹ 50,000 is the discount and it is to be amortized to the profit and loss account by following the effective interest rate method of amortization. The discount to be amortized over the holding period of four years will be as follows:

Year	Year opening carrying amount (₹)	Interest @ 12% on opening carrying amount	Premium to be amortized	Year end carrying amount (₹)
2006–07	46,990	5,639	639[5]	47,610
2007–08	47,610	5,713	713	48,300
2008–09	48,300	5,796	796	49,115
2009–10	49,115	5,894	894	50,000
			3,042	

The total discount to be amortized over the holding period of four years is ₹ 3,042, the difference of the interest received from the company and the amount of interest calculated on the opening, carrying the amount using effective interest rate of 12%.

Year end carrying amount in 2006–2007 is the present value of interest receivable during next three years and the maturity value. Discount rate being implied interest rate.

ANALYSIS OF MONETARY TRANSACTION

The monetary transaction is the one that can be precisely measured in monetary value. Each monetary transaction results into different assets and liabilities, stated in the balance sheet. This can be shown as follows:

Transaction	Cash or Bank (₹)	Other Current Assets	Increase/ Decrease in non-current Assets	Current Liabilities	Increase/ Decrease in Non-current Liabilities Other Than Owner's Equity	Increase/ Decrease in Owner's Equity
Owner started business with cash ₹ 2,50,000	2,50,000					2,50,000

(*Contd*)

[4]Interest for the fourth year and maturity value, i.e., 5,000 +50,000 = 55,000.

[5]Difference between the interest amount to be received from company, i.e., ₹ 5,000 and interest calculated @12% on the opening carrying amount of the bonds.

(*Contd*)

Purchased furniture for cash ₹ 75,000	(75,000)		75,000			
Purchased building of ₹ 1,20,000	(1,20,000)		1,20,000			
Taken a loan from bank ₹ 2,00,000	2,00,000				2,00,000	
Purchased goods of ₹ 30,000 in cash	(30,000)	30,000				
Paid rent for the month ₹ 7,000	(7,000)					(7,000)[6]
Sold 50% goods for ₹ 74,000 in cash	74,000	(15,000)				59,000[7]
Paid salary ₹ 20,000	(20,000)					(20,000)
Purchased goods of ₹ 23,000 on credit		23,000		23,000		
Sold goods of cost 15,000 in ₹ 54,000 on credit and incurred expenses 3,000	(3,000)	(15,000) 54,000				36,000
	2,69,000	77,000	1,95,000	23,000	2,00,000	3,18,000

KEY TERMS

Liquidity
Current liabilities
Fixed assets
Operating cycle
Intangible assets
Historical cost
Market value
Derivatives
Refinance
Revenue expenses
Assets
Current assets
Owner's equity
Property
Accruals and provisions
Current cost
Fair value
Put and call option
Rollover
Deferred revenue expenses
Liabilities
Non-current assets
Non-current liabilities
Plant and machinery
Contingent liabilities
Recoverable value
Effective interest rate
REPO
Capital expenditure

FINAL RECAP

- **Liquidity** implies the availability of sufficient current assets to repay current liabilities.
- **Current assets are also called short-term assets.** These include cash, cash equivalents marketable securities and the assets convertible into cash within one year from the date of balance sheet—stock, debtors, bills receivables, marketable securities, pre-paid expenses, accrued income, etc.
- **Current liabilities also called short-term liabilities** are the liabilities to be paid off within one year from the date of balance sheet—sundry creditors, bills payables, outstanding expenses, income received in advance, tax payable, dividend payable, etc.

[6]Payment of rent has been taken as a loss as there is no revenue earned by the company so far. The loss is deducted from the capital.

[7]Sales ₹74,000, cost ₹15,000; therefore, profit ₹ 59,000 is added to the capital.

- **Assets** are the economic resources, whether tangible or intangible. Anything that can be owned or controlled to generate the economic value by using it is called an asset.
- **Non-current assets,** also termed as **long-term assets**—property, plant, equipment, copyrights, generate operative capacity.
- **Current assets,** also termed as **short-term assets,** get created during capacity utilization provided by the non-current assets.
- **Operating cycle** is the flow concept indicating cycle from the introduction of raw material to the cash through routine operating activities of producing/procuring goods and services and selling these in the market.
- **Cash equivalents** are the investments held in the form of marketable securities. Treasury bills, government securities and certain money market instruments are categorized as marketable securities.
- **Marketable securities** are the one that are highly liquid in nature. The element of safety along with the liquidity makes these securities as **gilt-edged securities**.
- The personal accounts of the customers with a debit balance on the balance sheet are individually classified as debtors and collectively classified as sundry debtors or **accounts receivables**.
- A **Bills of exchange** is an unconditional order drawn by the creditor on his/her debtors. It becomes bills receivable/ bills payable only after acceptance by the drawee**.**
- A **bills receivables** is a negotiable instrument evidencing the acknowledgement by a debtor to make the payment on the pre-specified future date for the value received by him/her.
- **Inventory** includes the stock of raw material, stock of work-in-process (WIP), i.e., semi-finished goods and stock of finished goods remaining unutilized/unsold at the end of the accounting year.
- **Pre-paid expenses** are the expenses that have been paid during the current accounting year but not due, i.e., these are relevant for the next accounting year.
- **Accrued income** is the income that has been earned during the current accounting year and not received so far.
- Assets that generate the operating capacity are the **non-current assets**. These are not meant for sales during the normal course of business.
- Property, plant and equipment work on the principle of synergy. These items are called **group of assets** capable of generating cash flows. Therefore, these are also termed as **cash-generating units (CGU)**.
- Non-current asset under the process of construction or installation and likely to provide the operating capacity and generate cash in the future are classified as **capital work-in-process**.
- Non-monetary assets in non-physical form are the **intangible assets**. These enhance the cash-generating capacity of the non-monetary physical assets.
- **Investments** refer to putting the surplus cash in the securities (share, debentures and bonds) issued by the other companies and government.
- Investment of funds in different tangible assets to generate the rental income is termed as **investment property**.
- **Deferred credit** agreement is a mechanism to acquire an asset, particularly fixed asset on hire purchase system or on an installment payment system.
- Overdue expenses are the expenses that have become due for the payment but not paid till the date of balance sheet; also called **outstanding expenses**.
- A **derivative instrument** is the one that derives the value from an underlying asset. The underlying asset might be a share, a commodity, an index having some economic value.
- **Short selling** means selling something that is not owned by the seller. The main object is to book profit through short covering at a later date.
- A **REPO** deal is a combination of one spot deal and one forward deal, executed simultaneously between the same parties on the same bond/debenture.
- **Refinance** means arranging for another source of finance to repay an existing liability.
- **Roll over** means extending the maturity duration with the consent of another party involved.
- **Secured liabilities** are the one that are raised against the collateral of certain asset or group of assets of the business enterprise.

- An **unsecured liability** is the one for which no security is offered by the borrower except the personal guarantee of individual.
- **Provisions** are the items relating to a known item of liability that may arise in future depending upon certain circumstances.
- **Contingent liability** is a probable obligation to pay, resulting from some events/transactions of the past the outcome of which is dependent on the happening of one or more future events.
- **Current cost** of an asset is the cost that is likely to be paid at present, if an asset or its equivalent asset is purchased during the current period at the current market price.
- **Realizable value** of an asset is the value that would be realized if it is disposed off at present in the normal circumstances.
- **Present value** of a financial asset is the discounted value of the future cash inflow likely to be generated from an asset. It is also called **recoverable value of financial asset**.
- **Fresh-start measurement** implies making an estimation at the current market value without considering the existing valuation base.
- **Fair value** is the present negotiable value of an asset at which the asset can be transacted between the knowledgeable and willing parties.
- The **amortized value** of discount or premium for each of the year is the difference between the actual amount of interest received and the amount of interest calculated at the effective interest rate on the carrying cost of the financial asset.
- **Capital expenditure** results into the acquisition of an asset that is likely to generate the economic benefits over a long-term period.
- **Revenue expenditure** is incurred to use the operating capacity generated by the capital expenditure.
- When the economic benefit from revenue expenses is deferred for future time period then such revenue expense is called **deferred revenue expenditure**.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Current assets include the assets that are
   (a) Cash only
   (b) In cash and the assets likely to be converted into cash within twelve months
   (c) In cash, intangible assets and the assets likely to be converted into cash within twelve months
   (d) None of these
2. Which of the following is a non-quick asset?
   (a) Plant, property, inventory and equipment
   (b) Goodwill, patents and inventory
   (c) Inventory and pre-paid expenses
   (d) Inventory and preliminary expenses
3. Non-current assets are
   (a) Assets other than current assets
   (b) Monetary current assets
   (c) Financial instruments held as short-term investment
   (d) None of these
4. Current liabilities are
   (a) To be paid off in twelve months including the liabilities that are due for roll over also
   (b) To be paid off in twelve months including those that was non-current in the past but now due for repayment in twelve months
   (c) Every type of external liability
   (d) Only the amount due towards trade creditors

5. Which of the following statements is true about contingent liabilities?
   (a) These are shown in the balance sheet at monetary value.
   (b) These are shown outside the balance sheet the provision for these is also shown outside the balance sheet.
   (c) These are shown outside the balance sheet but provision for these is shown in the balance sheet.
   (d) These as well as provision for these are shown outside the balance sheet.
6. Which of the following statements is not true about provisions?
   (a) The amount of these is known with certainty.
   (b) Timing and amount both are uncertain.
   (c) Both of these.
   (d) Neither of these.
7. A loan taken from a bank to be repaid after three years will result into
   (a) Increase in non-current liabilities and increase in current assets
   (b) Increase in current liabilities and current assets
   (c) Increase in non-current liabilities and non-current assets
   (d) None of these
8. Which of the following will be the impact of the purchase of building for which consideration was discharged by the issue of equity shares?
   (a) Increase in non-current assets and increase in non-current liability excluding owner's equity.
   (b) Increase in non-current assets and increase in owner's equity.
   (c) Increase in current liabilities and increase in non-current assets.
   (d) None of these.
9. Which of the following is affected by payment of dividend?
   (a) Direct decrease in the equity.
   (b) Direct decrease in current assets.
   (c) Decrease in distributable equity and decrease in current assets.
   (d) Decrease in equity and decrease in current assets.
10. Which of the following statements is true about deferred revenue expenses?
   (a) The economic benefits from these are expected in the long-term period beyond the immediate next twelve months.
   (b) The economic benefits are to be drawn only in the immediate next twelve months.
   (c) The economic benefits have been realized in the past.
   (d) None of these.

Descriptive Questions

1. Differentiate between current and non-current assets. Are both desirable in a business enterprise?
2. A bank manager has to sanction a long-term loan. Suggest him/her which type of assets and liabilities he/she should opt for the long-term solvency and which one for the short-term liquidity of the borrower.
3. "Contingent liabilities do not find any place in the balance sheet, yet these are the critical factor affecting the financial position of a business enterprise." Explain.
4. "Property, plant and equipment are shown at historical cost, whereas for financial assets recoverable value and current market value are more important." Why is it so? Explain.

Numerical Problems

1. BB Ltd holds 80% shares with voting rights of Dilip Agro Ltd (DAL) and 61% shares of Ashok Agro Ltd (AAL). DAL holds shares of the following companies:
   (i) XYZ Ltd 20% shares with voting rights
   (ii) LML Ltd 75% shares with voting rights
   (iii) AAL holds 55% shares with voting rights of WWF Ltd.

   Show how these companies are related to each other.

2. Classify the following items into asset, expense, liability and income:

Trial Balance

As on ....

S. No.	Name of Account	L.F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		1,09,500	
2	Bank a/c		1,18,000	
3	Capital a/c			2,50,000
4	Furniture a/c		35,000	
5	Salary a/c		7,500	
6	Purchase a/c		27,000	
7	Sales a/c			55,000
8	Mohit's a/c		3,000	
9	Commission received a/c			3,000
10	Rent a/c		8,000	

3. The following deals were executed between SBBJ and PNB on January 21, 2011:
Deal 1: Ten thousands GOI-2012 Series bonds of face value ₹ 100 each were purchased by SBBJ from PNB at a price of ₹ 105 per bond deal is to be settled immediately.
Deal 2: Twenty thousands GOI-2015 Series bonds of face value ₹ 1,000 each were purchased by SBBJ from PNB at a price of ₹ 1020 per bond deal to be settled immediately. On the same day, both these parties entered into a 30 days forward on the same securities at a price of ₹ 1010 per bond, in this deal SBBJ was the seller and PNB was the buyer.
Are both deals 1 and 2 REPO deals? Explain.
4. DXK Ltd purchased 12% bonds of face value ₹ 1,50,000 on April 1, 2006 at a market price of ₹ 1,61,370. These are redeemable at par after five years. The implied interest rate on the date of purchase was 10% per annum for these types of bonds. DXK Ltd categorized these bonds to be 'held-till-maturity'. How interest will be shown in the books of accounts in the financial statements over the complete maturity? Also show how the difference between maturity value of ₹ 1,50,000 and the purchase price will be amortized over the holding period.
5. Classify the following items into different assets and liabilities as these would appear in the balance sheet. Also identify expense and income items.

S. No.	Item	S. No.	Item	S. No.	Item
1	Land	2	Building	3	Plant
4	Equipments	5	Cash	6	Bank
7	Bank over draft	8	Marketable securities	9	Closing stock of Finished goods
10	Long-term investment	11	Furniture	12	Goodwill
13	Patents	14	Copyrights	15	Preliminary expenses
16	Capital	17	Long-Term loan	18	Mortgage loan
19	Sales for the year	20	Purchase	21	wages
22	Salary	23	Royalty	24	Preference shares
25	Outstanding expenses	26	Pre-paid expenses	27	Accrued commission
28	Commission paid	29	Unearned interest	30	General reserve
31	Royalty	32	Power and fuel	33	Tax paybale

6. Show the following items by depicting the impact on different assets and liabilities:
   (i) Ramson started business with cash ₹ 8,50,000 and a machinery of ₹ 3,00,000
   (ii) Deposited cash into bank ₹ 5,50,000
   (iii) Purchased furniture of ₹ 1,74,500 and issued cheque
   (iv) Purchased goods of ₹ 35,600
   (v) Paid rent ₹ 9,400 by cheque
   (vi) Received Commission ₹ 1,400
   (vii) Sold goods for ₹ 54,300 and received cheque
   (viii) Purchased stationery ₹ 650 in cash
   (ix) Sold goods to Aman ₹ 23,000
   (x) Purchased goods from Sohan ₹ 28,500
   (xi) Paid salary ₹ 31,000 and insurance premium ₹ 10,000 by cheque
   (xii) Paid advertising expenses ₹ 31,200 by cheque
   (xiii) Received cheque of ₹ 22,800 from Aman and allowed discount of ₹ 200
   (xiv) Issued cheque of ₹ 28,000 to Sohan and he allowed a discount of ₹ 500 to us.
   (xv) Sold goods to Mohit of ₹ 56,700
   (xvi) Paid freight charges for goods purchased ₹ 100
   (xvii) Purchased goods from Kapil ₹ 14,000
   (xviii) Mohit returned goods to us ₹ 1,700
   (xix) Returned goods to Kapil ₹ 1,000
   (xx) Sold an old machinery for ₹ 9,000 cost of machinery ₹ 10,000
   (xxi) Mohit became insolvent and only ₹ 50,000 could be recovered from him.

Answers

Multiple Choice Questions

1. (b) 2. (c) 3. (a) 4. (b) 5. (c) 6. (a) 7. (a) 8. (b) 9. (c) 10. (a)

Numerical Problems

1. BB Ltd is the direct holding of DAL and AAL where as it is also the holding company for LML and WWF by second rule. LML is the subsidiary of DAL and WWF is the subsidiary of AAL.
2. Detailed answer to be verified using concepts relating to classification of assets and liabilities
3. Deal 1: spot deal; deal 2: REPO deal
4. ₹ 11,370 is the premium to be amortized over five years. (₹ 1,863; ₹ 2,049; ₹ 2,254; ₹ 2,480; ₹ 2,724; from first to fifth year)

5., 6. Detailed answer to be verified using concepts relating to classification of assets and liabilities

CASE

Window Dressing of Accounts and Financial Statements

Recognition of Items for Financial Statements

XYLO Ltd. reported a net loss of ₹ 11,95,000 crore for the year 2009–10 as compared to the net profit of ₹ 77,000 crore for the year 2008–09. However, the sales for the year 2009–10 was higher by ₹ 5,00,000 crore as compared to the sales for the year 2008–09. The income tax return filled by XYLO Ltd. was challenged by the assessing officer and the assessing officer reworked the net profit as ₹ 2,25,000 crore. The income statement of XYLO Ltd. for the year ending March 31, 2010 was as follows:

Profit and Loss Account

For the year ending March 31, 2010

Particulars	₹ (in crore)	Particulars	₹ (in crore)
To Opening Stock		By sales	12,00,000
Finished Goods	1,00,000	By closing stock	
Raw Material	50,000	Finished goods	1,50,000
To Purchase of raw material	5,00,000	Raw material	1,00,000
To Direct wages	2,00,000	By Profit on sale of shares	50,000
To Manufacturing expenses	1,00,000		
To Administrative expenses	30,000		
To Depreciation	20,000		
To R & D Expenses	10,50,000		
To Preliminary expenses written off	10,000		
To Motor van expenses	1,40,000		
To Advertising expenses	3,60,000	By Net Loss for the year	11,95,000
To Selling and distribution expenses	40,000		
To Loss on sale of plant	55,000		
To Interest on debentures	10,000		
To Provision for compensation	30,000		
	26,95,000		26,95,000

The following additional information was also extracted from the notes forming the part of financial statements:

(i) During the year, the company developed a new drug for which the research and development expenses were incurred; the benefit of these expenses is likely to be received in the five years' time commencing from the next accounting year.

(ii) The company being the new entrant in the industry spent heavily on advertisements the benefit of advertising expenses is likely to be received during four financial years equally including the current financial year.

(iii) Motor van is equally used by one more subsidiary of XYLO Ltd.

(iv) A litigation is pending if the court decision goes against the company. Then the company is likely to pay a compensation of ₹ 30,000 crore to its suppliers. However, the management of the company is confident that the case will be settled in the favour of company.

Discussion Question

1. You are an expert in accounting and the company has roped in you to verify whether the assessment by the income tax officer is correct or not. Elaborate your findings.

CHAPTER

4

The Accounting Cycle

Learning Objectives

After reading this chapter, you will be able to

- Understand the books of accounts and define mechanism of double-entry system
- Identify journalizing monetary transactions and comprehend mechanism of maintaining subsidiary books
- Make classification—posting to ledger accounts
- Define bank reconciliation statement
- Gain an insight into the preparation of trial balance and classify closing and opening entries

Agreeing of Trial Balance—A Myth or Reality

Trial balance is prepared to check the mathematical accuracy of books of accounts. It is only an elementary proof of mathematical accuracy but not the final proof of accuracy. The books of accounts cannot be considered free from errors even when a trial balance has agreed. There are certain errors, which do not affect the agreeing of trial balance, such as errors of principle, errors of omission and errors of compensatory nature. **Error of principle** means an error, which takes place on account of wrong interpretation of accounting principle, such as debiting purchase account instead of an asset account when an asset is purchased. **Error of omission** means omitting a transaction completely at the time of recording of transactions in journal or in subsidiary books. **Error of compensatory nature** occurs when two or more errors are committed simultaneously. One error gets hidden by the effect of the other; then these are called **compensatory errors**.

Hence, agreeing of trial balance is only a myth and a thorough scrutiny of books of accounts and audit of books of accounts is carried out to check the accuracy of books of accounts.

BOOKS OF ACCOUNTS

Books of accounts comprise such set of books in which monetary transactions of business enterprises are recorded, classified and presented. These books are maintained by following a set of accounting rules and principles that are applicable universally. The universal applicability of accounting rules and principles brings in the concept of (i) consistency, (ii) uniformity, (iii) comparability and (iv) standardization in the books of accounts. The following is included in books of accounts:

- Journal
- Subdivision of Journal:
    - Subsidiary books
    - Purchase book
    - Sales book
    - Purchase return book
    - Sales return book
    - Cash book
    - Bank book
    - Journal proper
- Ledger
- Subdivision of ledger
- Trial balance
- Final accounts

ACCOUNTING CYCLE

Accounting cycle begins with the identification of monetary transactions and recording these transactions at the elementary level (Fig. 4.1). The elementary recording is done in the journal or subsidiary books by following book-keeping rules. Journal and subsidiary books are the **elementary books** of accounts and the process of making entries in these is called **journalizing.** The recording of transactions in the elementary books is done in chronological order.

USEFUL INFO

General principles of accounting process:

- Journalization—elementary recording
- General ledger posting—classification of monetary transactions
- Preparation of trial balance—checking elementary accuracy of books of accounts
- Preparation of final accounts— Presenting financial position of business

The second step in the accounting cycle is to make posting to ledger account for the transactions that have been recorded in the elementary books of accounts—posting transaction to ledger accounts. An **account** is the classified summary of the transactions relating to a particular aspect/item/entity. For each item/aspect/entity, a separate account is prepared. This is called **posting of monetary transactions**.

At a regular interval, the ledger accounts are balanced so as to have a final summary of each account. The balance of different accounts is used to prepare trial balance. Trial balance helps in making an elementary verification of the books of accounts. The balances shown in the trial balance are further classified as assets, expenses, losses, liabilities, revenue and profits. The balances shown in the trial balance are further used to make final accounts. Final accounts are the **last step** in the accounting cycle.

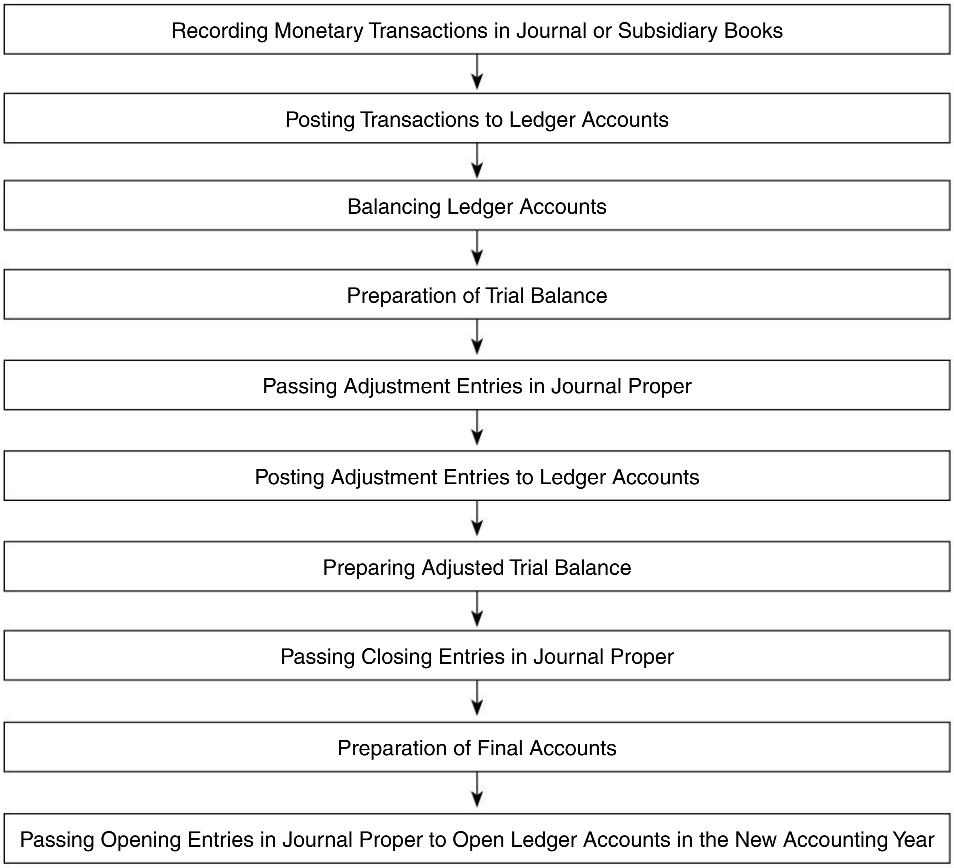

Fig. 4.1 *Flow Diagram of Maintaining Books of Accounts*

GENERAL PRINCIPLES OF ACCOUNTING

Accounting principles are applicable universally. Every monetary transaction passeses through the following logical phases called **general principles of accounting** adopted in business organizations:

- Journalization—elementary recording
- General ledger posting—classification of monetary transactions
- Preparation of trial balance—checking elementary accuracy of books of accounts
- Preparation of final accounts—presenting financial position of business

Journalization

The process of recording monetary transactions in the elementary books of accounts is called **journalization**. A **journal** is the elementary book for keeping the record of monetary transactions. A journal can be subdivided in the form of subsidiary books also.

Journal

A journal is the elementary book for maintaining monetary transactions of business at the elementary level. The transactions are recorded in the form of journal entries in a chronological manner, i.e., in a date-wise manner. As soon as a monetary transaction takes place, journal entries are passed using rules of journal. This is called ***journalizing.***

A **journal** is the elementary book for recording monetary transactions of business enterprises. The process of maintaining journal is called **journalizing**.

The journal entry is as follows:

Cash a/c	Dr.	3,00,000	
To Capital a/c			3,00,000

(The owner started business with a capital of ₹ 3,00,000.)

The **process of book keeping–journalizing** is based on double-entry system of accounting that implies that at least two different accounts are affected in a monetary transaction, out of which one is debited and another is credited. There are transactions in which more than two accounts are affected then the monetary sum total of accounts being debited equals to the monetary sum total of accounts being credited.

Each transaction has to be considered twice; if one account is giving the benefit then another happens to be receiving the benefit. For example, the owner contributes cash to start the business, here cash accounts receives the benefit and owner's account is giving the benefit; therefore, there must be a double-entry; accordingly, both the accounts will be affected in the journal entry. The receiving account is called **debtor**. Hence, it is debited and the giving account is called **creditor**; hence, it is credited. The rules of journalizing are universally applicable and the whole set of books of accounts of every business enterprise are based on these rules.

USEFUL INFO

Debit and credit are the two terms to record entries in the journal.

Journal and Classification of Accounts

A summarized record of all the transactions relating to a particular person or an item is called an **account**. Due to large number of transactions, the ledger of every business enterprise has huge number of accounts that are further classified into three groups, these are:

Personal accounts are the accounts of different individuals and other business enterprises with whom the business enterprise does the transactions.

Personal Accounts

Accounts of different individuals and other business enterprises with whom the business enterprise does the transactions are called **personal accounts**. A separate account is made for each individual.

Real Accounts

Accounts of all the assets are grouped as real accounts. For each asset item, a separate account is maintained; for example, building account, plant account, machinery account, cash account, goods (stock) account, furniture account, vehicle account, etc. All these accounts are collectively called **real accounts**.

Accounts of all the assets are grouped as **real accounts**.

Nominal Accounts

Accounts of all the expenses, losses, revenue and profit are collectively grouped as **nominal accounts**. A separate account is prepared for each item, the reasoning for maintaining separate account of each item is to have a detail about different type of expenses that can further be used for carrying out an analysis with the aim to exercise control.

Accounts of all the expenses, losses, revenue and profit are collectively grouped as **nominal accounts**.

Rules for Journalizing

Each monetary transaction affects a minimum of two accounts. Different accounts are affected by using the following book keeping rules:

Rules for Personal Account Debit (Dr.) the receiver and credit (Cr.) the giver.

Rules for Real Account Debit (Dr.) what comes in and credit (Cr.) what goes out.

Rules for Nominal Account Debit (Dr.) all the expenses/losses and credit (Cr.) all the revenue/profits.

Supporting Document for Accounting—Voucher or Bill

A **voucher** or **bill** is a written document evidencing a monetary transaction. Usually, a voucher or bill is a printed document in which details of the monetary transaction—expense or revenue is entered. All the accounting entries are passed with the help of the voucher or bill relating to the transaction. Transaction of buying and selling is evidenced with the help of the bill issued by seller of the goods. Similarly, either a bill is obtained for the expenses. If not then the business enterprise can have its own printed voucher that contains the details of the expense, it should be duly acknowledged by another party involved in the deal.

The vouchers and bills are maintained by assigning a serial number on these; such number is called **voucher number (V.N.)** As per accounting and auditing rules, none of the transactions is to be recorded in the books of accounts without any supporting document—voucher or bill. Subsequently, the verification or audit of books of accounts is done with the help of these vouchers and bills.

Owner's Account

Owner's contribution in the business is called **capital** that is like a liability for the business enterprise. While contributing the capital, the owner is giver of the benefit. Accordingly, his/her personal account is to be credited. As a matter of practice, the owner's personal account is not opened by his/her name; instead, the owner's account is opened by the name of **capital account**. Similarly, when the owner withdraws something either in cash or in kind from the business enterprise, the owner becomes the receiver of the benefit and his/her personal account is to be debited. But again as a matter of practice, personal account of the owner is not opened by his/her name; instead, it is named as **drawing account**.

As both the capital account and the drawing account are personal accounts, therefore they are maintained by applying personal account rules.

Format of Journal

Journal

Date	Particulars	V. No.	L.F.	Amt Debit (₹)	Amt. Credit (₹)

Note: V.N. stands for voucher number and L.F. stands for ledger folio.

Journalization Steps

Step One Identify accounts being affected in a monetary transaction.
Step Two Identify type of the accounts identified in step one.
Step Three Apply rules of passing journal entry as discusses in the previous section.
Step Four Pass journal entry.

At the end of the accounting period, both the amount columns are totaled.

Table 4.1 illustrates the mechanism of passing a journal entry.

TABLE 4.1 Mechanism of Passing Journal Entry

Transaction	Step 1	Step 2	Step 3	Step 4
Started business with cash	(i) Cash a/c (ii) Capital a/c	(i) Cash a/c is a real a/c (ii) Capital a/c is a personal a/c of owner	(i) Rule: Debit what comes in (here cash is coming in) (ii) Rule: Credit the giver (here owner is the giver)	Cash a/c Dr. To Capital a/c (Started business with cash)
Deposited cash into bank	(i) Bank a/c (ii) Cash a/c	(i) Bank a/c is a personal a/c (ii) Cash a/c is a real a/c	(i) Rule: Debit the receiver (here bank is the receiver) (ii) Rule: Credit what goes out (here cash is going out)	Bank a/c Dr. To Cash a/c (Deposited cash into bank)
Purchased building and paid cash	(i) Building a/c (ii) Cash a/c	(i) Building a/c is a real a/c (ii) Cash a/c is a real a/c	(i) Rule: Debit what comes in (here building is coming in) (ii) Rule: Credit what goes out (here cash is going out)	Building a/c Dr. To Cash a/c (Purchased building in cash)
Purchased goods and issued cheque	(i) Purchase a/c (ii) Bank a/c	(i) Purchase a/c is a nominal a/c (ii) Bank a/c is a personal a/c (It can also be considered as real a/c)[1]	(i) Rule: Debit all the expenses (Purchase of goods is an expense) (ii) Rule: Credit the giver (here bank is giving the payment on behalf of the business)	Purchase a/c Dr. To Bank a/c (Purchased goods and issued cheque)

(*Contd*)

[1] If the bank is considered as a real account then also it will be credited because the asset namely bank balance decreases by the issuance of cheque. Asset a/c is to be credited when it decreases and debited when it increases.

(*Contd*)

Purchased goods from Mohan	(i) Purchase a/c (ii) Mohan's a/c (It is a credit transaction. Hence, Mohan's a/c is affected)	(i) Purchase a/c is a nominal a/c (ii) Mohan's a/c is a personal a/c	(i) Rule: Debit all the expenses (Purchase of goods is an expense) (ii) Rule: Credit the giver (here Mohan is giving goods)	Purchase a/c Dr. To Mohan's a/c (Purchased goods from Mohan on credit)
Paid salary for the month in cash	(i) Salary a/c (ii) Cash a/c	(i) Salary a/c is a nominal a/c (ii) Cash a/c is a real a/c	(i) Rule: Debit all the expenses (Salary is an expense) (ii) Rule: Credit what goes out (here cash is going out)	Salary a/c Dr. To Cash a/c (Paid salary in cash)
Sold goods to Kamal on credit	(i) Kamal's a/c (ii) Sales a/c (It is a credit transaction. Hence, Kamal's a/c is affected)	(i) Kamal's a/c is a personal a/c (ii) Sales a/c is a nominal a/c	(i) Rule: Debit the receiver (Kamla is receiving the goods) (ii) Rule: Credit all the revenue (here sales of goods is revenue)	Kamal's a/c Dr. To Sales a/c (Sold goods to Kamal on credit)

Journal Folio and Ledger Folio

Journal folio (J.F.) is the page number mentioned on each page of the journal. When posting of a transaction is made in the general ledger accounts, there is a provision of writing journal folio in **J.F. column of ledger account** so as to provide ready reference of the related page number of the journal on which such journal entry has been made in journal.

Ledger folio (L.F.) is the page number mentioned on each page of the ledger. While making journal entries, the ledger folio number is entered in **L.F. column of journal** so as to facilitate ready reference of the page number of general ledger on which such account has been maintained in the general ledger.

Recognition of Cash Transaction and Credit Transaction

Cash transaction: A transaction in which word cash/cheque appears is identified as a **cash transaction.** In such transactions, even if the name of another party appears, the account of another party is not affected because another party neither becomes the debtor nor the creditor. It is to be settled in future.

Credit transaction is the one that satisfies the following two conditions:

(i) word 'cash/cheque' is missing in the transaction and

(ii) name of another party is given in the transaction.

If it is a credit purchase then another party becomes the creditor for the business enterprise and if it is a sales transaction then another party becomes the debtor for the business enterprise. Hence, in a credit transaction, the account of another party is affected. A **debtor** is the one to whom goods/assets have been sold one credit and the consideration—cash for such sales is to be recovered in future. A debtor is like an asset and shown in the asset side of balance sheet. Similarly, a **creditor** is the one from whom goods/assets have been purchased on credit and the consideration —cash for such purchase is to be paid in future. The creditor is a liability and shown on the liability side of balance sheet.

Table 4.2 lists out the differences between purchase of assets and purchase of goods.

TABLE 4.2 Differences between purchase of assets and purchase of goods

S. No.	Basis	Purchase of Assets	Purchase of Goods
1	Economic benefit	Generates economic benefit over long-term period.	Generates economic benefit during the current accounting period.
2	Type of account	Real account	Nominal account
3	Depreciation	Assets are subject to depreciation	No provision for depreciation
4	Closing balance	Closing balance is arrived at after providing depreciation for the year. It is shown as an asset in the balance sheet.	Unsold or unused goods are the closing stock and shown as an asset in the balance sheet.
5	Opening balance	Opening balance is the current year's base for providing depreciation.	Opening stock is considered to be consumed or sold; hence, it becomes an expense.

Example 1 Pass necessary journal entries in the journal for the following transactions:

Date	Transaction
April 1	Owner started business with cash ₹ 5,00,000
April 2	Purchased furniture of ₹ 1,00,000 in cash
April 3	Purchased goods from Deepak in cash ₹ 50,000
April 6	Paid wages ₹ 13,000
April 7	Paid rent for the month ₹ 6,500
April 8	Sold goods for ₹ 23,500
April 9	Received commission ₹ 1,250
April 10	Paid ₹ 2,200 as advertising expenses
April 11	Sold goods to Anil in cash ₹ 85,000
April 15	Paid carriage outward ₹ 1,100
April 18	Purchased goods from Rohan ₹ 13,000
April 22	Sold goods to Anil in cash ₹ 22,500
April 26	Paid telephone bill for the month ₹ 500
April 29	Paid electricity bill for the month ₹ 800, and salary ₹ 25,000
April 30	Owner withdrew ₹ 3,000 for his/her personal use

Solution:

Journal

Date	Particulars		V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
April 1	Cash a/c	Dr.			5,00,000	
	To Capital* a/c					5,00,000
	(Started business with cash)					

(*Contd*)

*When owner contributes something (monetary value) in the business the personal account of owner is affected but in the business account by the name of the owner is not opened; instead Capital Account, which is a personal account is opened.

(*Contd*)

April 2	Furniture a/c Dr.			1,00,000	
	To Cash a/c				1,00,000
	(Purchased furniture[2] in cash)				
April 3	Purchase a/c Dr.			50,000	
	To Cash a/c				50,000
	(Purchased goods from Deepak[3] in cash)				
April 6	Wages a/c Dr.			13,000	
	To Cash a/c				13,000
	(Paid wages in cash)				
April 7	Rent a/c Dr.			6,500	
	To Cash a/c				6,500
	(Paid rent in cash)				
April 8	Cash a/c Dr.			23,500	
	To Sales a/c				23,500
	(Sold goods for cash)				
April 9	Cash a/c Dr.			1,250	
	To Commission received a/c				1,250
	(Received commission in cash)				
April 10	Advertising Expense a/c Dr.			2,200	
	To Cash a/c				2,200
	(Paid advertising expense)				
April 11	Cash a/c Dr.			85,000	
	To Sales a/c				85,000
	(Sold goods to Anil in cash[4])				
April 15	Carriage Inwards a/c Dr.			1,100	
	To Cash a/c				1,100
	(Paid carriage outwards in cash)				
April 18	Purchase a/c Dr.			13,000	
	To Cash a/c				13,000
	(Purchased goods from Rohan in cash[5])				
April 22	Cash a/c Dr.			22,500	
	To Sales a/c				22,500
	(Sold goods to Anil in cash)				

(*Contd*)

[2]Furniture will generate the economic utility for a long-time period. When an asset is purchased, a separate account with the name of asset is opened.
[3]Cash has been paid instantly to Deepak. Therefore, it does not generate any dues to be paid in future by the business enterprise. Hence, Deepak's account has not been affected.
[4]In a cash transaction, personal account of another party is not affected.
[5]Here goods have been purchased in cash; therefore, Rohan's a/c has not been opened.

(*Contd*)

April 26	Telephone Charges a/c Dr. To Cash a/c (Paid telephone charges in cash)			500	500
April 29	Electricity Charges a/c Dr. To Cash a/c (Paid electricity charges in cash)			800	800
April 29	Salary a/c Dr. To Cash a/c (Paid salary in cash)			25,000	25,000
April 30	Drawings[6] a/c Dr. To Cash a/c (Owner withdrew cash from business for his/her personal use)			3,000	3,000
	Total			**8,47,350**	**8,47,350**

Bank Transactions

In a bank transaction, a cheque is issued or received and bank account gets affected instead of cash account. Bank is another business enterprise. Therefore, bank account is identified as personal account, and rules of personal account are applied while passing the journal entries. The bank balance is also an **asset** for the business enterprise, whenever a cheque is deposited in the bank the balance in bank increase, i.e., an asset increases, similarly when a cheque is issued the balance in bank decreases, i.e., an asset decreases. As per real account rule, the asset account should be debited if asset increases; upon a decrease in the asset, the asset account is to be credited.

EXAMPLE 2 Pass necessary journal entries in the journal for the following transactions:

Date	**Transaction**
2010	
January 1	Deepak started business with cash ₹ 2,50,000 and machinery worth ₹ 1,50,000
January 2	Deposited cash into bank ₹ 1,30,000
January 3	Purchased furniture in cash ₹ 22,000
January 3	Purchased equipment of ₹ 15,000 and issued cheque
January 4	Purchased goods from Ramesh and issued cheque ₹ 12,000
January 5	Purchased goods from Ram of ₹ 22,500
January 6	Paid rent for the month ₹ 3,000 by cheque
January 7	Sold goods in cash ₹ 33,500 to Mukesh
January 8	Sold goods of ₹ 51,000 to Naveen
January 12	Purchased stationery of ₹ 1,400
January 14	Paid wages ₹ 9,500 by cheque
January 16	Received cheque from Naveen ₹ 30,000

[6]When the owner takes something from business the personal account of the owner is affected, but in a business account by the name of owner is not opened, instead account, namely Drawings Account is opened which is a personal account.

January 19 Issued cheque to Ram ₹ 20,000
January 22 Purchased machinery of ₹ 90,000 and issued cheque
January 25 Owner withdrew ₹ 3,000 from bank for his personal use
January 27 Deposited cash into bank ₹ 25,000
January 28 Paid salary by cheque ₹ 45,000
January 29 Paid insurance premium in cash ₹ 4,300
January 30 Withdrew cash from bank ₹ 10,000

Solution

Journal

Date	Particulars	V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
2010	Cash a/c Dr.			2,50,000	
Jan. 1	Machinery a/c Dr.			1,50,000	
	To Capital a/c				4,00,000
	(Deepak started with cash and machinery)				
Jan. 2	Bank a/c Dr.			1,30,000	
	To Bank a/c				1,30,000
	(Deposited cash into bank)				
Jan. 3	Furniture a/c Dr.			22,000	
	To Cash a/c				22,000
	(Purchased furniture in cash)				
Jan. 3	Equipment a/c Dr.			15,000	
	To Bank a/c				
	(Purchased equipment and issued cheque)				15,000
Jan. 4	Purchase a/c Dr.			12,000	
	To Bank a/c				
	(Purchased goods from Ramesh[7] and issued cheque)				12,000
Jan. 5	Purchase a/c Dr.			22,500	
	To Ram's a/c				22,500
	(Purchase goods on credit from Ram[8])				
Jan. 6	Rent a/c Dr.			3,000	
	To Bank a/c				3,000
	(Paid rent by cheque)				
Jan. 7	Cash a/c Dr.			33,500	
	To Sales a/c				33,500
	(Sold goods to Mukesh in cash)				
Jan. 8	Naveen's a/c Dr.			51,000	
	To Sales a/c				51,000
	(Sold goods to Naveen[9] on credit)				

(*Contd*)

[7]Here, consideration for purchase is being paid instantly to Ramesh; therefore, it is a cash transaction and Ramesh's account is not to be affected.

[8]Here word, cash/cheque is not given and the name of another party is given; therefore, it is a credit transaction. Accordingly, Ram's account has been affected.

[9]Word, cash/cheque is not given and name of another party is given; therefore, it is a credit transaction. Accordingly, Naveen's account has been affected.

(*Contd*)

Jan. 12	Stationery a/c Dr.		`	1,400	
	To Cash a/c				1,400
	(Purchased stationery)				
Jan. 14	Wages a/c Dr.			9,500	
	To Bank a/c				9,500
	(Paid wages by cheque)				
Jan. 16	Bank[10] a/c Dr.			30,000	
	To Naveen's a/c				30,000
	(Received cheque from Naveen)				
Jan. 19	Ram's a/c Dr.			20,000	
	To Bank[11] a/c				20,000
	(Paid to Ram by cheque)				
Jan. 22	Machinery a/c Dr.			90,000	
	To Bank a/c				90,000
	(Purchased machinery and issued cheque)				
Jan. 25	Drawings[12] a/c Dr.			3,000	
	To Bank a/c				3,000
	(Owner withdrew cash from bank for his personal use)				
Jan. 27	Bank a/c Dr.			25,000	
	To Cash a/c				25,000
	(Deposited cash into bank)				
Jan. 28	Salary a/c Dr.			45,000	
	To Bank a/c				45,000
	(Paid salary by cheque)				
Jan. 29	Insurance Premium a/c Dr.			4,300	
	To Cash a/c				4,300
	(Paid insurance premium in cash)				
Jan. 30	Cash a/c Dr.			10,000	
	To Bank a/c				10,000
	(Withdrew cash from bank for office purpose)				
	Total			**9,27,200**	**9,27,200**

Trade Discount vs Cash Discount

Trade discount is like reduction in the sales price so as to pass on the margin to intermediary; it is given by one intermediary to another to maintain intermediary's margin also called **dealer's margin**. The price so reduced is called **dealer's price**. Example: A company has television with MRP printed on it ₹ 40,000. Let us assume the company gives it to its stockist at a trade discount of 40%. Then it implies that the price to be charged by the company to stockist will be ₹ 24,000 (40% less than the ₹ 40,000), the sales will be recorded

[10]As cheque received from Naveen will be deposited in bank. As a result, the bank balance (asset) will increase, when an asset increases, the asset account is debited. Here, as per personal account reasoning, also the bank is received of benefit on behalf of the business enterprise. Accordingly, the receiver is to be debited.

[11]As issued cheque to Ram will reduce the bank balance (asset), when an asset decreases the asset account is credited. Here, as per personal account reasoning, also the bank is giver of benefit on behalf of the business enterprise. Accordingly, the giver is to be credited.

[12]Here beneficiary is the owner; therefore, the owner's account—drawings account has been affected.

by the company at ₹ 24,000. Similarly, the stockist may sell it to the wholeseller at 30% discount to MRP. Then the stockist will record the sales at ₹ 28,000 (30% less than MRP). The wholeseller will record the purchase at ₹ 28,000. Likewise, the wholeseller might sell the television to the retailer at a 15% trade discount. Then the sales for the wholeseller and purchase for the retailer will be at ₹ 34,000 (15% less than MRP).

Trade discount is never recorded in the books of accounts; the transaction is recorded at the net price (Print price less discount).

Cash discount is a tool to motivate the buyers to make the payment earlier than the due date. It helps in the speedy recovery of dues from customers.

A wholeseller might offer a cash discount of 1% for making payment within 10 days. Usually, the credit term is shown as follows: '1/10 net 30'. It implies if payment is made within 10 days then 1% cash discount is allowed. Otherwise, the payment is to be made within 30 days. **Cash discount** is a loss for the business enterprise giving such discount and for the business enterprise receiving such discount it is a gain.

Discount Allowed and Discount Received: Cash discount allowed to customers is discount allowed and cash discount received from suppliers is discount received.

> The difference between the total due amount to be paid and the amount actually paid is called **discount received.**

> **Discount allowed** is the difference between amount actually received from customer and the original amount which was due to be received.

Example 3 XYZ Ltd sold goods of MRP ₹ 20,000 to Nitish at 20% trade discount. The terms of credit sales were '2/14 net 30'. Nitish makes the payment within 10 days. Show the journal entry for this transaction, in the books of XYZ Ltd and books of Nitish.

Solution

Books of XYZ Ltd

1. For recording sales:

Nitish's a/c	Dr.	16,000	
To Sales a/c			16,000
(Goods of MRP ₹ 20,000 sold at 20% trade discount to Nitish on credit)			

2. Upon receiving payment from Nitish:

Cash a/c	Dr.	15,680	
Discount Allowed a/c	Dr.	320	
To Nitish's a/c			16,000
(Received cash from Nitish after 2% cash discount)			

Books of Nitish

1. For recording purchase:

Purchase a/c	Dr.	16,000	
To XYZ Ltd's a/c			16,000
(Goods of MRP ₹ 20,000 purchased at 20% trade discount from XYZ Ltd on credit)			

2. Upon making payment to XYZ Ltd:

XYZ Ltd's a/c	Dr.	16,000	
To Cash a/c			15,680
To Discount Received a/c	Dr.		320
(Paid cash to XYZ Ltd after 2% cash discount)			

Example 4 GP Ltd sold goods of MRP ₹ 10,000 to Nitish at 15% trade discount in cash. Show the journal entry for this transaction, in the books of GP Ltd and books of Nitish.

Solution

Books of GP Ltd

Cash a/c	Dr.	8,500	
To Sales a/c			8,500
(Goods of MRP 10,000 sold at 15% trade discount in cash to Nitish)			

Books of Nitish

Purchase a/c	Dr.	8,500	
To Cash a/c			8,500
(Goods of MRP 10,000 purchased at 15% discount in cash from GP Ltd)			

Example 5 Sold goods of ₹ 20,000 to Mahesh. Subsequently received cash from Mahesh ₹ 19,800 in the final settlement of his account. Purchased goods from Deepak of ₹ 30,000. Subsequently issued a cheque of ₹ 29,500 to Deepak and he allowed discount ₹ 500.

Solution

(i) Mahesh's a/c	Dr.	20,000	
To Sales a/c			20,000
(Sold goods to Mahesh)			
(ii) Cash a/c	Dr.	19,800	
Discount Allowed a/c	Dr.	200	
To Mahesh's a/c			20,000
(Received cash ₹ 19,800 from Mahesh in the final settlement of ₹ 20,000)			
(iii) Purchase a/c	Dr.	30,000	
To Deepak's a/c			30,000
(Purchased goods from Deepak)			
(iv) Deepak's a/c	Dr.	30,000	
To Bank a/c			29,500
To Discount Received a/c			500
(Issued cheque of ₹ 29,500 to Deepak and he received discount ₹ 500)			

Goods Given Away

Sometimes a business enterprise gives away goods without any consideration, such as giving free samples for sales promotion like a pharmaceutical company does, giving goods in charity, gift for client entertainment and for sales promotion. Here, practical implication is that out of the total goods purchased all the goods do not get sold and certain goods go out of the company without any consideration. Giving away of goods, such as this reduces direct expense–purchase expense and increases an indirect expense–sales promotion expense or loss–charity. The journal entry for these is as follows:

Charity/Donation/Free Sample a/c	Dr.
To Purchase a/c	

Example 6 A business enterprise gave away goods costing ₹ 10,000; 5,000; 3,000, respectively as free sample, as charity and for personal use of owner. Pass journal entry.

Solution

Free Sample a/c	Dr.	10,000	
To Purchase a/c			10,000
(Goods costing ₹ 10,000 given as free sample)			
Charity a/c	Dr.	5,000	
To Purchase a/c			5,000
(Goods costing ₹ 5,000 given in charity)			
Drawings a/c	Dr.	3,000	
To Purchase a/c			3,000
(Goods costing ₹ 3,000 used by owner for personal use)			

Compound Entry

When a set of transactions take place on one single day and in these transactions at least one common account is affected then instead of passing separate journal entry for each transaction, one single entry can be passed. Such single entry is called **compound entry**. Here, the nature of the transaction should be the same, such as all the transactions are either expense transactions or all the transactions are revenue transactions. For example, paid salary ₹ 10,000 and rent ₹ 5,000 on March 6. Here salary and rent account are expense accounts affecting one common account namely cash account. The compound entry for these two transactions can be passed as follows:

Salary a/c	Dr.	10,000	
Rent a/c	Dr.	5,000	
To Cash a/c			15,000
(Paid salary ₹ 10,000 and rent ₹ 5,000 in cash)			

Loss on Account of Bad Debts

Bad debts is a loss on account of non-recovery of dues from credit customers.

Bad debts is a loss on account of non-recovery of dues from credit customers. It is the amount that a seller fails to recover from the customers to whom goods were sold on credit. Bad debts are shown as a loss in the books of accounts only when there is no possibility of recovering the dues.

Due to bad debts, an asset namely debtors gets reduced; therefore, it is credited in the journal entry and loss namely bad debts increases. Accordingly, it is debited. For example, sold goods of ₹ 25,000 on credit to Mahesh, subsequently Mahesh became insolvent and only ₹ 18,000 could be recovered from him.

At the time of sales

Mahesh's a/c	Dr.	25,000	
To Sales a/c			25,000
(Sold goods to Mahesh on credit)			
Cash a/c	Dr.	18,000	
Bad Debts a/c	Dr.	7,000	
To Mahesh's a/c			25,000
(Received ₹ 18,000 from Mahesh after writing off bad debts of ₹ 7,000)			

Dishonour of Cheque Deposited in Bank

Dishonour of cheque means the depositor fails to get the credit in his/her bank account for the cheque deposited by him/her. If due to certain reasons, the payee's bank does not clear the cheque, then it means the depositor will not get the credit for the cheque deposited in his/her bank account. This is also called **dishonour of cheque** or **bouncing of cheque**.

The incidence of non-clearance of cheque due to certain reasons is called **dishonour of cheque**. It is also called **bouncing of cheque**.

Entry at the time of depositing cheque

Bank a/c	Dr.
To Ram's a/c	
(Cheque received from Ram)	

When bank intimates about the dishonour of cheque

Ram's a/c	Dr.
To Bank a/c	
(Ram's cheques was dishonoured)	

If bank levies certain bank charges to client (depositor) account as a penalty for dishonour of cheque then the entry for dishonour will be a compound entry.

Ram's a/c	Dr.	(with the amount of cheque)
Bank charges a/c	Dr.	(with the amount of bank charges)
To Bank a/c		(total)

(Ram's cheque was dishonoured and bank also levied ₹......bank charges)

Example 7 D.D. Enterprises executed the following transactions:

Date	Transactions
April 3	Started business with cash ₹ 4,35,000
April 7	Paid rent for the month ₹ 15,000
April 10	Deposited cash into bank ₹ 2,50,000
April 15	Purchased goods and issued cheque ₹ 41,350
April 17	Purchased furniture and issued cheque ₹ 49,500
April 29	Cash sales for the month ₹ 1,50,000
April 30	Paid salary ₹ 33,400 and insurance premium ₹ 2,400 by cheque
May 07	Paid rent for the month by cheque ₹ 15,000
May 9	Paid commission ₹ 3,400 by cheque
May 15	Received commission by cheque ₹ 11,100
May 18	Paid wages ₹ 3,500
May 19	Sold goods to Manav of ₹ 20,000 at 10% trade discount
May 20	Paid telephone bill by cheque ₹ 1,650
May 21	Paid electricity bill by cheque ₹ 8,500
May 22	Sold goods to Anukalp of ₹ 80,000
May 23	Purchased goods from Nandan ₹ 25,000
May 23	Sold goods to Anukalp of ₹ 10,500 in cash
May 24	Received cheque from Anukalp ₹ 79,500 in the final settlement of his account
May 25	Issued cheque of ₹ 24,000 to Nandan and he allowed a discount of ₹ 1,000

May 28 Anukalp's cheque was dishonoured and bank charged bank charges ₹ 50
May 29 Purchased stationery of ₹ 500
May 30 Manav became insolvent only ₹ 17,000 could be recovered from him.

Pass journal entries for the above transactions in the journal.

SOLUTION

Explanation:

(i) For transaction dated April 15: Purchase of goods is an expense, and payment has been made immediately; therefore, it is a cash transaction. As per rules, expenses are debited and bank balance being an asset gets reduced on account of issuing the cheque; therefore, it is to be credited. Hence, the net entry is **debit purchase a/c** and **credit bank a/c**.

(ii) For transaction dated May 22: Sales of goods is a revenue; it is a credit transaction because there is no exchange of cash/cheque immediately. Anukalp is the receiver; as per personal account rule, debit the receiver. Hence, his account has been **debited** and salesis a revenue; as per nominal account rule, credit the revenue. Hence, the sales have been **credited**.

(iii) For transaction dated May 23: Cheque received from bank will increase the bank balance (asset) in the bank; as per real account rule, it has been **debited**. Anukalp being the giver has been **credited**. Instead of ₹ 80,000, his account has been settled in ₹ 79,500, the difference of ₹ 500 is discount allowed—an expense. Discount allowed being an expense has been **debited**.

(iv) For transaction dated May 28: Dishonour of cheque reduces the bank balance. Hence, the bank account has been **credited,** bank charges levied by the bank is an expense; hence, **debited**. Now, Anukalp is the debtor with the amount of cheque that has been dishonoured. Accordingly, his account has been **debited**.

Journal

Date	Particulars		V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
April 3	Cash a/c	Dr.			4,35,000	
	To Capital a/c					4,35,000
	(Owner started business with cash)					
April 7	Rent a/c	Dr.			15,000	
	To Cash a/c					15,000
	(Paid rent in cash)					
April 10	Bank a/c	Dr.			2,50,000	
	To Cash a/c					2,50,000
	(Deposited cash into bank)					
April 15	Purchase a/c	Dr.			41,350	
	To Bank a/c					41,350
	(Purchased goods and issued cheque)					
April 17	Furniture a/c	Dr.			49,500	
	To Bank a/c					49,500
	(Purchased furniture and issued cheque)					
April 29	Cash a/c	Dr.			1,50,000	
	To Sales a/c					1,50,000
	(Cash sales for the month)					

(*Contd*)

(*Contd*)

April 30	Salary a/c Dr. Insurance Premium a/c Dr. To Bank a/c (Paid salary ₹ 33,400 and insurance premium ₹ 2,400 by cheque)			33,400 2,400	 35,800
May 7	Rent a/c Dr. To Bank a/c (Paid rent by cheque)			15,000	 15,000
May 9	Commission Allowed a/c Dr. To Bank a/c (Paid commission by cheque)			3,400	 3,400
May 15	Bank a/c Dr. To Commission Received a/c (Received commission by cheque)			11,100	 11,100
May 18	Wages a/c Dr. To Cash a/c (Paid wages in cash)			3,500	 3,500
May 19	Manav's a/c Dr. To Sales a/c (Sold goods of ₹ 20,000 at 10% trade discount to Manav on credit)			18,000	 18,000
May 20	Telephone Charges a/c Dr. To Bank a/c (Paid telephone charges by cheque)			1,650	 1,650
May 21	Electricity Charges a/c Dr. To Bank a/c (Paid electricity charges by cheque)			8,500	 8,500
May 22	Anukalp's a/c Dr. To Sales a/c (Sold goods on credit to Anukalp)			80,000	 80,000
May 23	Purchase a/c Dr. To Nandan's a/c (Purchased goods from Nandan on credit)			25,000	 25,000
May 23	Cash a/c Dr. To Sales a/c (Sold goods to Anukalp in cash)			10,500	 10,500
May 24	Bank a/c Dr. Discount Allowed a/c Dr. To Anukalp's a/c (Received a cheque of ₹ 79,500 from Anukalp and allowed him discount of ₹ 500)			79,500 500	 80,000
May 25	Nandan's a/c Dr. To Bank a/c To Discount Received a/c (Issued a cheque of ₹ 24,000 to Nandan and received discount of ₹ 1,000)			25,000	 24,000 1,000

(*Contd*)

(*Contd*)

May 28	Anukalp's a/c Dr. Bank Charges a/c Dr. To Bank a/c (Anukalp's cheque was dishonoured and bank charged ₹ 50 as bank charges)			79,500 50	 79,550
May 29	Stationery a/c Dr. To Cash a/c (Purchased stationery in cash)			500	 500
May 30	Bank a/c Dr. Bad Debts a/c Dr. To Manav's a/c (Manav became insolvent and received only 17,000 out of 20,000 due)			17,000 1,000	 18,000
	Total			**13,56,350**	**13,56,350**

Recap 1

So far, we have discussed the following topics:

- Books of Accounts
- Accounting Cycle
- Journalizing

Self-assessment 1

1. Explain accounting principle.
2. Differentiate trade discount and cash discount.
3. Explain the principle of identifying revenue expenses and capital expenditure.
4. Is purchase of goods different from purchase of assets?

The following topics will be delved into next:

- Segmentation of journal—subsidiary books
- Purchase book
- Sales book
- Purchase return book
- Sales return book
- Cash book
- Journal proper
- Segmentation of cash book
- Simple cash book
- Two-column cash book
- Three-column cash book
- Petty cash book
- Bank reconciliation statement
- General ledger/ledger
- Trial balance—mathematical accuracy of books of accounts
- Closing entries—closing ledger accounts
- Opening entries

SEGMENTATION OF JOURNAL—SUBSIDIARY BOOKS

Subsidiary books are maintained by a business enterprise to have segmentation of book-keeping activity. Such segmentation is implemented with the help of subsidiary books.

Purchase Book

It is used to record all the transactions of credit purchase of goods. It is also called **purchase day book**.

Sales Book

It is used to record all the transactions of credit sales of goods. It is also called **sales day book**.

Purchase Return Book

It is used to record the purchase return of goods out of the goods purchased.

Sales Return Book

It is used to record the sales return of goods out of the sales of goods.

Cash Book

All the transactions dealt in cash are recorded in it.

Bank Book

All the bank transactions are recorded in it.

Journal Proper

The transactions that cannot be recorded in other subsidiary books are recorded in it by passing journal entry. Transactions, such as opening entries, closing entries, purchase and sale of fixed assets, providing depreciation and drawing of goods by owner are recorded in **general journal.**

In this book, miscellaneous entries are passed. **Miscellaneous entries** usually relate to credit purchase of assets, depreciation on assets, bad debts written off, opening entries, and closing entries, etc. Rectification entries to correct the errors in accounts are also passed in the journal proper. The following are the miscellaneous entries passed in journal proper.

Transactions Relating to Assets

All the credit purchase of assets is journalized in journal proper by passing appropriate journal entry. Similarly, entry for providing depreciation, loss/profit on sale of assets, is passed in the journal proper.

Closing Entries

These are the entries passed at the end of the accounting year to close ledger accounts. By passing these entries, revenue and expense accounts get closed as well as get transferred to final accounts. This entry helps in the carry forward of assets and liabilities to the next accounting year.

Transfer Entries

These are the entries with the help of which the net result of trading account and profit and loss account is transferred to the respective final accounts.

Adjustment Entries

Adjustments are certain transactions that do not get passed in the books of accounts during the year. Instead these are brought to the notice of the accountant after closing the accounts. With the help of these entries, relevant expenses and revenue for the year gets recorded in the books of accounts.

Opening Entries

To bring forward the balances of assets and liabilities in the beginning of the accounting year, these entries are passed. Here liabilities also include equity. With the help of these entries, accounts of assets and liabilities get opened in the fresh set of books for the new accounting year.

Rectification Entries

These are the entries passed to rectify the errors that might have occurred while recording or posting the transactions in the books of accounts.

Entries for Bills of Exchange

With the help of bills of exchange, the debtors get converted into bills receivable and the creditors get converted into bills payable.

Entries for Posting from Subsidiary Books

These are the entries with the help of which transactions recorded in the subsidiary books get posted to ledger accounts.

Purchase Book

This is the book in which only credit purchase of goods is recorded. The cash purchase of goods is recorded in the cash book or bank book as applicable. The recording in this book is done with the help of the invoice (bill) received from supplier. The said invoice contains the details of goods purchased. In this book, all the details of goods purchased are recorded in a chronological order. Posting from this book to ledger is made at a regular interval. Purchase book is also called **purchase day book**. The personal account of individual suppler is credited with the respective amount of purchase and the sum total of all the purchase for the period is debited to the purchase account.

EXAMPLE 8 M/s Sunder Enterprise executed the following transactions. Record these in the purchase book.

Date	Invoice No.	Transaction
12/5/10	502	Goods of MRP ₹ 25,000 purchased from Naveen Enterprises at 20% trade discount
16/5/10	207	Goods of MRP ₹ 44,000 purchased from Satish Enterprises at 10% trade discount
20/5/10	511	Goods costing ₹ 19,000 purchased in cash from Naveen Enterprises
21/5/10	106	Goods costing ₹ 11,000 purchased from Telelink Ltd

SOLUTION

Purchase Book

Date	Particulars	Invoice No.	Ledger Folio	Amount (₹)
12/5/10	*Naveen Enterprises* Goods of MRP ₹ 25,000 purchased at 20% trade discount	502		20,000
16/5/10	*Satish Enterprises* Goods of MRP ₹ 44,000 purchased at 10% trade discount	207		39,600
21/5/10	*Telelink Ltd* Goods costing ₹ 11,000 purchased	106		11,000
	Total			**70,600**

Note: Cash purchase from Naveen Enterprises dated 20/05/10 is to be recorded in the cash book.

At a regular interval, the transactions from purchase book are posted to ledger accounts by passing the following entry:

Purchase a/c	Dr.	70,600	
To Naveen Enterprises's a/c			20,000
To Satish Enterprises's a/c			39,600
To Telelink Ltd's a/c			11,000
(Sundries as per purchase book)			

Sales Book

All the credit sales transactions are recorded in this book in a chronological order. There is no need to pass the journal entry for the transactions recorded in this book. Sales transactions executed in cash or by cheque are not recorded in it instead these are recorded in the cash/bank book as applicable. This book is also called **sales day book**. Recording of transactions in this book is like journalizing—keeping a chronological record of monetary transactions, the transactions recorded in this book are subsequently posted to sales account and to the account of individual customer.

EXAMPLE 9 M/s Sunder Enterprise executed the following transactions. Record these in the sales book.

Date	Invoice No.	Transaction
13/5/10	109	Goods of MRP 55,000 sold to Nitish Enterprises at 20% trade discount
16/5/10	110	Goods of MRP 49,500 Sold to Ram Enterprises at 10% trade discount
22/5/10	111	Goods of value 15,400 sold to Nitish Enterprises in cash
24/5/10	112	Goods of value 16,500 sold to Simson Ltd

SOLUTION

Sales Book

Date	Particulars	Invoice No.	Ledger Folio	Amount (₹)
13/5/10	*Nitish Enterprises* Goods of MRP 55,000 sold at 20% trade discount	109		44,000
16/5/10	*Ram Enterprises* Goods of MRP 49,500 sold at 10% trade discount	110		44,550
24/5/10	*Simson Ltd* Goods of value 16,500 sold	112		16,500
	Total			**1,05,050**

Note: Cash sales to Nitish Enterprises dated 22/05/10 is to be recorded in the cash book.

At a regular interval, transactions from purchase book are posted to ledger accounts by passing the following entry:

Nitish Enterprises's a/c	Dr.	44,000	
Ram Enterprises's a/c	Dr.	44,550	
Simson Ltd's a/c	Dr.	16,500	
To Slaes a/c			1,05,050
(Sundries as per sales book)			

Purchase Return Book

Certain goods out of the total goods purchased are returned to the supplier. Such return of goods is recorded in the **purchase return book**. The final total of this book shows the total amount of goods returned to suppliers. The company obtains either a bill/invoice from the supplier for the goods returned or the company issues a **debit note** to the supplier.

A **debit note** is issued when a business enterprise has a confirmed monetary claim against another party. It is a supporting document on the basis of which accounting records are maintained and verified.

Example 10 M/s Sunder Enterprise executed the following transactions, record these in the purchase return book.

Date	Invoice No.	Transaction
14/5/10	007	Goods valuing ₹ 1,100 returned to Naveen Enterprises
19/5/10	008	Goods of cost ₹ 3,200 returned to Satish Enterprises

Solution

Purchase Return Book

Date	Particulars	Invoice No.	Ledger Folio	Amount (₹)
14/5/10	Naveen Enterprises Goods returned	007		1,100
19/5/10	Satish Enterprises Goods returned	008		3,200
	Total			4,300

At a regular interval, these transactions are posted to ledger accounts with the help of the following entry:

Naveen Enterprises's a/c	Dr.	1,100	
Satish Enterprises's a/c	Dr.	3,200	
To Purchase Return a/c			4,300
(Sundries as per purchase return book)			

Sales Return Book

Customers to whom goods are sold might return the goods to the seller. For seller, such transactions are called **sales return transactions** and recorded in the **sales return book** in a chronological order. The recording is done on the basis of invoice/bill issued to the customer returning the goods, sometimes. Instead of invoice/bill, a **credit note** is issued to the customer.

A **credit note** is issued when a business enterprise sanctions a confirmed monetary claim to another party. It is a supporting document on the basis of which accounting records are maintained and verified.

Example 11 M/s Sunder Enterprise executed the following transactions, record these in the sales return book.

Date	Invoice No.	Transaction
21/5/10	131	Goods of value ₹ 5,000 return by Nitish Enterprises
26/5/10	133	Goods of value ₹ 1,500 returned by Ram Enterprises
01/6/10	142	Goods of value ₹ 4,500 returned by Simson Ltd

Sales Return Book

Date	Particulars	Invoice No.	Ledger Folio	Amount (₹)
21/5/10	Nitish Enterprises Goods returned	131		5,000
26/5/10	Ram Enterprises Goods returned	133		1,500
01/6/10	Simson Ltd Goods returned	142		4,500
	Total			**11,000**

Subsequently, these posted to ledger accounts with the help of the following entry:

Sales Return a/c	Dr.	11,000	
To Nitish Enterprises's a/c			5,000
To Ram Enterprises's a/c			1,500
To Simson Ltd's a/c			4,500
(Sundries as per sales return book)			

Cash Book

Cash book is the one in which all the cash transactions are recorded. *It is maintained only when a business enterprise maintains subsidiary book*. A **cash transaction** is the one in which consideration for the transaction, i.e., cash gets exchanged between the transacting parties immediately at the time of entering into the transaction. Journal entry for the transactions affecting cash is not passed. The transactions recorded in the cash book are subsequently posted to ledger accounts. All the receipts of cash are recorded on the debit side of cash book, and payments are recorded on the credit side of cash book. At the end of each calendar month, the balance of cash book is calculated that is carried forward to the next month's cash book. Cash book is like **cash account.** Therefore, a separate cash account is not maintained in the ledger. When cash transactions are in large number balancing the cash—taking cash balance is a daily routine such as in a bank, in a retail show room, in a departmental store, in petrol pump and in public utility office.

Balancing the cash book means finding out the difference between the total amount of receipts and total amount of payments.

Segmentation of Cash Book

Simple Cash Book It is the cash book with only one amount column; transactions relating to only cash receipts and cash payment are recorded in it. The opening cash balance represents *opening cash in hand* is shown on the debit side as cash in hand. The transactions relating to cash receipts and payments are entered on daily basis and at the end of the period balance of cash book is taken that represents the closing cash balance called *closing cash in hand. A cash book always has debit balance because payments can never exceed the sum total of opening cash in hand and receipts*.

Example 12 D.D. Enterprises executed the following transactions:

Date	Transactions
2010	
April 3	Started business with cash ₹ 4,35,000
April 7	Paid rent for the month ₹ 15,000
April 10	Deposited cash into bank ₹ 2,50,000

April 15 Purchased goods in cash of ₹ 41,350
April, 17 Purchased furniture of ₹ 49,500
April, 29 Cash sales for the month ₹ 1,50,000
April, 30 Paid salary ₹ 33,400 and insurance premium ₹ 2,400
May, 07 Paid rent for the month ₹ 15,000
May, 09 Paid commission ₹ 3,400 in cash
May, 15 Received commission in cash ₹ 11,100
May, 18 Paid wages ₹ 3,500
May, 19 Sold goods to Manav of ₹ 20,000
May, 23 Sold goods to Anukalp of ₹ 10,500 in cash
May, 24 Received cash from Manav ₹ 20,000
May, 25 Paid to Nandan in cash of ₹ 22,000
May, 29 Purchased stationery of ₹ 500

Solution

Dr. **Cash Book** **Cr.**

Date	Particulars (Receipts)	VNo.	L. F.	Amt.(₹)	Date	Particulars (Payments)	VNo.	L. F.	Amt.(₹)
2010					2010				
3/4	To Capital a/c			4,35,000	7/4	By Rent a/c			15,000
29/4	To Sales a/c			1,50,000	10/4	By Bank a/c			2,50,000
					15/4	By Purchase a/c			41,350
					17/4	By Furniture a/c			49,500
					30/4	By Salary a/c			33,400
					30/4	By Insurance Premium a/c			2,400
					30/4	By Balance c/d			1,93,350
				5,85,000					5,85,000
1/5	To Balance b/d			1,93,350	7/5	By Rent a/c			15,000
					9/5	By Commission Allowed a/c			3,400
15/5	To Commission Received a/c			11,100	18/5	By Wages a/c			3,500
23/5	To Sales a/c			10,500	25/5	By Nandan's a/c			22,000
24/5	To Manav's a/c			20,000	29/5	By Stationery a/c			500
					31/5	By Balance c/f			1,90,550
				2,34,950					**2,34,950**

Note: Transaction of 19/5 is a credit transaction hence not recorded.

Two-Column Cash Book—Cash Book with Discount Column A business enterprise having cash transactions as well as giving and receiving discount but not having bank transactions maintains this cash book. In this cash book, an additional column for discount is provided on both the sides, i.e., on debit and credit side. The cash column is the replication of cash account but the discount column is not the replication of discount account. Instead it is prepared on memorandum basis. At the end of the period, cash column of the cash book is balanced that represents closing cash in hand but discount columns are never balanced. The total of debit side discount column is the sum total of **discount allowed** and the total of credit side discount column is the sum total of **discount received**. These totals of discount columns are posted to the respective discount accounts.

EXAMPLE 13 D.P. Enterprises executed the following transactions:

Date	Transactions
2010	
June 1	Opening cash in hand ₹ 30,505
June 3	Paid rent for the month ₹ 5,200
June 4	Sold goods in cash ₹ 13,400
June 7	Received cash from Deepak ₹ 9,850 and allowed him a discount ₹ 150
June 10	Paid wages ₹ 3,400
June 15	Paid to Amit ₹ 19,200 and he allowed us a discount of ₹ 300
June 18	Received commission ₹ 800
June 24	Purchased equipments of ₹ 12,400
June 26	Paid to Gopal ₹ 7,800

SOLUTION Here, the columns of voucher number and ledger folio have been omitted for convenience.

Explanation:

(i) Transaction dated June 7: Cash ₹ 9,850 has been received from Deepak; hence, it has been entered to the debit of cash book. A discount of ₹ 150 has been allowed; it has been entered in the debit side discount column.

(ii) Transaction dated June 15: Cash ₹ 19,200 paid to Amit; hence, entered on the credit side of cash book. Dividend ₹ 300 received has been entered in the discount column on the credit side.

Dr. **Cash Book** **Cr.**

Date	Particulars (Receipts)	Discount	Cash (₹)	Date	Particulars (Payments)	Discount	Cash (₹)
1/6	To Cash in Hand (Balance b/f)		30,505	3/6	By Rent a/c		5,200
				10/6	By Wages a/c		3,400
4/6	To Sales a/c		13,400	15/6	By Amit's a/c	300	19,200
7/6	To Deepak's a/c	150	9,850	24/6	By Equip. a/c		12,400
18/6	To Commission Received a/c		800	26/6	By Gopal's a/c		7,800
				30/6	By Closing Cash in Hand		6,555
		150	54,555			300	54,555

Three-Column Cash Book—Cash Book with Discount and Bank Column

It is the cash book in which there are three-column for amount—for discount, for cash and for bank. Maintaining three-column cash book is more convenient only when there is a large frequency of bank transactions and transactions relating to discount. Cash column and bank column represent, respectively cash account and bank account, whereas discount columns are maintained on memorandum basis—these are not maintained by following double-entry system. Opening cash balance is always debit and entered on the debit side, whereas opening balance for bank can be either debit or credit. Accordingly, it is entered on the proper side of column. The transaction in which both cash and bank are affected is recorded on both the sides of three-column cash book. This is referred as **contra entry**.

Example 14 D.N. Enterprises executed the following transactions:

Date	*Transactions*
2010	
April 1	Cash in hand ₹ 70,500 and bank balance ₹ 85,000
April 2	Paid rent for the month ₹ 15,000 by cheque
April 10	Deposited cash into bank ₹ 50,000
April 11	Sold goods and received cheque ₹ 90,000
April 15	Purchased goods and issued cheque ₹ 41,350
April 17	Purchased furniture and issued cheque ₹ 49,500
April 18	Received cheque from Manav ₹ 23,500 and allowed discount ₹ 500
April 19	Paid to Deepak by cheque ₹ 11,400 and he allowed discount 600
April 20	Received commission in cash ₹ 700
April 21	Paid cash to Mohan ₹ 1,900 and he allowed discount ₹ 50
April 24	Received cash from Amit ₹ 2,800 and allowed him discount ₹ 100
April 29	Withdrew cash from bank ₹ 12,000
April 30	Paid salary ₹ 33,400 and insurance premium ₹ 2,400 by cheque

Solution Here, columns of voucher number and ledger folio have been eliminated for convenience. When bank balance's type is not given then it is taken as debit balance.

Dr. **Three-Column Cash Book** **Cr.**

Date	Particulars (Receipts)	Discount	Cash (₹)	Bank	Date	Particulars (Payments)	Discount	Cash (₹)	Bank
1/4	To Balance b/f		70,500	85,000	2/4	By Rent a/c			15,000
10/4	To Cash a/c	(C)		50,000	10/4	By Bank a/c	(C)	50,000	
11/4	To Sales a/c			90,000	15/4	By Purchase a/c			41,350
18/4	To Manav's a/c	500		23,500	17/4	By Furniture a/c			49,500
20/4	To Comm. Recd. a/c		700		19/4	By Deepak's a/c	600		11,400
					21/4	By Mohan's a/c	50	1,900	
					29/4	By Cash a/c	(C)	—	12,000
24/4	To Amit's a/c	100	2,800		30/4	By Salary a/c			33,400
29/4	To Bank a/c	(C)	12,000		30/4	By Insurance Premium a/c			2,400
								34,100	
					30/4	Balance c/f			83,450
		600	86,000	2,48,500			650	86,000	2,48,500

Explanation:
Transaction dated April 10 cash ₹ 50,000 deposited in bank has been shown on the debit bank column because the balance in bank has increased, its contra entry has been entered on the credit side because this transaction has reduced the cash balance also.

Petty Cash Book—Imprest System of Cash Book

Petty cash book is a cash book to record petty cash expenses paid by the business enterprises. There are several small–small (petty) expenses—printing and stationery, postage and telegram, wages, carriage charges, miscellaneous expenses, etc. These are incurred on daily basis. To avoid loading, the cash book with unnecessary details a separate cash book called **petty cash book** is maintained. Petty cash book is maintained using imprest system of cash. An imprest system is the one in which the following steps are involved:

- Petty cash clerk is provided with an advance amount in the beginning of each month; this advance is called **imprest amount**.

- Petty cash clerk pays for petty expenses and maintains the record of these expenses in the petty cash book
- At the end of the month, the amount equal to the total expenses incurred by him/her is again provided to him/her as to maintain the imprest amount at the original level.

Petty cash book is maintained by petty cash clerk.

Example 15 Record the following transactions in the petty cash book:
On January 1, 2010 petty cash clerk was provided with an imprest amount of ₹ 1,000 and he/she incurred the following expenses during the month:

Date	*Transactions*
Jan. 1	Paid for stationery ₹ 120, postage ₹ 70
Jan. 2	Paid taxi fare ₹ 45
Jan. 6	Paid miscellaneous expenses ₹ 55
Jan. 9	Paid for printing charges ₹ 92
Jan. 16	Paid for carriage charges ₹ 127
Jan. 24	Paid for postage stamps ₹ 34
Jan. 27	Paid casual labour charges ₹ 107

Dr. **Petty Cash Book** **Cr.**

Receipts	Date	Particulars	V. No.	Total Payments	Printing & Stationery	Postage and Telegram	Wages	Carriage & Conveyance	Miscellaneous Exp.
1,000	Jan. 1	To Cash a/c							
	Jan. 1	By Stationery		120	120				
	Jan. 1	By Postage		70		70			
	Jan. 2	By Conveyance Taxi fare		45				45	
	Jan. 6	By Miscellaneous Exp.		55					55
	Jan. 9	By Printing Charges		92	92				
	Jan. 16	By Carriage charges		127				127	
	Jan. 24	By Postage stamp		34		34			
	Jan. 27	By Casual labour charges		107			107		
	Jan. 31	By Balance c/f		350					
1,000				1,000	212	104	107	172	55

The petty cash clerk has spent ₹ 650 out of the imprest amount of ₹ 1,000. In the beginning of next month, he/she will be provided with ₹ 650 so as to have the imprest amount of ₹ 1,000.

Example 16 Pass journal entries for the following transactions:

(i) Purchased machinery from Lohia Ltd of ₹ 1,20,000
(ii) Purchased furniture from Gulab Enterprises of ₹ 35,000
(iii) Paid to Lohia Ltd by cheque ₹ 1,20,000
(iv) Written off depreciation on machinery ₹ 3,000

Solution

Journal Proper (General Journal)

Date	Particulars	V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
	Machinery a/c Dr. To Lohia Ltd's a/c (Purchased machinery from Lohia Ltd on credit)			1,20,000	 1,20,000
	Furniture a/c Dr. To Gulab Enterprises's a/c (Purchased furniture from Gulab Enterprises on credit)			35,000	 35,000
	Depreciation on Machinery a/c Dr. To Machinery a/c (Depreciation ₹ 3,000 written off on machinery)			3,000	 3,000
	Total			1,58,000	1,58,000

Note: Payment to Lohia Ltd is to be entered in the cash book with bank column or in bank account.

Example 17 Record the following transactions in appropriate subsidiary books:

Date	*Transaction*
2010	
January 1	Deepak started business with cash ₹ 2,50,000 and machinery worth ₹ 1,50,000
January 2	Deposited cash into bank ₹ 1,30,000
January 3	Purchased furniture in cash ₹ 22,000
January 3	Purchased equipment of ₹ 15,000 and issued cheque
January 4	Purchased goods from Ramesh and issued cheque ₹ 12,000
January 5	Purchased goods from Ram of ₹ 22,500
January 6	Paid rent for the month ₹ 3,000 by cheque
January 7	Sold goods of ₹ 33,500 to Mukesh
January 8	Sold goods of ₹ 51,000 to Naveen
January 9	Purchased goods from Shyam of MRP ₹10,000 at 10% trade discount
January 10	Received cheque from Mukesh ₹ 33,500
January 12	Purchased stationery of ₹ 1,400
January 14	Paid wages ₹ 9,500 by cheque
January 16	Received cheque from Naveen ₹ 50,000 and allowed him discount ₹ 1000
January 19	Issued cheque to Ram ₹ 22,000 in the final settlement.
January 20	Mukesh's cheque was dishonoured
January 22	Purchased machinery of ₹ 90,000 and issued cheque
January 25	Owner withdrew ₹ 3,000 from bank for his personal use
January 28	Paid salary by cheque ₹ 45,000
January 29	Paid insurance premium by cheque ₹ 4,300
January 30	Purchased furniture of ₹ 23,000 from Dee & Sons on credit

Solution Transaction related to credit purchase are to be recorded in purchase book, transaction of credit sales in the sales book, cash and bank transaction to be recorded in three-column cash book, and rest of the transactions in journal proper.

Journal Proper (General Journal)

Date	Particulars	V.N.	L.F.	Amount. Debit (₹)	Amount Credit (₹)
2010 Jan. 01	Machinery a/c Dr. To Capital a/c (Started business with machinery)			1,50,000	1,50,000
Jan. 30	Furniture a/c Dr. To Dee & Sons's a/c (Purchased furniture on credit)			23,000	23,000
	Total			**1,73,000**	**1,73,000**

Purchase Book

Date	Particulars	Invoice No.	Ledger Folio	Amount (₹)
Jan. 5	Ram Goods purchased			22,500
Jan. 9	Shyam Goods of MRP ₹ 10,000 purchased at 10% trade discount			9,000
	Purchase a/c Dr.			**31,500**

Sales Book

Date	Particulars	Invoice No.	Ledger Folio	Amount (₹)
Jan. 7	Mukesh Sold goods			33,500
Jan. 8	Naveen Sold goods			51,000
	Sales a/c Cr.			**84,500**

Dr. **Three-Column Cash Book** **Cr.**

Date	Particulars (Receipts)	Discount	Cash (₹)	Bank	Date	Particulars (Payments)	Discount	Cash (₹)	Bank
Jan. 1	To Capital a/c		2,50,000		Jan. 2	By Bank a/c	(c)	1,30,000	
Jan. 2	To Cash a/c	(C)		1,30,000	Jan. 3	By Furniture a/c		22,000	
Jan. 10	To Mukesh's a/c			33,500	Jan. 3	By Equipment a/c			15,000
Jan.16	To Naveen's a/c	1,000		50,000	Jan. 4	By Purchase a/c			12,000
					Jan. 6	By Rent a/c			3,000
					Jan. 12	By Stationery a/c		1,400	
					Jan. 14	By Wages a/c			9,500
					Jan.19	By Ram's a/c	500		22,000
					Jan. 20	By Mukesh's a/c			33,500
					Jan. 22	By Machinery a/c			90,000
					Jan. 25	By Drawings a/c			3,000
					Jan. 28	By Salary a/c			45,000
					Jan. 29	By Insurance Premium a/c			4,300
Jan. 31	To Balance c/f			23,800	Jan. 31	By Balance c/f		96,600	----
		1,000	2,50,000	2,37,300			500	2,50,000	2,37,300

BANK RECONCILIATION STATEMENT

Genesis

Every business enterprise maintains a bank account to record deposits and withdrawal from the bank account. **Bank account** (bank column of cash book) is like an asset account. Therefore, the bank account is debited with the transactions that increase the bank balance and it is credited with the transactions that decrease the bank balance. Business enterprises maintain bank accounts. At the same time, the bank maintains the constituent's account. The **pass book** provided by the bank to its account holders is the copy of the constituent's account. The constituent's account maintained by the bank is the mirror image of the bank account maintained by the business enterprises, i.e., the transactions appearing on the debit side of bank account appear on the credit side of constituent account (pass book) and the transactions appearing on the credit side of the bank account appear on the debit side of constituent's account (pass book).

Despite the fact that the pass book is the mirror image of the bank account, the balance of both of these on a particular date rarely tallies. Therefore, bank reconciliation statement is prepared at a regular interval so as to find out the reasons for such differences and pass necessary entries if required.

Meaning of Bank Reconciliation Statement

Bank reconciliation statement is a statement to reconcile the difference between the balance of bank account and balance of pass book, it is prepared on a particular date so as to apprise the management about the difference in these two balances and also verify the reasons for such difference. Usually, the following may be the reasons for such difference.

Reasons for Difference

Out of these reasons mentioned in the following, first three reasons are the actual reconciliation items and the rest of the reasons are the transactions that need to be recorded in the bank account before preparing final accounts. These are recorded by passing journal entries in journal proper; the balance of bank account after the effect of these entries is called **adjusted bank balance** as per bank account this adjusted bank balance is to be shown in the balance sheet. The most common reasons for difference in both the balances are as follows:

- Cheques deposited but not yet cleared by the bank.
- Cheques issued but not yet presented for payment.
- Cheques entered in bank account but not banked.
- Dividend, interest and other income credited in pass book but not entered in bank account.
- Bank charges, interest and other charges debited in pass book but not entered in bank. account
- Direct payment made by bank entered in pass book but not entered in cash book.
- Direct deposit recorded in pass book but not recorded in cash book.
- Errors in bank account—wrong totaling, entry on wrong side, entry with wrong amount.
- Errors in pass book—wrong totaling, entry on wrong side, entry with wrong amount.
- Dishonour of cheques recorded in pass book but not recorded in bank account.
- Bills collected by bank entered in pass book but not recorded in bank account.
- Bills dishonoured recorded in pass book but not recorded in bank account.

Preparation of Bank Reconciliation Statement (BRS)

Bank reconciliation statement is a statement to reconcile the balance of bank account and pass book. The bank account balance also known as **balance of bank column of cash book**. Therefore, it is called **cash**

book balance while preparing bank reconciliation statement. The process of preparing bank reconciliation statement is as follows:

Step One : Take any one balance as base balance and another as target balance.
Step Two : Identify the items that appear in one but do not appear in the other.
Step Three : Adjust these items in the base balance according to the effect that has already been done in the target balance.
Step Four : The resulting balance should equal the target balance.
Step Five : Pass necessary entries to adjust the balance of bank account.

USEFUL INFO

Benefits of BRS:
- Detection of errors in bank account
- Detection of errors in pass book
- Helps in checking frauds
- Helps in recording missing transactions

By following these steps, a bank reconciliation statement is prepared. If after the adjustments base balance does not equal the target balance then it indicates certain more errors in either bank account or pass book. Preparation of bank reconciliation offers several benefits like detection of errors in pass book, detection of errors in bank account. It also helps in identifying frauds or embezzlement in accounts specially bank account. It also helps in recording the transactions recorded in pass book but not yet recorded in bank account.

Example 18 On March 31, 2010 cash book showed ₹ 30,000 debit on the same day pass book showed ₹ 19,640 credit balance. Upon scrutiny, the following items of difference were identified:

(i) Cheques amounting to ₹ 12,400 deposited but not yet cleared by bank.
(ii) Cheques amounting to ₹ 9,350 issued but not yet presented for payment.
(iii) Bank credited our account with ₹ 250 for interest but not entered in bank account.
(iv) Bank debited our account for bank charges ₹ 120 but not entered in bank account.
(v) Bank collected dividend ₹ 1,200 but not recorded in bank account.
(vi) A cheque of ₹ 1,500 deposited duly cleared by the bank but it was recorded in the cash book with 1,050 only.
(vii) A cheque of ₹ 3,010 issued and presented for payment in the bank but it was entered by bank with 3,100 in the pass book.
(viii) A cheque of ₹ 9,000 deposited in the bank dishonoured but not entered in the bank account.

Prepare bank reconciliation statement, make necessary adjustments in the bank account (cash book) and then again prepare bank reconciliation statement.

Solution Here we are taking base balance as disclosed by cash book and target balance will be the balance as disclosed by pass book.

Bank Reconciliation Statement

Particulars	Details (₹)	Total (₹)
Debit Balance as per cash book (bank account)		**30,000**
Add:		
(i) Cheques issued but not presented for payment	9,350	
(ii) Interest credited by bank but not entered in cash book	250	
(iii) Dividend collected by bank but not in cash book	1,200	
(iv) Error of showing less deposit in cash book(1500 – 1050)	450	11,250
		41,250

(*Contd*)

(*Contd*)

Less:		
(i) Cheques deposited but not yet cleared by bank	12,400	
(ii) Bank charges debited by bank but not in cash book	120	
(iii) Error by bank in entering more amount of cheque issued and presented for payment (3,100–3,010)	90	
(iv) Cheque dishonoured but not recorded in cash book	9,000	21,610
Balance as per pass book (credit)		**19,640**

Explanation: For preparing adjusted cash book. The items of errors in the cash book, and the items that should have been entered in the cash book in the routine course like items of expense and revenue entered in pass book but not in cash book, entries for dishonour of cheques, direct payment and deposits, etc. are recorded to have adjusted bank balance.

Dr. **Adjusted Cash Book (Bank column only)** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31/3/10	To Balance b/f	30,000	31/3/10	By Bank Charges	120
	To Interest a/c	250		By Sundry Debtors' a/c (dishonour of cheque)	9,000
	To Dividend a/c	1,200			
	To Rectification of error in cash book (1500–1050)	450		By Balance (adjusted) c/f	22,780
		31,900			31,900

Bank Reconciliation Statement

Particulars	Details (₹)	Total (₹)
Adjusted Debit Balance as per cash book (bank account)		**22,780**
Add:		
(i) Cheques issued but not presented for payment	9,350	9,350
Less:		32,130
(i) Cheques deposited but not yet cleared by bank	12,400	
(ii) Error by bank in entering more amount of cheque issued and presented for payment (3100–3010)	90	12,490
Balance as per pass book (credit)		**19,640**

Example 19 On March 31, 2010 cash book showed ₹ 10,000 credit balance and on the same day pass book showed ₹ 25,550 debit balance. Upon scrutiny, the following items of difference were identified:

(i) Cheques amounting to ₹ 2,400 deposited but not yet cleared by bank.
(ii) Cheques amounting to ₹ 6,000 issued but not yet presented for payment.
(iii) Bank credited our account with ₹ 1,250 for interest but not entered in bank account.
(iv) Bank collected dividend ₹ 1,000 but not recorded in bank account.
(v) Bank paid telephone bill ₹ 2,400 of ours but not entered in cash book.
(vi) A cheque of ₹ 19,000 issued and duly cleared by bank but not entered in cash book bank column.

Prepare bank reconciliation statement.

Solution Here, we are taking base balance as disclosed by cash book and target balance will be the balance as disclosed by pass book. Credit balance as per cash book represents a bank overdraft to be written as negative amount in parenthesis.

Bank Reconciliation Statement

Particulars	Details (₹)	Total (₹)
Credit Balance as per cash book (bank account)		**(10,000)**
Add:		
(i) Cheques issued but not presented for payment	6,000	
(ii) Interest credited by bank but not entered in cash book	1,250	
(iii) Dividend collected by bank but not in cash book	1,000	8,250
		(1,750)
Less:		
(i) Cheques deposited but not yet cleared by bank	2,400	
(ii) Telephone bill paid by bank entered in pass book only	2,400	
(iii) Cheque issued and cleared but not entered in cash book	19,000	(23,800)
Balance as per pass book (debit)		**25,550**

Credit balance as per cash book and debit balance as per pass book are shown in bracket means negative balance.

Recap 2

So far, we have discussed the following topics:

- Books of Accounts
- Accounting Cycle
- Journalizing
- Segmentation of Journal—Subsidiary Books
  - Purchase book
  - Sales book
  - Purchase return book
  - Sales return book
  - Cash book
  - Journal Proper
- Segmentation of Cash Book
  - Simple cash book
  - Two-column cash book
  - Three-column cash book
  - Petty cash book
- Bank Reconciliation Statement

Self-assessment 2

1. Explain the concept of bank reconciliation statement. Why is its preparation necessary?
2. Explain the concept of segmentation of journal.

The following topics will be delved into next:

- General Ledger/Ledger
- Trial Balance—Mathematical Accuracy of Books of Accounts
- Closing Entries—Closing Ledger Accounts
- Opening Entries

GENERAL LEDGER

General ledger is a book in which different accounts are maintained. It is also called **ledger** or '**Khaata Bahi**'. An account is the summary of all the monetary transactions related to an item, individual/entity or an object.

A separate account is maintained for each item, individual/entity or an object. An account is prepared in 'T Form', it has two sides, i.e., debit side and credit side. Debit side indicates the monetary benefit received by the account and credit side indicates the monetary benefit given by the account. The account is also called **khaata**. The process of writing the entries in the ledger account is called **posting to ledger accounts**. The entry in respective ledger accounts is posted with the help of the following posting rules.

POSTING RULES

Posting from Journal/Journal Proper to Ledger Account

A separate account is opened for each item/aspect/entity.

For Account Debited in Journal Entry

To the debit of this account, the name of opposite account, i.e., the account that has been credited in the journal entry is entered. On the debit side of the account, 'To' is prefixed before each entry. And in the amount column, the amount affecting debit account is entered, i.e., the amount shown in front of debit account is used.

For Account Credited in Journal Entry

To the credit of this account, the name of opposite account, i.e., the account that has been debited in the journal entry is entered. On the credit side of the account, 'By' is prefixed before each entry. And in the amount column the amount affecting credit account is entered, i.e., the amount shown in front of credit account is used.

Posting from Subsidiary Books

Different transactions recorded in the subsidiary books are posted to ledger accounts by using the following rules:

From Purchase Book to Ledger Accounts

- Entry is shown to the credit of personal account of each supplier with the respective amount belonging to each supplier by writing 'By Purchase a/c'.
- Total of purchase book is debited to purchase account by writing 'To Sundries as per purchase book' on the debit side of purchase account.

From Sales Book to Ledger Accounts

- Entry is shown to the debit of personal account of each customer with the respective amount belonging to each customer by writing 'To Sales a/c'.
- Total of sales book is credited to sales account by writing 'By Sundries as per sales book' on the credit side of sales account.

From Purchase Return Book to Ledger Accounts

- Entry is shown to the debit of personal account of each supplier with the respective amount belonging to each supplier by writing 'To Purchase Return a/c'.
- Total of purchase return book is credited to purchase return account by writing 'By Sundries as per purchase return book' on the credit side of purchase return account.

From Sales Return Book to Ledger Accounts

- Entry is shown to the credit of personal account of each customer with the respective amount belonging to each customer by writing 'By Sales Return a/c'.
- Total of sales return book is debited to sales return account by writing 'To Sundries as per sales return book' on the debit side of sales return account.

From Cash Book to Ledger Accounts

From simple cash book

- Accounts appearing on the debit side of cash book are credited with the respective amount by writing 'By Cash a/c' to the credit of respective account.
- Accounts appearing on the credit side of cash book are debited with the respective amount by writing 'To Cash a/c' to the debit of respective account.

From two-column and three-column cash book

- Accounts appearing on the debit side of cash book are credited with the respective amount by writing 'By Cash a/c' if the amount appears in the cash column and 'By Bank a/c' if the amount appears in the bank column.
- Accounts appearing on the credit side of cash book are debited with the respective amount by writing 'To Cash a/c' if the amount appears in the cash column and 'To Bank a/c' if the amount appears in the bank column.
- Total of debit side of discount column is shown to the debit of Discount Allowed Account by writing 'To Sundries as per discount column of cash book'.
- Total of credit side of discount column is shown to the credit of Discount Received Account by writing 'By Sundries as per discount column of cash book'.

Example 20 Show posting to ledger account for the transactions of Example 17.

Solution **Explanation**:
Owner is giver of cash ₹ 2,50,000 and machinery ₹ 1,50,000 as per rule giver is to be credited. Hence, owner's capital account has been credited with cash ₹ 2,50,000 and machinery ₹ 1,50,000.

Dr. **Capital Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
				Jan. 1	By Cash a/c		2,50,000
				Jan. 1	By Machinery a/c		1,50,000

Dr. **Machinery Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 1	To Capital a/c		1,50,000				
Jan. 22	To Bank a/c		90,000				

Note: Since cash book with three column has been prepared therefore cash and bank a/c are not required in ledger.

Explanation:

(i) Furniture appears on the credit side of cash book. Therefore, it has been entered in the debit side of furniture account. When one account is debited then the opposite account is credited.

Dr. Furniture Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 2 Jan. 30	To Cash a/c To Dee & Sons's a/c		22,000 23,000				

Dr. Ram's Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 19 Jan. 19	To Bank a/c To Discount Received a/c		22,000 500	Jan. 5	By Purchase a/c		22,500

Dr. Rent Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 6	To Bank a/c		3,000				

Dr. Equipment Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 3	To Bank a/c		15,000				

Explanation:

(i) Sales of goods to Mukesh on credit implies that Mukesh is the receiver as per rule, receivers' account is to be debited; hence, it has been shown on the debit of Mukesh's account.

(ii) Cheque received from Mukesh implies Mukesh is the giver. Hence, his account has been credited.

(iii) Dishonour of cheque makes Mukesh again the debtor. Hence, his account has been debited.

Dr. Mukesh's Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 7 Jan. 20	To Sales a/c To Bank a/c (Dishonour of cheque)		33,500 33,500	Jan. 10	By Bank a/c		33,500

Dr. **Naveen's Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 8	To Sales a/c		51,000	Jan. 16 Jan. 16	By Bank a/c By Discount Allowed a/c		50,000 1,000

Dr. **Shyam's Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
				Jan. 9	By Purchase a/c		9,000

Dr. **Stationery Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 12	To Cash a/c		1,400				

Dr. **Wages Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 14	To Bank a/c		9,500				

Dr. **Drawings Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 25	To Bank a/c		3,000				

Dr. **Salary Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 28	To Bank a/c		45,000				

Dr. **Insurance Premium Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 29	To Bank a/c		4,300				

Dr. **Purchase Account** **Cr.**

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
Jan. 4	To Bank a/c		12,000				
Jan. 31	To Sundries as per purchase book		31,500				

Dr. Sales Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amount (₹)
				Jan. 31	By Sundries as per sales book		84,500

Rules for Direct Posting to Ledger Accounts

Table 4.3 shows that by nature, asset, expense and loss accounts have debit, balance. Therefore, these are to be debited whenever these increase in the business, whereas these are to be credited when these decrease on account of business activities. The nature of liability, revenue (income) and profit accounts is that these have credit balance. Therefore, these are to be credited whenever these increase and debited as soon as these decrease.

TABLE 4.3 Rules for Maintaining Ledger Accounts

	When Increase	When Decrease
Assets, Expenses and Losses	Debit it	Credit it
Liabilities, Revenue (Income) and Profits	Credit it	Debit it

Example 21 Show direct posting to ledger account for the following transactions:

(i) Ramesh started business with cash ₹ 2,50,000
(ii) Deposited cash into bank ₹ 1,20,000
(iii) Purchased furniture for ₹ 35,000 in cash
(iv) Purchased goods from Deepak of ₹ 15,000 in cash
(v) Purchased goods from Deepak of ₹ 12,000
(vi) Paid salary for the month ₹ 7,500
(vii) Sold goods to Mohan of ₹ 37,000 in cash
(viii) Sold goods to Mohit of ₹ 18,000
(ix) Received commission ₹ 3,000 by cheque
(x) Paid to Deepak ₹ 12,000 by cheque
(xi) Received cheque from Mohit of ₹ 15,000
(xii) Paid rent for the month by cheque ₹ 8,000

Solution

Dr. Cash A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Capital a/c To Sales a/c	2,50,000 37,000		By Bank a/c By Furniture a/c By Purchase a/c By Salary a/c	1,20,000 35,000 15,000 7,500

Dr. **Bank A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c To Commission a/c To Mohit's a/c	1,20,000 3,000 15,000		By Deepak's a/c By Rent a/c	12,000 8,000

Dr. **Capital A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Cash a/c	2,50,000

Dr. **Furniture A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	35,000			

Dr. **Salary A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	7,500			

Dr. **Purchase A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c To Deepak's a/c	15,000 12,000			

Dr. **Deepak's A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	12,000		By Purchase a/c	12,000
		12,000			12,000

Dr. **Sales A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Cash a/c By Mohit's a/c	37,000 18,000

Dr. **Mohit's A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To sales a/c	18,000		By Bank a/c	15,000

Dr. **Commission Received A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Bank a/c	3,000

Dr. **Rent A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	8,000			

Balancing Ledger Accounts

Balancing implies taking the difference of sum total of debit amounts and sum total of credit amounts shown in a ledger account. When the debit total exceeds the credit total, it is called **debit balance**. On the contrary, when the credit total exceeds the debit total it is called **credit balance**. If after balancing the account, further posting is to be continued on the same page then we write **Balance c/d**. If posting is to be continued on the next page then we write **Balance c/f**.

Example 22 Show balancing of accounts by using the monetary transaction of Example 21.

Solution

Dr. **Cash A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Capital a/c	2,50,000		By Bank a/c	1,20,000
	To Sales a/c	37,000		By Furniture a/c	35,000
				By Purchase a/c	15,000
				By Salary a/c	7,500
				By Balance c/f[13]	1,09,500
		2,87,000			2,87,000

Explanation: Here sum total of debit side is ₹ 2,87,000 and the sum total of credit side before balancing is ₹ 1,77,500. Debit total is more by ₹ 1,09,500. Hence, cash account has a debit balance of ₹ 1,09,500.

Dr. **Bank A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	1,20,000		By Deepak's a/c	12,000
	To Commission a/c	3,000		By Rent a/c	8,000
	To Mohit's a/c	15,000			
				By Balance c/d[14]	1,18,000
		1,38,000			1,38,000

[13]It has been considered that the cash account will be continued on the next page after balancing.

[14]It has been considered that the bank account will be continued on the same page after balancing.

Dr. **Capital A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Cash a/c	2,50,000
	To Balance c/f	2,50,000			
		2,50,000			2,50,000

Explanation: Here credit total is ₹ 2,50,000 and on debit side there is no amount before taking the balance, credit is more by ₹ 2,50,000; therefore, capital a/c has credit balance of ₹ 2,50,000.

Dr. **Furniture A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	35,000			
				By Balance c/f	35,000
		35,000			35,000

Dr. **Salary A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	7,500			
				By Balance c/f	7,500
		7,500			7,500

Dr. **Purchase A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	15,000			
	To Deepak's a/c	12,000			
				By Balance c/f	27,000
		27,000			27,000

Dr. **Deepak's A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	12,000		By Purchase a/c	12,000
		12,000			12,000

Dr. **Sales A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Cash a/c	37,000
				By Mohit's a/c	18,000
	To Balance c/f	55,000			
		55,000			55,000

Dr. **Mohit's A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To sales a/c	18,000		By Bank a/c	15,000
				By Balance c/f	3,000
		18,000			18,000

Dr. **Commission Received A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Bank a/c	3,000
	To Balance c/f	3,000			
		3,000			3,000

Dr. **Rent A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	8,000			
				By Balance c/f	8,000
		8,000			8,000

Subdivision of Ledger

Business enterprises having large volume of transactions adopts the sub-division of ledger. This implies making at least three sections of the ledger: (i) Purchase Ledger, (ii) Sales Ledger and (iii) General Ledger. **Purchase ledger,** also called **creditor's ledger,** is maintained to record only the transactions related to creditors, i.e., relating to credit purchase and settlement of these accounts. **Sales ledger** also called **debtor's ledger** is maintained to record only the transactions related to debtors, i.e., relating to credit sales and settlement of these accounts. In the **general ledger** rest of the transactions are maintained.

To check the mathematical accuracy of ledger at the aggregate level, control accounts are opened in the general ledger. One control account for debtor's ledger namely **total debtor's account** and one control account for creditor's ledger namely **total creditor's account** is opened in the general ledger. With the help of these control accounts, the total effect of debtor's ledger and creditor's ledger is maintained in the general ledger that helps in balancing the trial balance of general ledger.

Memorandum Books and Accounts

These are the books of accounts maintained to keep the record of different transaction without following the double-entry system of recording the transaction. Different transactions are recorded in these books with the objective to keep a track of the transactions. The transactions recorded on memorandum basis need not to have corresponding credit effect for every debit effect and vice versa. *Discount column in the two-column and three-column cash book is prepared on memorandum basis.*

TRIAL BALANCE—MATHEMATICAL ACCURACY OF BOOKS OF ACCOUNTS

Trial balance is a statement showing summary of different accounts maintained in the ledger (general ledger). Trial balance is prepared to achieve several objectives, out of which the objective, i.e., checking mathematical accuracy of books of accounts is the paramount and prominent one. The total of debit column of trial balance must tally with the total of credit column of the trial balance. Trial balance is prepared at a regular interval by every business organization. This helps in checking and maintaining mathematical accuracy of books of accounts. Even, if trial balance tallies, there might be certain errors that still persist in the books of accounts. These errors might be

- Errors of omission
- Errors of principle
- Compensatory errors

Due to these errors, we say, *Agreeing of trial balance is only an elementary proof of mathematical accuracy of books accounts but not the final proof of accuracy of books of accounts*.

USEFUL INFO

Agreeing of trial balance is the elementary proof of mathematical accuracy of books of account but not the final proof.

While preparing books of accounts, certain errors might creep in. Out of these, afew of the errors affect the agreeing of trial balance and others do not affect the agreeing of trial balance. All these errors are identified and corrected by the process of cross verification and auditing. If due to certain errors there is a mismatch in the total of trial balance then the difference is temporarily shown to suspense account, and subsequently it is removed as soon as the errors are rectified.

Preparation of Trial Balance

Trial balance can be prepared by showing debit total as well as credit total of each of the accounts maintained in the ledger.

ERRORS IN BOOKS OF ACCOUNTS

While recording, posting or carrying an account from one page to another page, certain errors might take place. Out of these, errors might affect casting (totaling) of the trial balance, whereas certain other might not affect the casting of the trial balance. These errors are classified into two groups: (i) errors casting effect on the agreeing of trial balance and (ii) errors that do not cast effect on the agreeing of trial balance.

Errors not casting effect on the agreeing of trial balance:

- Errors of omission
- Errors of principle
- Errors of compensating nature (compensatory errors)

Errors casting effect on the agreeing of trial balance:

- Errors of commission
- Errors in wrong casting of accounts/books

Errors of Omission: These are the errors that occur when a transaction is completely omitted either at the recording stage or it is omitted completely at the time of posting. As it will have no effect on any side of the trial balance. therefore, it will not have any effect on the totaling (casting) of trial balance.

Errors of Principle: While recording a transaction, the account keeper (clerk/accountant) might pass the entry in the wrong account but with the same amount and on the same side. Such error will not have any effect on the casting of trial balance. These are also called clerical errors. For example, purchase of furniture of ₹ 90,000 is debited to purchase account with ₹ 90,000 instead of debiting furniture account with ₹ 90,000, and credit account is credited appropriately. Here the accountant has applied wrong principle of book-keeping. Actually, the furniture account should have been debited and not the purchase account, still it will not affect the totaling of trial balance.

Errors of Compensating Nature: When two or more errors hide the effect of each other then these errors collectively do not cast any effect on the totaling of trial balance. For example, purchase account was debited less by ₹ 500 but suppliers' account was credited correctly. At the same time, the commission received was credited less by ₹ 500 and the corresponding cash account was debited correctly. These two errors are hiding the effect of each another; therefore, these will not affect the agreeing of trial balance.

Errors of Commission: Partial omission in recording of transaction, posting of transaction are errors of commission. Here some mistake has been committed by an oversight or due to come carelessness. These errors affect the total of trial balance. For example, purchase of goods on credit journalized correctly but it was posted only to purchase account and was not posted to suppliers' account. Similarly, in credit sales of goods, sales account was debited to sales account instead of being credited, wrong casting of subsidiary books. These will affect the agreeing of trial balance, unless these are of compensatory nature.

Errors of Wrong Casting: Casting means totaling an account or subsidiary book. The total is made at the end of the account and sometimes total is carried forward from one page of an account to another page of the same account. This wrong casting will certainly have an effect on the agreeing of trial balance, unless it is of compensatory nature.

When the trial balance does not agree the temporary solution to match the trial balance is to show the difference to suspense account and match the trial balance.

But the most common approach is to show balance of each of the account maintained in the ledger. These balances are further used to prepare final accounts so as to have the measurement of profit/loss incurred for the year and have an assessment of different assets and liabilities at the end of the financial year.

The balances shown in the trial balance also serve as a ready reference. The closing balance of each of the account is shown in the trial balance. The amount is shown to the debit column of trial balance when an account has debit balance, whereas it is shown to the credit column when the balance is credit.

Rectification of Errors

Different errors whether affecting the casting of trial balance or not need to be rectified as soon as these get discovered during the process of verification and audit. Unless these are rectified, the financial statements will not disclose the accurate level of profit/loss. At the same time, assets and liabilities might not be shown at the correct value in the balance sheet. The rectification is carried out as and when errors are detected. The final accounts get prepared even if errors cannot be detected during the current accounting year, i.e., current financial year. In such situations, errors might be detected during the next financial year and accordingly, a rectification entry should be passed in the next financial year and profit/loss as well as assets and liabilities of the previous financial year should be reworked. This effect is disclosed exclusively in the annual report presented in the year in which errors are detected.

(*Rectification of errors has been discussed in detail in subsequent chapters.*)

Example 23 Taking the balances of accounts shown in the solution to Example 22, prepare Trial Balance.

Trial Balance

As on ....

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		1,09,500	
2	Bank a/c		1,18,000	
3	Capital a/c			2,50,000
4	Furniture a/c		35,000	
5	Salary a/c		7,500	
6	Purchase a/c		27,000	
7	Sales /ac			55,000
8	Mohit's a/c		3,000	
9	Commission Received a/c			3,000
10	Rent a/c		8,000	
	Total		**3,08,000**	**3,08,000**

CLOSING ENTRIES—CLOSING LEDGER ACCOUNTS

Closing ledger accounts means transferring the balance of different accounts to final accounts. Transfer of balance is executed by means of passing journal entry in the journal proper (general journal). This entry is called **closing entry**. After passing this entry, ledger accounts get closed. The effect of passing closing entries is that different revenue and expense accounts get closed and the closing balance of these accounts gets transferred either to trading account or to profit & loss account. The closing balance of different asset and liability accounts is shown in the balance sheet. The balances of different assets and liabilities are carried to the next accounting year.

(These have been discussed in details in the next chapter).

OPENING ENTRIES

Opening entry is passed in the beginning of the accounting year to bring in the opening balance of different asset and liability accounts in the ledger. Balances of assets and liabilities are continued from one accounting year to another accounting year until the account balance becomes zero. The opening entries are passed in journal proper. As assets always have debit balance and liabilities always have credit balance. Therefore, all the asset accounts are debited and liability accounts are credited to bring in the opening balance in the respective account.

(These have been discussed in detail in the next chapter.)

SOLVED EXAMPLES

Example 26 Record the following transactions in journal.

(i) Ramson started business with cash ₹ 8,50,000 and a machinery of ₹ 3,00,000

(ii) Deposited cash into bank ₹ 5,50,000

(iii) Purchased furniture of ₹ 1,74,500 and issued cheque

(iv) Purchased goods of ₹ 35,600

(v) Paid rent ₹ 9,400 by cheque
(vi) Received Commission ₹ 1,400
(vii) Sold goods for ₹ 54,300 and received cheque
(viii) Purchased stationery ₹ 650 in cash
(ix) Sold goods to Aman ₹ 23,000
(x) Purchased goods from Sohan ₹ 28,500
(xi) Paid salary ₹ 31,000 and insurance premium ₹ 10,000 by cheque
(xii) Paid advertising expenses ₹ 31,200 by cheque
(xiii) Received cheque of ₹ 22,800 from Aman and allowed discount of ₹ 200
(xiv) Issued cheque of ₹ 28,000 to Sohan and he allowed a discount of ₹ 500 to us.
(xv) Sold goods to Mohit of ₹ 56,700
(xvi) Paid freight charges for goods purchased ₹ 100
(xvii) Purchased goods from Kapil ₹ 14,000
(xviii) Mohit returned goods to us ₹ 1,700
(xix) Returned goods to Kapil ₹ 1,000
(xx) Sold an old machinery for ₹ 9,000 cost of machinery ₹ 10,000
(xxi) Mohit became insolvent and only ₹ 50,000 could be recovered from him.

Solution

Journal

Date	Particulars		V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
(i)	Cash a/c	Dr.			8,50,000	
	Machinery a/c	Dr.			3,00,000	
	To Owner's Capital a/c					11,50,000
	(Owner contributed cash and machinery to start the business)					
(ii)	Bank a/c	Dr.			5,50,000	
	To Cash a/c					5,50,000
	(Deposited cash into bank)					
(iii)	Furniture a/c	Dr.			1,74,500	
	To Bank a/c					1,74,500
	(Purchased furniture and issued cheque)					
(iv)	Purchase a/c	Dr.			35,600	
	To Cash a/c					35,600
	(Purchased goods in cash)					
(v)	Rent a/c	Dr.			9,400	
	To Bank a/c					9,400
	(Paid rent by cheque)					
(vi)	Cash a/c	Dr.			1,400	
	To Commission Received a/c					1,400
	(Received commission in cash)					
(vii)	Bank a/c	Dr.			54,300	
	To Sales a/c					54,300
	(Being sales of goods and received cheque)					

(*Contd*)

(*Contd*)

(viii)	Stationery a/c Dr. To Cash a/c (Purchased stationery in cash)			650	 650
(ix)	Aman's a/c Dr. To Sales a/c (Sold goods to Aman on credit)			23,000	 23,000
(x)	Purchase a/c Dr. To Sohan's a/c (Purchased goods on credit from Sohan)			28,500	 28,500
(xi)	Salary a/c Dr. Insurance Premium a/c Dr. To Bank a/c (Paid salary and insurance premium by cheque)			31,000 10,000	 41,000
(xii)	Advertising Expenses a/c Dr. To Bank a/c (Paid advertising expenses by cheque)			31,200	 31,200
(xiii)	Bank a/c Dr. Discount Allowed a/c Dr. To Aman's a/c (Received cheque from Aman and allowed him discount)			22,800 200	 23,000
(xiv)	Sohan's a/c Dr. To Bank a/c To Discount Received a/c (Paid by cheque to Sohan and he allowed us discount)			28,500	 28,000 500
(xv)	Mohit's a/c Dr. To Sales a/c (Sold goods to Mohit on credit)			56,700	 56,700
(xvi)	Freight Charges a/c Dr. To Cash a/c (Paid freight charges for goods purchased)			100	 100
(xvii)	Purchase a/c Dr. To Kapil's a/c (Purchased goods from Kapil on credit)			14,000	 14,000
(xviii)	Sales Return a/c Dr. Mohit's a/c (Mohit returned goods out of one sold to him)			1,700	 1,700
(xix)	Kapil's a/c Dr. To Purchase Return a/c (Out the goods purchased from Kapil some goods worth ₹ 1,000 returned to him)			1,000	 1,000

(*Contd*)

(*Contd*)

(xx)	Cash a/c Dr. Loss of sale of M/c a/c Dr. To Machinery a/c (Machinery costing ₹ 10,000 sold for ₹ 9,000)			9,000 1,000	 10,000
(xxi)	Bank a/c Dr. Bad Debts a/c Dr. To Mohit's a/c (received ₹ 50,000 from Mohit and written off bad debts ₹ 5,000)			50,000 5,000	 55,000
	Total			22,89,550	22,89,550

Example 27 Taking the data of Example 26, prepare ledger accounts and trial balance.

Solution

Dr. **Cash A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Capital a/c	8,50,000		By Bank a/c	5,50,000
	To Commission Received a/c	1,400		By Purchase a/c	35,600
				By Stationery a/c	650
	To Machinery a/c	9,000		By Freight a/c	100
				By Balance c/f	2,74,050
		8,60,400			8,60,400

Dr. **Bank A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	5,50,000		By Furniture a/c	1,74,500
	To Sales a/c	54,300		By Rent a/c	9,400
	To Aman's a/c	22,800		By Salary a/c	31,000
	To Mohit's a/c	50,000		By Insurance Premium a/c	10,000
				By Advertising Exp. a/c	31,200
				By Sohan's a/c	28,000
				By Balance c/f	3,93,000
		6,77,100			6,77,100

Dr. **Capital A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Cash a/c	8,50,000
				By Machinery a/c	3,00,000
	To Balance c/f	11,50,000			
		11,50,000			11,50,000

Dr. **Machinery A/C** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Capital a/c	3,00,000		By Cash a/c	9,000
				By Loss on sales of M/C a/c	1,000
				By Balance c/f	2,90,000
		3,00,000			3,00,000

Dr. Furniture A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	1,74,500		By Balance c/f	1,74,500
		1,74,500			1,74,500

Dr. Salary A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	31,000		By Balance c/f	31,000
		31,000			31,000

Dr. Insurance Premium A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	10,000		By Balance c/f	10,000
		10,000			10,000

Dr. Advertising Expense A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	31,200		By Balance c/f	31,200
		31,200			31,200

Dr. Bad Debts A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Mohit's a/c	5,000		By Balance c/f	5,000
		5,000			5,000

Dr. Purchase A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	35,600			
	To Sohan's a/c	28,500			
	To Kapil's a/c	14,000			
				By Balance c/f	78,100
		78,100			78,100

Dr. Stationery A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	650		By Balance c/f	650
		650			650

Dr. **Freight A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Cash a/c	100		By Balance c/f	100
		100			100

Dr. **Sohan's A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c To Discount Received a/c	28,000 500		By Purchase a/c	28,500
		28,500			28,500

Dr. **Discount Received A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Balance c/f	500		By Sohan's a/c	500
		500			500

Dr. **Discount Allowed A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Aman's a/c	200		By Sohan's a/c	200
		200			200

Dr. **Aman's A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Sales a/c	23,000		By Bank a/c By Discount Allowed a/c	22,800 200
		23,000			23,000

Dr. **Sales A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Balance c/f	1,34,000		By Bank a/c By Aman's a/c By Mohit's a/c	54,300 23,000 56,700
		1,34,000			1,34,000

Dr. **Mohit's A/C** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To sales a/c	56,700		By Sales Return a/c By Bad Debts a/c By Bank a/c	1,700 5,000 50,000
		56,700			56,700

Dr. Kapil's A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Purchase Return a/c	1,000		By Purchase a/c	14,000
	To Balance c/f	13,000			
		14,000			14,000

Dr. Commission Received A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Cash a/c	1,400
	To Balance c/f	1,400			
		1,400			1,400

Dr. Rent A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Bank a/c	9,400			
				By Balance c/f	9,400
		9,400			9,400

Dr. Sales Return A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Mohit's a/c	1,700			
				By Balance c/f	1,700
		1,700			1,700

Dr. Purchase Return A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
				By Kapil's a/c	1,000
	To Balance c/f	1,000			
		1,000			1,000

Dr. Loss on Sale of Machinery A/C Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
	To Machinery a/c	1,000			
				By Balance c/f	1,000
		1,000			1,000

Trial Balance

As on ....

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		2,74,050	
2	Bank a/c		3,93,000	
3	Capital a/c			11,50,000

(Contd)

(*Contd*)

4	Machinery a/c		2,90,000	
5	Furniture a/c		1,74,500	
6	Salary a/c		31,000	
7	Insurance Premium a/c		10,000	
8	Advertising Expense a/c		31,200	
9	Bad Debts a/c		5,000	
10	Purchase a/c		78,100	
11	Stationery a/c		650	
12	Freight a/c		100	
13	Discount a/c		200	500
14	Sales a/c			1,34,000
15	Commission Received a/c			1,400
16	Kapil's a/c			13,000
17	Rent a/c		9,400	
18	Sales Return a/c		1,700	
19	Purchase Return a/c			1,000
20	Loss on Sale of Machinery a/c		1,000	
	Total		**12,99,900**	**12,99,900**

Key Terms

Journal
Simple cash book
Trial balance
Real Accounts
Voucher
Drawings account
Trade discount
Subsidiary books
Two-column cash book
Final accounts
Nominal accounts
Bill
Journal folio
Cash discount
General ledger
Three-column cash book
Personal accounts
book-keeping
Capital account
Ledger folio

Final Recap

- **Books of accounts** comprise such set of books in which monetary transactions of business enterprises are recorded, classified and presented.
- **Journal** is the elementary book for maintaining monetary transactions of business at the elementary level.
- Accounts of different individuals and other business enterprises with whom the business enterprise does the transactions is called **personal accounts**.
- Accounts of all the assets are grouped as **real accounts**.
- Accounts of all the expenses, losses, revenue and profit are collectively grouped as **nominal accounts**.
- A **voucher or bill** is a written document evidencing a monetary transaction.
- Owner's contribution in the business is called **capital** that is like a liability for the business enterprise.
- **Journal folio** is the page number mentioned on each page of the journal.
- **Ledger folio** is the page number mentioned on each page of the ledger.

- **Trade discount** is like reduction in the sales price so as to pass on the margin to intermediary, it is given by one intermediary to another to maintain intermediary's margin also called dealer's margin.
- **Cash discount** is a tool to motivate the buyers to make the payment earlier than the due date; it helps in the speedy recovery of dues from customers.
- The difference between the total due amount and the amount paid is called **discount received**.
- The difference between the total amount to be received and the amount actually received is called **discount allowed.**
- **Bad debts** is a loss on account of non-recovery of dues from credit customers.
- The incidence of non-clearance of cheque is called **dishonour of cheque**. Dishonour of cheque is also called **bouncing of cheque**.
- **Subsidiary books** are maintained by a business enterprise to have segmentation of book-keeping activity.
- **Purchase Book:** It is used to record all the credit purchase of goods.
- **Sales Book:** It is used to record all the credit sales of goods.
- **Purchase Return Book:** It is used to record the purchase return of goods out of the goods purchased.
- **Sales Return Book:** It is used to record the sales return of goods out of the sales of goods.
- **Cash book** is used for keeping the record of all the transactions relating to cash receipts and cash payments of business enterprise.
- **Bank Book:** All the bank transactions are recorded in it.
- **Journal Proper:** The transactions that cannot be recorded in other subsidiary books are recorded in it by passing journal entry. Transactions, such as opening entries, closing entries, purchase and sale of fixed assets, providing depreciation and drawing of goods by owner. This is also called **general journal.**
- **Petty cash book** is a cash book to record petty expenses paid by the business enterprises.
- **General Ledger** is a book in which different accounts are maintained. It is also called **ledger** or '**Khaata Bahi**'.
- **Balancing an account** implies taking the difference of sum total of debit amounts and sum total of credit amounts shown in a ledger account.
- **Memorandum books** of accounts are the books of accounts maintained to keep the record of different transaction without following the double-entry system of recording the transaction.
- **Trial balance** is not an account but a statement showing summary of different accounts maintained in the ledger.
- **Errors of Omission**: These are the errors that occur when a transaction is completely omitted either at the recording stage or it is omitted completely at the time of posting.
- **Errors of Principle**: While recording a transaction the account keeper (clerk/accountant) might pass the entry in the wrong account but with the same amount and on the same side. Such error will not have any effect on the casting of trial balance. These are also called ***clerical errors***.
- **Errors of Compensating Nature**: When two or more errors hide the effect of each other then these errors collectively do not cast any effect on the totaling of trial balance.
- **Errors of Commission**: Partial omission in recording of transaction, posting of transaction are **errors of commission**.
- **Errors of Wrong Casting**: Casting means totaling an account or subsidiary book. The total is made at the end of the account and sometimes total is carried forward from one page of an account to another page of the same account wrong totalling results into error of casting.
- Closing ledger accounts means transferring the balance of different accounts to final accounts. Transfer of balance is executed by means of passing journal entry in the journal proper (general journal), this entry is called **closing entry**.
- **Opening entry** is passed to bring in the opening balance of different asset and liability accounts in the ledger.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Which of the following statements is not true about capital account?
   (a) It is a representative personal account.
   (b) It is a liability for business enterprise.
   (c) It is a real account.
   (d) None of these.
2. Which of the following statements is true about drawings account?
   (a) It is a representative personal account.
   (b) It is a liability for business enterprise.
   (c) It is an expense account.
   (d) It is revenue for business.
3. Trade discount is provided by seller. Which of the following statements is true about it?
   (a) It is not recorded in the books of accounts.
   (b) It is given if payment is made in time.
   (c) It is shown in the balance sheet.
   (d) It is shown in the Profit and Loss a/c.
4. Cash discount is provided by seller. Which of the following statements is true about it?
   (a) It is not recorded in the books of accounts.
   (b) It is given if payment is made in time.
   (c) it is shown in the balance sheet.
   (d) It is shown in the trading account.
5. In a transaction, 'Purchased furniture on credit', which of the following accounts will be affected?
   (a) Purchase a/c and suppliers' a/c
   (b) Furniture a/c and suppliers' a/c
   (c) Purchase a/c and cash a/c
   (d) Furniture a/c and cash a/c
6. In a transaction, 'Purchased goods on credit', which of the following accounts will be affected?
   (a) Purchase a/c and suppliers' a/c
   (b) Furniture a/c and suppliers' a/c
   (c) Purchase a/c and cash a/c
   (d) Furniture a/c and cash a/c
7. In a transaction, 'Sold goods to Mohit' and 'Received cheque', which of the following accounts will be affected?
   (a) Sales a/c and customer's a/c
   (b) Sales a/c and suppliers' a/c
   (c) Sales a/c and cash a/c
   (d) Sales a/c and bank a/c
8. In a transaction, 'Sold goods to Mukesh', which of the following accounts will be affected?
   (a) Sales a/c and Mukesh's a/c
   (b) Sales a/c and Cash a/c
   (c) Sales a/c and Bank a/c
   (d) None of these
9. In a three-column cash book, which of the following transactions will be recorded?
   (a) Credit purchase of goods
   (b) Issue of cheque to supplier
   (c) Credit sales of goods
   (d) All of these
10. In a two-column cash book, which of the following transactions will be recorded?
    (a) Credit purchase of goods
    (b) Issue of cheque to supplier
    (c) Credit sales of goods
    (d) Cash payment to supplier
11. In a purchase day book, which of the following transactions will be recorded?
    (a) Credit purchase of goods
    (b) Issue of cheque to supplier
    (c) Credit sales of goods
    (d) Cash payment to supplier
12. In a sales day book, which of the following transactions will be recorded?
    (a) Credit purchase of goods
    b) Issue of cheque to the supplier
    (c) Credit sales of goods
    (d) Cash payment to the supplier
13. In a journal proper, which of the following transactions will be recorded?
    (a) Credit purchase of goods
    (b) Credit purchase of assets
    (c) Credit sales of goods
    (d) Cash payment to supplier

14. Which of the following is not applicable for discount column of two-column cash book?
    (a) At the end of the period, its balance is calculated.
    (b) Debit discount column is discount received.
    (c) Credit discount column is discount allowed.
    (d) None of these.
15. Agreeing of trial balance implies
    (a) Final proof of accuracy of books of accounts
    (b) Elementary proof of accuracy of books of accounts
    (c) Both of these
    (d) Neither of these

Descriptive Questions

1. "Agreeing of trial balance is the elementary proof of mathematical accuracy of books of account but not the final proof." Discuss.
2. Write short notes on the following:
    (a) Capital account and drawings account
    (b) Trade discount vs cash discount
    (c) Petty cash book
    (d) Closing entries

Numerical Problems

1. Pass necessary journal entries in the journal for the following transactions:

Date	**Transaction**
April 1	Owner started business with cash ₹ 6,00,000
April 2	Purchased furniture of ₹ 2,00,000 in cash
April 3	Purchased goods from Deepak in cash ₹ 1, 50,000
April 6	Paid wages ₹ 23,000
April 7	Paid rent for the month ₹ 16,500
April 8	Sold goods for ₹ 43,500
April 9	Received commission ₹ 2,250
April 10	Paid ₹ 12,200 as Advertising Expenses
April 11	Sold goods to Anil in cash ₹ 1,85,000
April 15	Paid carriage outward ₹ 1,700
April 18	Purchased goods from Rohan ₹ 33,000
April 22	Sold goods to Anil in cash ₹ 82,500
April 26	Paid telephone bill for the month ₹ 1,500
April 29	Paid electricity bill for the month ₹ 800, and salary ₹ 25,000
April 30	Owner withdrew ₹ 3,000 for his/her personal use

2. Pass necessary journal entries in the journal for the following transactions:

Date	**Transaction**
2010	
January 1	Deepak started business with cash ₹ 4,50,000 and machinery worth ₹ 3,50,000
January 2	Deposited cash into bank ₹ 3,30,000
January 3	Purchased furniture in cash ₹ 42,000
January 3	Purchased equipment of ₹ 65,000 and issued cheque
January 4	Purchased goods from Ramesh and issued cheque ₹ 29,000

January 5	Purchased goods from Ram of ₹ 22,500
January 6	Paid rent for the month ₹ 13,000 by cheque
January 7	Sold goods in cash ₹ 83,500 to Mukesh
January 8	Sold goods of ₹ 88,000 to Naveen
January 12	Purchased stationery of ₹ 5,400
January 14	Paid wages ₹ 19,500 by cheque
January 16	Received cheque from Naveen ₹ 30,000
January 19	Issued cheque to Ram ₹ 22,500
January 22	Purchased machinery of ₹ 1,90,000 and issued cheque
January 25	Owner withdrew ₹ 13,000 from bank for his personal use
January 27	Deposited cash into bank ₹ 25,000
January 28	Paid salary by cheque ₹ 45,000
January 29	Paid insurance premium in cash ₹ 4,300
January 30	Withdrew cash from bank ₹ 10,000

3. ABC Ltd sold goods of MRP ₹ 39,000 to Nitish at 25% trade discount. The terms of credit sales were '1/14 net 30'. Nitish makes the payment within 10 days. Show the journal entry for this transaction, in the books of ABC Ltd and books of Nitish.
4. GK Ltd sold goods of MRP ₹ 50,000 to Nitish at 15% trade discount in cash. Show the journal entry for this transaction, in the books of GP Ltd and books of Nitish.
5. Sold goods of ₹ 40,000 to Mahesh. Subsequently received cash from Mahesh ₹ 39,800 in the final settlement of his account. Purchased goods from Deepak of ₹ 80,000. Subsequently issued a cheque of ₹ 79,500 to Deepak and he allowed discount ₹ 500. Show how these transactions will appear in the cash book.
6. A business enterprise gave away goods costing ₹ 10,000; 5,500; 3,400, respectively as free sample, as charity and for personal use of owner. Pass journal entry.
7. P.D. Enterprises executed the following transactions:

Date	**Transactions**
2010	
April 3	Started business with cash ₹ 11,35,000
April 7	Paid rent for the month ₹ 1,15,000
April 10	Deposited cash into bank ₹ 7,55,000
April 15	Purchased goods and issued cheque ₹ 81,350
April 17	Purchased furniture and issued cheque ₹ 99,500
April 29	Cash sales for the month ₹ 3,01,000
April 30	Paid salary ₹ 23,900 and Insurance premium ₹ 6,400 by cheque
May 7	Paid rent for the month by cheque ₹ 1,15,000
May 9	Paid commission ₹ 13,400 by cheque
May 15	Received commission by cheque ₹ 51,100
May 18	Paid wages ₹ 43,500
May 19	Sold goods to Manav of ₹ 1,20,000
May 20	Paid telephone bill by cheque ₹ 11,650
May 21	Paid electricity bill in cash ₹ 8,550
May 22	Sold goods to Anukalp of ₹ 80,000
May 23	Purchased goods from Nandan ₹ 45,000
May 23	Sold goods to Anukalp of ₹ 10,500 in cash
May 24	Received cheque from Anukalp ₹ 79,500 in the final settlement of his Account
May 25	Issued cheque of ₹ 24,000 to Nandan and he allowed a discount of ₹ 1,000
May 28	Anukalp's cheque was dishonoured and bank charged bank charges ₹ 50

May, 29	Purchased stationery of ₹ 500
May 30	Manav became insolvent; only ₹ 70,000 could be recovered from him.

Pass journal entries for the above transactions in the journal.

8. M/s Sunder Enterprise executed the following transactions. Record these in the purchase book.

Date	Invoice No.	Transaction
12/5/10	102	Goods of MRP ₹ 75,000 purchased from Naveen Enterprises at 20% trade discount
16/5/10	207	Goods of MRP ₹ 55,000 purchased from Satish Enterprises at 10% trade discount
20/5/10	111	Goods costing ₹ 19,000 purchased in cash from Naveen Enterprises
21/5/10	306	Goods costing ₹ 10,000 purchased from Telelink Ltd

9. M/s Samsung Enterprise executed the following transactions. Record these in the sales book.

Date	Invoice No.	Transaction
13/5/10	109	Goods of MRP ₹ 1,00,000 sold to Nitish Enterprises at 20% trade discount
16/5/10	110	Goods of MRP ₹ 1,49,500 sold to Ram Enterprises at 10% trade discount
22/5/10	111	Goods of value ₹ 1,400 sold to Nitish Enterprises
24/5/10	112	Goods of value ₹ 1,16,500 sold to Simson Ltd

10. M/s Samsung Enterprise executed the following transactions. Record these in the purchase return book.

Date	Invoice No.	Transaction
14/5/10	007	Goods valuing ₹ 11,100 returned to Naveen Enterprises
19/5/10	008	Goods of cost ₹ 3,900 returned to Satish Enterprises

11. M/s Sunder Enterprise executed the following transactions. Record these in the sales return book.

Date	Invoice No.	Transaction
21/5/10	131	Goods of value ₹ 15,000 return by Nitish Enterprises
26/5/10	133	Goods of value ₹ 1,900 returned by Ram Enterprises
01/6/10	142	Goods of value ₹ 7,500 returned by Simson Ltd

12. D.S. Enterprises executed the following transactions:

Date	Transactions
2010	
April 3	Started business with cash ₹ 2,35,000
April 7	Paid rent for the month ₹ 5,000
April 10	Deposited cash into bank ₹ 50,000
April 15	Purchased goods in cash of ₹ 11,350
April 17	Purchased furniture of ₹ 19,000
April 29	Cash sales for the month ₹ 2,80,000
April 30	Paid salary ₹ 31,400 and Insurance premium ₹12,400
May 7	Paid rent for the month ₹ 5,000
May 9	Paid commission ₹ 13,400 in cash
May 15	Received commission in cash ₹ 11,100
May 18	Paid wages ₹ 13,500
May 19	Sold goods to Mayank of ₹ 70,000
May 23	Sold goods to Anu of ₹ 60,800 in cash
May 24	Received cash from Mayank ₹ 70,000
May 29	Purchased stationery of ₹ 1,500

Record these transactions in subsidiary books. Post them to ledger accounts and prepare trial balance.

13. P.P. Enterprises executed the following transactions:

Date	Transactions
2010	
June 1	Opening cash in hand ₹ 2,30,500
June 3	Paid rent for the month ₹ 15,900
June 4	Sold goods in cash ₹ 1,13,400
June 7	Received cash from Deepak ₹ 19,850 and allowed him a discount ₹ 150
June 10	Paid wages ₹ 43,400
June 15	Paid to Amit ₹ 54,200 and he allowed us a discount of ₹ 300
June 18	Received commission ₹ 1,800
June 24	Purchased equipments of ₹ 72,400
June 26	Paid to Gopal ₹ 17,800

Record these transactions in subsidiary books. Post them to ledger accounts and prepare trial balance.

14. N.D. Enterprises executed the following transactions:

Date	Transactions
2010	
April, 01	Cash in hand ₹ 1,70,500 and Bank balance ₹ 85,000
April, 02	Paid rent for the month ₹ 25,000 by cheque
April, 10	Deposited cash into bank ₹ 30,000
April, 11	Sold goods and received cheque ₹ 1,90,000
April, 15	Purchased goods and issued cheque ₹ 51,350
April, 17	Purchased furniture and issued cheque ₹ 29,500
April, 18	Received cheque from Manav ₹ 33,500 and allowed discount ₹ 500
April, 19	Paid to Deepak by cheque ₹ 19,400 and he allowed discount 600
April, 20	Received commission in cash ₹1,700
April, 21	Paid cash to Mohan ₹ 11,900 and he allowed discount ₹ 100
April, 24	Received cash from Amit ₹ 12,800 and allowed him discount ₹ 200
April, 29	Withdrew cash from bank ₹ 32,000
April, 30	Paid salary ₹ 53,400 and Insurance premium ₹ 12,400 by cheque

Prepare ledger accounts and trial balance.

15. Pass journal entries for the following transactions:
   (i) Purchased machinery from Lohia Ltd of ₹ 1,20,000
   (ii) Purchased furniture from Gulab Enterprises of ₹ 35,000
   (iii) Paid to Lohia Ltd by cheque ₹ 1,20,000
   (iv) Write off depreciation on machinery ₹ 3,000

16. Show direct posting to ledger account for the following transactions and prepare trial balance:
   (i) Ramesh started business with cash ₹ 2,50,000
   (ii) Deposited cash into bank ₹ 1,20,000
   (iii) Purchased furniture for ₹ 35,000 in cash
   (iv) Purchased goods from Deepak of ₹ 15,000 in cash
   (v) Purchased goods from Deepak of ₹ 12,000
   (vi) Paid salary for the month ₹ 7,500
   (vii) Sold goods to Mohan of ₹ 37,000 in cash
   (viii) Sold goods to Mohit of ₹ 18,000
   (ix) Received commission ₹ 3,000 by cheque
   (x) Paid to Deepak ₹ 12,000 by cheque
   (xi) Received cheque from Mohit of ₹ 18,000
   (xii) Paid rent for the month by cheque ₹ 8,000

Answers

Multiple Choice Questions

1. (c)	2. (a)	3. (a)	4. (b)	5. (b)	6. (a)	7. (d)	8. (a)	9. (b)	10. (d)
11. (a)	12. (c)	13. (b)	14. (d)	15. (b)					

Numerical Problems

1. Total of journal: ₹ 13,79,950
2. Total of journal: ₹18,37,700
3. Final cash payment: ₹ 28,957.50; cash discount: ₹ 292.50
4. Transaction to be recorded at ₹ 42,500
5. Cash debit by ₹ 39,800 and bank credit by ₹ 79,500, discount allowed ₹ 200 and discount received ₹ 500
6. Purchase to be credited by ₹ 18,900
7. Total of journal: ₹ 33,20,900
8. Purchase: ₹ 1,38,500 (credit purchase 1,19,500)
9. Sales: ₹ 3,32,450
10. Purchase return: ₹ 15,000
11. Sales return: ₹ 24,400
12. Total of trial balance: ₹ 6,56,900
13. Opening capital: ₹ 1,78,200
14. Opening capital: ₹ 2,70,500
15. Machine a/c balance: ₹ 1,17,000; furniture a/c balance: ₹ 35,000
16. Total of trial balance: ₹ 3,08,000

CASE

Tallied Trial Balance: A Myth or Reality

Gypsy Enterprises (GE) producing high quality low cost housekeeping instruments was started by an engineer. Jagson introduced the initial capital of ₹ 10,00,000 in cash and a machine costing ₹ 3,50,000. Before the formal inauguration of the business, Jagson executed the following transactions:

(i) Purchased furniture and fixtures for business costing ₹ 1,85,000,

(ii) Paid preliminary expenses ₹ 90,000. On market survey, he believed that these expenses will generate the economic benefits within the four years' time.

(iii) Purchased equipment costing ₹ 2,25,000

(iv) He also purchased a second-hand car at a cost of ₹ 2,10,000. The car was expected to have a life of eight years with a salvage value of ₹ 50,000 at the end. Further, he expected to use the car for business purpose as well as for his personal use in 2:3, respectively.

After incurring these expenses, he was left out with a cash balance of ₹ 3,10,000 only. The inaugural day of the business was really lucky for him. On this day, he got appointed as Senior Engineer in a multinational company. Therefore, he appointed Paul as Manager-cum-Accountant to manage the business activities. Paul executed the business activities as per the guidelines set by Jagson and presented the following trial balance:

Trial Balance
As on March 31, 2010

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		74,000	
2	Bank a/c		93,000	
3	Capital a/c			3,10,000
4	Building a/c		2,90,000	
5	Patents a/c		1,74,500	
6	Salary a/c		31,000	
7	Insurance Premium a/c		10,000	
8	Advertising Expense a/c		31,200	
9	Bad Debts a/c		5,000	
10	Purchase a/c		78,100	
11	Stationery a/c		650	
12	Freight a/c		100	
13	Discount a/c		200	500
14	Sales a/c			4,88,000
15	Commission Received a/c			1,500
16	Car Expenses a/c		11,000	
17	Commission a/c		1,250	
	Total		**8,00,000**	**8,00,000**

By looking at the trial balance, Jagson was surprised and asked to explain the details of the monetary transactions. Paul cross-checked all the accounts and reported back saying thereby that all the records were complete and perfect. He supported his argument with the fact that the trial balance had tallied. Therefore, there is no possibility of any mistake in the books of account. Jagson, however, was not convinced by Paul's reply.

Discussion Question

1. Jagson has appointed you to verify the books of accounts. You have to come up with a true view of the financial position of the Gypsy Ltd.

CHAPTER

5

Completion of Accounting Cycle

Learning Objectives

After reading this chapter, you will be able to

- Rectify errors in books of account
- Make adjustments in final accounts
- Understand provision for depreciation and provision for doubtful debts
- Gain an insight into the mechanism of preparing final accounts (manufacturing account, trading account, profit and loss account, profit and loss appropriation account and balance sheet)

Balance Sheet—Conceals More Than What it Reveals

Balance sheet is a static statement prepared to depict the assets and liabilities at the end of the year. In practice, there are certain assets and liabilities which might have performed their role in earning the income throughout the financial year but are not shown in the balance sheet because these do not exist any more on the date of balance sheet.

While analysing financial results as depicted by the final accounts in light of balance sheet, this fact is much more important. Then only true and fair view of the financial performance can be portrayed. This can be done by analysing **schedules forming part of accounts** as depicted in the annual report of the company. These schedules contain details about monetary transactions which were dealt throughout the year. Therefore, these schedules are important tools for analysing final accounts—financial statements.

INTRODUCTION

The accounting cycle gets completed by the preparation of final accounts—Profit and Loss Account and Balance Sheet. These accounts are prepared by using the account balances shown in the trial balance. The scholars have learnt about the trial balance and its preparation in detail in the previous chapter. Different account balances as shown in the trial balance are classified into assets, expenses, losses, liabilities, revenue and profit items. Completion of accounting cycle involves the following steps:

- Rectification of errors
- Adjustment entries
- Closing entries
- Preparation of final accounts—manufacturing account, trading account, profit & loss account and balance sheet.

RECTIFICATION OF ERRORS

Although matching of trial balance is the elementary proof of mathematical accuracy of books of accounts, it is not the final proof of accuracy.

Whether a trial balance matches or not, there might remain certain errors in the books of accounts. These are errors of omission, principle and of compensating nature, errors of commission are errors due to wrong casting of accounts/books. (Details about these errors have been given in the previous chapter.)

Accounting cycle gets completed with the preparation of final accounting—income statement and balance sheet.

USEFUL INFO

Different types of errors in books of accounts

- Errors of omission • Errors of principle • Errors of compensating nature (Compensatory errors)
- Errors of commission • Errors in wrong casting of accounts/books

Different errors whether affecting the casting of trial balance or not need to be rectified as soon as these get discovered during the process of verification and audit. Unless these are rectified, the financial statements will not disclose accurate level of profit/loss at the same time assets and liabilities might not be shown at the correct value in the balance sheet. The rectification is carried out as and when errors are detected. The final accounts get prepared even if errors do not get detected during the current accounting year, i.e., current financial year. In such situation, errors might be detected during the next financial year and accordingly, a rectification entry should be passed in the next financial year and profit/loss as well as assets and liabilities of the previous financial year should be reworked before preparing the final accounts of the year in which errors of the previous year are detected.

Suspense Account

When the total of trial balance does not agree, the difference is posted to the suspense account. If the debit total is less than the credit total then the suspense account is debited; on the contrary, if the credit total is less than the debit total, the suspense account is credited.

Debit balance of suspense account is shown on the asset side and credit balance of suspense account is shown on the liability side of balance sheet.

This suspense account is affected at the time of rectification of errors. Errors might take place at different stages, such as at the stage of (i) recording of transactions, (ii) posting of transactions in ledger accounts and (iii) balancing of accounts.

ILLUSTRATION Total of purchase book was under casted by ₹ 1,000 but the posting to individual accounts of suppliers was done correctly. This is an **error of wrong casting** as an error in totalling has taken placed. The total of purchase book is posted to the debit of purchase account and individual accounts of suppliers are credited with the respective amount. This error has effect on only purchase account and not on the individual accounts of suppliers. Therefore, it the error affecting only one account, i.e., purchase account.

The purchase account has been debited less by ₹ 1,000. Therefore, the rectification entry should be

Purchase a/c	Dr.	1,000	
To Suspense a/c			1,000

(Under casting of purchase book by ₹ 1,000 now rectified)

ILLUSTRATION Balance of cash column of cash book was overcastted by ₹ 2,000. This error is also **one-sided error**—error affecting only one account. This is also an error of **wrong casting.** The balance of cash column is always debit balance and it is higher by ₹ 2,000, which means that the cash account has been debited more by ₹ 2,000.

To rectify this error, we need to credit cash account and the suspense account is to be debited.

Suspense a/c	Dr.	2,000	
To Cash a/c			2,000

(Overcasting of cash column of cash book by ₹ 2,000 now rectified)

> Error in making wrong total accounts is called **error of wrong casting**, whereas error in making wrong posting or in wrong account is called **error of commission**.

ILLUSTRATION Total of debit side discount column of cash book ₹ 650 was posted wrongly to the credit of discount allowed account. This is an error of commission as by mistake entry has been done to the credit of the account instead of debit side. This is also an error affecting only the discount allowed account; it is to be rectified as follows:

The debit discount column represents discount allowed. Accordingly, the discount allowed is to be debited with this total, but here instead of debiting, it has been credited. The rectification is to be done with double the amount one to nullify the effect of error and another to have the actual effect.

Discount Allowed a/c	Dr.	1,300	
To Suspense a/c			1,300

(Posting to the wrong side of discount allowed account now rectified)

ILLUSTRATION Cheque of ₹ 5,400 received from Ramesh entered correctly in the cash book but by mistake, it was credited to Ram's account. Here, Ramesh account has not been affected at all, which should have been credited, whereas Ram's has been credited wrongly. The rectification will be as follows:

Ram's a/c	Dr.	5,400	
To Ramesh's a/c			5,400

(Ram's account wrongly credited instead of Ramesh's account now rectified.)

Rectification of Errors before Preparing Final Accounts

Books of accounts might have both the category of errors as discussed earlier. If these errors get detected before the preparation of final accounts then the process of rectification is as follows:

Step 1: Identify the accounts that have been debited/credited wrongly with the amount of such wrong debit and credit.

Step 2: Identify what should have been the correct entry/posting along with the correct amount.

Step 3: Debit/credit the account that should have been done as per step 2 and undo the wrong effect as identified in the step 1. If the sum total of journal entry does not match then the difference is to be debited/credited to the suspense account.

Example 1 An accountant prepared the trial balance and short total ₹ 31,700 on debit side was debited to suspense account. Subsequently, before the preparation of final accounts, the following errors were detected:

(i) Debit side bank column of cash book was under totalled by ₹ 150.
(ii) A credit sales of ₹ 3,000 to Deepak was posted correctly to sales account but it was posted to the credit side of Deepak's account.
(iii) Total of purchase book ₹ 13,000 was posted to the credit of sales account.
(iv) Credit sales of goods ₹ 4,500 to Mukesh was wrongly entered in purchase day book.
(v) Total of credit side discount column of cash book ₹ 240 was posted to the credit of discount allowed account.
(vi) Credit purchase ₹ 1,500 from Dilip entered correctly in the purchase day book but it was posted to credit of his account with ₹ 1,050.

Solution **Rectification of error (i):** Here only one account has been affected. The bank account has been debited less by ₹ 150. Now by debiting bank account by ₹ 150 and crediting suspense account by ₹ 150, the rectification entry will be

Bank a/c	Dr.	150	
To Suspense a/c			150

(Under totalling of debit side of bank column of cash book now rectified)

Rectification of error (ii): For credit sales, the customer's account should be debited but here customer's account, i.e., Deepak's account has been credited. Therefore, Deepak's account has been credited by ₹ 3,000 instead of being debited by ₹ 3,000. Now to rectify it, we should debit Deepak's account by ₹ 6,000. The rectification entry will be

Deepak's a/c	Dr.	6,000	
To Suspense a/c			6,000

(Posting to the wrong side of Deepak's account by ₹ 3,000 now rectified)

Rectification of error (iii): Total of purchase book is debited to the purchase account but here instead of purchase account being debited by ₹ 13,000, sales account has been credited wrongly by ₹ 13,000. The rectification can be to debit sales account by ₹ 13,000, debit purchase account by ₹ 13,000 and suspense account is to be credited with ₹ 26,000. The entry will be

Sales a/c	Dr.	13,000	
Purchase a/c	Dr.	13,000	
To Suspense a/c			26,000

(Total of purchase book credited wrongly to sales account now rectified)

Rectification of error (iv): Credit sales is to be entered in the sales day book but here it has been entered in purchase day book. The rectification can be viewed as follows:

Wrong Entry	Correct Entry that should have been	Rectification Entry
Dr. Purchase a/c 4,500 Cr. Sundry Creditors' a/c 4,500 (Mukesh's a/c)	Dr. Sundry Debtor's (Mukesh's) a/c 4,500 Cr. Sales a/c 4,500	Sundry Creditor's a/c Dr. 4,500 Sundry Debtor's a/c Dr. 4,500 To Purchase a/c 4,500 To Sales a/c 4,500

The rectification entry will be

Sundry Creditor's (Mukesh's) a/c	Dr.	4,500	
Sundry Debtor's (Mukesh's) a/c	Dr.	4,500	
To Purchase a/c			4,500
To Sales a/c			4,500

(Credit sales wrongly entered to purchase day book now rectified)

Rectification of error (v): Credit discount column of cash book represents the discount received and it is to be credited to the discount received account but here by mistake discount allowed account has been credited. The rectification entry will be

Discount Allowed a/c	Dr.	240	
To Discount Received a/c			240

(Posting of discount received wrongly to the credit of discount allowed a/c now rectified.)

Rectification of error (vi): Here purchase account has been debited with correct amount but personal account of Dilip has been credited correctly but with less by ₹ 450 (1,500 − 1,050). To rectify it, we need to credit Dilip's account by ₹ 450 and debit the suspense account. The rectification entry will be

Suspense a/c	Dr.	450	
To Dilip's a/c			450

(Credit to Dilip's a/c by 1,050 instead of 1,500 now rectified)

After these rectifications, we should prepare suspense account, which is as follows:

Dr. **Suspense A/C** **Cr.**

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
	To Balance b/f	31,700		By Bank a/c	150
	To Dilip's a/c	450		By Deepak's a/c	6,000
				By Purchase a/c	13,000
				By Sales a/c	13,000
		32,150			32,150

EXAMPLE 2 Trial balance showed debit excess by ₹ 10,000. It was put to suspense account. At a later date before the preparation of final accounts, the following errors were found in the books of accounts. Rectify these accounts and prepare suspense account.

(i) Cheque of ₹ 1,700 received from a customer Mahesh was recorded in the cash book by ₹ 1,070.

(ii) Cash payment of wages ₹ 700 entered correctly in the cash book but it was not posted to wages.

(iii) Depreciation charged on building ₹ 20,000 was not debited to the depreciation account.

(iv) Wages paid for the construction of building ₹ 35,000 debited to the wages account.
(v) Rent received in cash ₹ 1,400 entered to the credit of sales account by ₹ 140.
(vi) Cash sale of furniture ₹ 2,000 wrongly entered to the sales account.
(vii) Credit sales of ₹ 3,500 to Mohit entered correctly in the sales day book but it was posted to the credit of Mohit's account by ₹ 3,050.

Solution We will solve the question by the following three steps mentioned earlier.

Rectification Entry (i): This is an error of commission.

S. No.	Wrong Effect	Correction to be Done
(i)	(a) Cash a/c is debited correctly but less by ₹ 630 (1,700 − 1,070) (b) Mahesh's a/c is credited correctly but less by ₹ 630 (1,700 −1,070)	Now we shall debit cash by ₹ 630 and credit Mukesh's a/c by ₹ 630

Cash a/c	Dr.	630	
To Mukesh's a/c			630

Rectification Entry (ii): This is the error of partial omission.

S. No.	Wrong Effect	Correction to be Done
(ii)	Wages account has not been debited. Only one account is involved	Debit wages a/c by ₹ 700 and credit suspense a/c by ₹ 700

Wages a/c	Dr.	700	
To Suspense a/c			700

Rectification Entry (iii): This is the error of partial omission.

S. No.	Wrong Effect	Correction to be Done
(iii)	Here, it is assumed that the building account has been credited correctly but only depreciation has not been debited.	Debit Depreciation a/c by 20,000 and credit suspense a/c by 20,000

Depreciation a/c	Dr.	20,000	
To Suspense a/c			20,000

Errors which creep in because of wrong interpretation of accounting principles are the **errors of principle.** These do not affect the matching of trial balance.

Rectification Entry (iv): This is an error of principle.

S. No.	Wrong Effect	Correction to be Done
(iv)	Here wages account has been debited instead of building account.	Credit wages a/c by 35,000 and Debut building a/c by 35,000

Building a/c	Dr.	35,000	
To Wages a/c			35,000

Rectification Entry (v): This is an error of principle.

S. No.	Wrong Effect	Correction to be Done
(v)	Rent received ₹ 1,400 has not been credited to Rent received a/c and Sales account has been credited wrongly by ₹ 140.	Debit Sales a/c by 140 Credit Rent Received a/c by 1,400 Debit Suspense a/c by 1,260 (1,400 – 140)

Sales a/c	Dr.	140	
Suspense a/c	Dr.	1,260	
To Rent Received a/c			1,400

Rectification Entry (vi): This is an error of principle.

S. No.	Wrong Effect	Correction to be Done
(vi)	Here furniture account has not been credited; instead sales account has been credited. It has been assumed that cash account has been debited correctly.	Debit sales account by 2,000 Credit furniture account by 2,000

Sales a/c	Dr.	2,000	
To Furniture a/c			2,000

Rectification Entry (vii)

S. No.	Wrong Effect	Correction to be Done
(vii)	Mohit's a/c has been credited by ₹ 3,050 instead of being debited by ₹ 3,500.	Now debit Mohit's a/c by ₹ 3,050 to correct the mistake another debit to his account by ₹ 3,500 that should have been done. Therefore, Debit Mohit's a/c by 6,550 Credit Suspense a/c by 6,550

Mohit's a/c	Dr.	6,550	
To Suspense a/c			6,550

Dr. **Suspense A/C** **Cr.**

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
	To Rent Received a/c	1,260		By Balance b/f	10,000
				By Wages a/c	700
				By Depreciation a/c	20,000
	To Balance c/f	35,990		By Mohit's a/c	6,550
		37,250			37,250

Note: Debit excess in the trial balance implies credit balance of suspense a/c.
There still exists the balance of suspense account it implies that there are more errors yet to be rectified.

Rectification of Errors in the Subsequent Financial Year

When errors do not get detected during the current financial year before the preparation of final accounts, the final accounts get prepared but the profit/loss and assets and liabilities shown in these accounts are not accurate. These errors are rectified during the subsequent financial year as and when detected. These are also called **errors detected in subsequent period**. The fundamental of rectification in the subsequent financial year is as follows:

(i) The errors in which **nominal accounts** (revenue and expenses) have been affected need not to be debited/credited instead profit and loss appropriation account is to be debited/credited instead of these nominal accounts. This is done because the net effect of previous financial year's nominal account has been reflected in the opening balance of profit and loss appropriation account.

(ii) The errors in which **asset and liability accounts** have been affected are debited/credited because previous financial years' balances of these accounts are brought forward to the subsequent financial year.

(iii) If on account of rectification debit total of a rectification entry does not match with the credit total then the **suspense account** is affected with the difference.

EXAMPLE 3 An accountant prepared the trial balance and short total ₹ 35,630 on debit side was debited to suspense account. The following errors were detected during the next financial year. Show how these are to be rectified.

(i) Debit side bank column of cash book was under totalled by ₹ 150.

(ii) A credit sales of ₹ 3,000 to Deepak was posted correctly to sales account but it was posted to the credit side of Deepak's account.

(iii) Total of purchase book ₹ 13,000 was posted to the credit of sales account.

(iv) Credit sales of goods ₹ 4,500 to Mukesh was wrongly entered in purchase day book.

(v) Total of debit side discount column of cash book ₹ 240 was posted to the credit of discount allowed account.

(vi) Credit sales ₹ 1,500 to Dilip entered correctly in the sales day book but it was posted to credit of his account with ₹ 1,500.

SOLUTION **Rectification (i):** It is an error of wrong totalling, affecting only bank account which is an asset account the rectification entry will be as follows:

Bank a/c	Dr.	150	
To Suspense a/c			150

(The short total by 150 of debit bank column in the previous financial year is now rectified)

Rectification (ii): Here Deepak's account has been credited instead of being debited. Therefore, Deepak's account might have been included in Sundry Creditors and not in Sundry Debtors. The rectification affects asset and liability account only.

Sundry Creditor's (Deepak's) a/c	Dr.	3,000	
Sundry Debtor's (Deepak's) a/c	Dr.	3,000	
To Suspense a/c			6,000

Rectification (iii): Here purchase account should have been debited; instead of it sales account has been credited. As an effect of it, revenue of the previous year has been increased by ₹ 13,000 at the same time expense namely purchase has been shown less by ₹ 13,000. The net effect is that the gross profit as well as the net profit has been shown more by ₹ 26,000 in the previous year. We cannot debit the purchase account by ₹ 13,000 and also cannot debit the sales account by ₹ 13,000 as these are nominal accounts of the previous financial year. instead of these two accounts profit and loss appropriation account is to be affected.

Profit and Loss Appropriation a/c	Dr.	26,000	
To Suspense a/c			26,000

Rectification (iv): Here purchase has been debited wrongly, whereas sales has not been credited. At the same time, Mukesh's account gets included in the list of sundry creditors instead of being included in the list of sundry debtors. The rectification entry will be

Sundry Creditor's (Mukesh)'s a/c	Dr.	4,500	
Sundry Debtor's (Mukesh)'s a/c	Dr.	4,500	
To Profit & Loss Appropriation a/c			9,000

(Here instead of crediting sales a/c and purchase a/c, profit and loss appropriation a/c has been credited.)

Rectification (v): The net effect of this error is that the discount allowed has been shown less by 480. Discount allowed is a nominal expense account. Therefore, instead of it profit and loss appropriation account is to be affected.

Profit and Loss Appropriation a/c	Dr.	480	
To Suspense a/c			480

Rectification (vi): Instead of debiting Dilip's account, his account has been credited. As a result, sundry creditors have increased and sundry debtors have decreased. The rectification entry will be

Sundry Creditors (Dilip)'s a/c	Dr.	1,500	
Sundry Debtors (Dilip)'s a/c	Dr.	1,500	
To Suspense a/c			3,000

Dr. **Suspense A/C** **Cr.**

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
	To Balance b/f (opening balance)	35,630		By Bank a/c	150
				By Sundry Debtors a/c	3,000
				By Sundry Creditors a/c	3,000
				By Profit and Loss Appropriation a/c	26,000
				By P & L Appropriation a/c	480
				By Sundry Debtors a/c	1500
				By Sundry Creditors a/c	1500
		35,630			35,630

Effect of the errors on the profit of the previous financial year

Error no.	Effect on Profit of Previous Year	Effect of Rectification
(i)	No effect	No effect
(ii)	No effect	No effect
(iii)	Both gross profit and net profit have been overstated by ₹ 26,000	Now opening balance of P & L Appropriation a/c reduced by 26,000
(iv)	Both gross profit and net profit have been understated by ₹ 9,000	Now opening balance of P & L Appropriation a/c increased by 9,000
(v)	Net profit has been overstated by ₹ 480	Now opening balance of P & L Appropriation a/c is reduced by 480.
(vi)	No effect	No effect

ACCRUAL SYSTEM AND ADJUSTMENTS

Adjustments are the monetary transactions affecting the financial result of current financial year but not provided for in the books of account. Accrual system of maintaining books of accounts requires that (i) matching concept is to be followed while preparing final accounts and (ii) different revenue and expenses items are to be recorded in the final accounts by following the accrual system whether the transaction has been settled in cash or not. The items to be shown by following these to aspects are called **adjustments**. The matching concept emphasizes that all the relevant expenses of the current financial year and related to sales revenue should be shown in the final accounts, such as providing depreciation on fixed assets, amortization of intangible and fictitious assets; certain accrual items, such as 'outstanding expenses', 'and pre-paid expenses'. Similarly, there are certain income items, such as 'income received in advance, i.e., unearned income' and 'accrued income'.

Adjustments are certain monetary items that affect the financial result of the current financial year but not provided for in the books of accounts so far.

The convention of conservatism also emphasizes that certain provisions, such as provision for bad debts, provision for discount on debtors, provision for losses and provision for contingencies should be provided in the final accounts.

All these adjustment items are the tool to have **true and fair view** of books of accounts and help in estimating accurate level of profit and also help in estimating the assets/liabilities at the accurate level. Due to dual aspect concept, every adjustment has **minimum two impacts** on the final accounts.

Closing Inventory/Stock

Closing inventory is the stock of unused raw material, work-in-process and unsold finished goods. It is also known as **closing stock**. In the books of accounts, a separate account namely 'closing inventory' does not appear until a closing entry is passed for the closing stock. Therefore, trial balance does not have the account namely 'closing stock or stock account'. This closing stock is an asset at the end of the year to be shown in the balance sheet under the heading 'current assets'. Whenever goods are purchased, these are debited to purchase account but due to the closing stock, all the goods purchased do not get sold, a closing entry is to be passed to record the closing stock in the final accounts so that true and fair view of profit and assets can be projected in the final accounts. Once trial balance has been prepared, the following closing entry, i.e., adjustment entry is passed to bring the closing stock in books of accounts.

Stock (closing) a/c Dr.
To Trading or Profit and Loss a/c
(Adjustment entry for closing stock passed)

USEFUL INFO

Constituents of closing inventory:
- Stock of raw material
- Stock of work-in-progress
- Stock of finished goods

Effect in final accounts: Closing stock is either to be deducted from purchase or shown to the credit of Trading a/c or Profit & Loss a/c as the situation may be. The amount of closing stock is shown as a current asset in the balance sheet.

Accruals—Expenses

Accruals about expenses are of two types: (i) outstanding expenses and (ii) pre-paid expenses.

Outstanding Expenses

These are such expenses that have become due but not been paid by the end of the financial year. As theses expenses relate to current financial year, therefore true and fair view of profit can be ascertained only when these expenses are duly incorporated in the final accounts. The adjustment entry is as follows:

Expenses a/c Dr. (with the amount of outstanding)
To Outstanding Expense a/c

USEFUL INFO

Accruals
- Outstanding expenses
- Pre-paid expenses
- Accrued income
- Unearned income

Effect in final accounts: Outstanding amount is added to the concerned expense in the trading account or profit and loss account, and outstanding amount is shown as liability in the balance sheet.

Pre-paid Expenses

These are such expenses that have been paid during the current financial year but these relate to next financial year, the economic benefit from these expenses is to be realized in the next financial year. The adjustment entry for these is as follows:

Pre-paid Expense a/c   Dr.
    To Expense a/c   (with the amount paid in advance, i.e., pre-paid amount)

Effect in final accounts: Pre-paid amount is deducted from the concerned expenses while preparing trading/profit & loss account, the pre-paid amount is shown as an asset in the balance sheet.

> Accruals about expenses and income are adjusted only in accrual system of accounting and not in cash system of accounting.

Accruals—Income

Accruals regarding income are also of two types: (i) unearned income/income received in advance and (ii) accrued income.

Unearned Income/Income Received in Advance

This is such income that has been received during the current financial year but it relates to the subsequent financial year. This is also termed **income received in advance**. The adjustment entry, i.e., closing entry for this is as follows:

Income a/c   Dr.   (amount received in advance)
    To Unearned Income a/c

Effect in final accounts: Unearned income being a liability is shown on the liability side of balance sheet, and the amount received in advance is deducted from the concerned income item while preparing profit and loss account.

Accrued Income

This is such income that has been earned during the current financial year but not received so far till the end of the financial year. Adjustment entry is as follows:

Accrued Income a/c   Dr.
    To Income a/c   (with the amount of income earned but not received so far)

Effect in final accounts: Accrued income being an asset is shown on the asset side of the balance sheet, and the accrued amount is added to concerned income item in the profit and loss account. Table 5.1 illustrates incorporation of accruals in final accounts.

The adjustment entries relating to accruals are reversed in the beginning of next financial year. The impact of such reversal is that the assets and liabilities generated in the previous financial year get reversed.

TABLE 5.1 **Incorporation of Accruals in Final Accounts**

Accrual	Effect in Trading/P & L A/C	Effect in Balance Sheet
Outstanding Expense	Add to concerned expense	Show as liability
Pre-paid Expense	Less from concerned expense	Show as an asset
Unearned Income	Less from concerned income	Show as liability
Accrued Income	Add to concerned income	Show as an asset

EXAMPLE 4 Show how the following adjustments are to be shown in the final accounts.

Trial Balance for the year ending March 31, 2010

Particular	Amount (₹)
Wages	1,29,000
Salary (for eleven months)	1,32,000
Insurance Premium	18,000
Commission Received	21,000
Interest Received	30,000

Adjustments

(i) Wages due but not paid so far ₹ 11,000
(ii) Insurance premium paid on January 1, 2010 is for twelve months period
(iii) Commission earned but not received so far ₹ 3,000
(iv) Interest received includes ₹ 5,000 relevant for next financial year.

SOLUTION Incorporation of accruals in the final accounts

Trading and Profit & Loss A/C for the year ending March 31, 2010

Expenses		Amount ₹	Income		Amount ₹
To Wages	1,29,000				
Add: Outstanding Wages	11,000				
		1,40,000			
To Salary	1,32,000		By Commission Received	21,000	
Add: Outstanding Salary	12,000		Add: Accrued commission	3,000	
		1,44,000			24,000
To Insurance Premium	18,000		By Interest Received	30,000	
Less: Pre-paid	13,500		Less: Unearned Interest	5,000	
		4,500			25,000

Explanation 1: Salary has been paid for only eleven month. Therefore, salary of one month (132000 × 1/11) is outstanding.

Explanation 2: Insurance premium for the period from January 1 to March 31, i.e., for three months ₹ 4,500 (18000 × 3/12) is relevant for the current and rest ₹ 13,500 (18,000 – 4,500) is relevant for next year, i.e., pre-paid expense.

Balance Sheet as on March 31, 2010

Liabilities		Amount ₹	Assets	Amount ₹
Current Liabilities			**Current Assets**	
Outstanding Expenses			Pre-paid Insurance Premium	13,500
Wages	11,000		Accrued Commission	3,000
Salary	12,000			
		23,000		
Unearned Interest		5,000		

Consumable Items—Expenses on Material other than Stock-in-trade

In every business, certain materials, such as stationery items, crockery, medicines, lubricants, waste paper and clothes get consumed in producing goods and services. At the time of purchase of these items, these are debited as an expense and the total of this expense appears in the trial balance. However, the unused stock of these items at the end of year is to be treated as a **current asset.** The unused stock is also referred as **stores**. To bring these items in the final accounts, the closing balance of these items is shown as an adjustment mentioned below the trial balance. Adjustment entry for this is passed as follows:

> **Stores** is the collective name given to different consumables—lubricants, cotton, grease, etc.

Stock of Materials (Stores) a/c Dr. (unused stock at the end of the year)
  To Concerned Expense a/c

The closing stock of material becomes opening stock of material in the next year to be consumed in the next financial year to record it as an expense in the next year a reverse entry is passed that is as follows:

Concerned Expenses a/c Dr. (opening stock of materials in the beginning of year)
  To Stock of Materials a/c

Provision for Doubtful Debts

> **Provision** means keeping aside certain part of profit to provide for a known loss/ expenses but its amount is not known with certainty.

Keeping certain part of current year's profit to write of expected loss on account of bad debts that might take place in future is called **provision for doubtful debts**. The amount that cannot be recovered from trade debtors is called 'Bad Debt'. It is a loss for the business organization. The bad debt is recorded in the accounts and trade debtors get reduced, to record it in the books of accounts the following entry is passed.

Bad Debts a/c Dr. (with the amount of bad debts)
  To Trade Debtor's a/c

The net effect of this entry is that bad debts appear in the trial balance and correspondingly amount due from trade debtors gets reduced. Bad debt is shown as a ***loss*** in the debit side of profit and loss account.

When provision for doubtful debts is not maintained then bad debts are shown in the profit & loss account.

Accounting prudence

The accounting prudence emphasizes that a provision for expected loss that might take place on account of bad debts in the next financial year should be provided in the final accounts. *Provision is created by debiting profit and loss account and the amount of provision is shown as a deduction from trade debtors* and not as a liability in the balance sheet. The amount of provision depends upon the past experience of entrepreneur and expectation about future. The entry for provision is passed as follows:

Profit & Loss a/c Dr. (amount of provision charged to P & L a/c)
  To Provision for Doubtful Debts a/c

This provision amount is used to write off bad debts that take place in the next financial year. In the next financial year, **actual bad debts are transferred to provision account and not to profit and loss account.** By doing this, the net profit for the next year does not get affected unduly.

When provision for doubtful debts does not exist in the trial balance.

EXAMPLE 5 Trial balance of a business as on March 31, 2009 showed Sundry Debtors ₹ 70,000 and Bad Debts ₹ 2,000. The business wishes to maintain a provision for doubtful debts @ 5% for the next year.

SOLUTION Here bad debts is appearing in the trial balance that implies that the entry for bad debts has already been passed. We need to make a provision @ of 5% (₹ 3,500) on debtors (₹ 70,000) to provide for expected bad debts in the next financial year on account of such losses. The entry for provision is as follows:

Profit & Loss a/c	Dr.	3,500	
To Provision for Doubtful Debts a/c			3,500
(Provision for doubtful debts made @ of 5% on debtors)			

USEFUL INFO

Common Provisions are made for
- Doubtful debts
- Depreciation
- Repairs and maintenance
- Contingencies

Projection in the final accounts

Profit & Loss A/C for the year ending March 31, 2009

Expense		Amount (₹)	Income	Amount (₹)
To Bad Debts	2,000			
Add: Provision for Doubtful Debts	3,500	5,500		

Balance Sheet as on March 31, 2009

Liabilities	Amount (₹)	Assets		Amount (₹)
		Sundry Debtors	70,000	
		Less: Provision for Doubtful Debts	3,500	66,500

When provision for doubtful debts exists in the trial balance.

EXAMPLE 6 Trial balance as on March 31, 2010 showed Sundry Debtors of ₹ 40,000; Bad Debts ₹ 2,700 and Provision for Doubtful Debts ₹ 3,500. It was decided to maintain provision for doubtful debts @ 5% of debtors for next financial year. Show how provision is to be maintained and projected in the final accounts.

SOLUTION Here actual bad debts of ₹ 2,700 is to be transferred to Provision for Doubtful Debts already existing as shown in the trial balance. After adjusting this, the balance of provision will be ₹ 800 (3,500 – 2,700). The provision to be carried to next financial year is 2,000; now only ₹ 1,200 (2,000 – 800) is to be charged to profit and loss account. The adjustment entries will be as follows:

Provision for Doubtful Debts a/c	Dr.	2,700	
To Bad Debts a/c			2,700
(Balance of bad debts transferred to provision for doubtful debts a/c)			

Profit & Loss a/c Dr. 1,200
To Provision for Doubtful Debts a/c 1,200
(Amount required for provision charged to profit and loss a/c)

Profit & Loss A/C for the year ending March 31, 2010

Expenses		Amount (₹)	Income	Amount (₹)
To *Provision for Doubtful Debts*				
Required for next year	2,000			
Add: Bad Debts	2,700			
	4,700			
Less: Old provision	3,500	1,200		

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹)	Assets		Amount (₹)
		Sundry Debtors	40,000	
		Less: Provision for		
		Doubtful Debts	2,000	38,000

Note: in the balance sheet always new provision is deducted from trade debtors.

Provision for Discount on Debtors

Keeping aside certain part of current year's profit to write off discount to be allowed to debtors in future is called **provision for discount on debtors**. Discount allowed accounts for a very significant proportion in the operating expenses of a business enterprise. When provision for discount on debtors does not exist the amount of discount allowed is shown to the debit of profit & loss account. The accounting prudence insists that one can make a provision for discount to be allowed to debtors in the next financial year, by doing this the profit of subsequent financial year does not get affected unduly on account of the discount of previous year given in the subsequent year and at the same time profit of the current financial year also get projected at the appropriate level. The provision is made as follows:

Profit & Loss a/c Dr. (with the amount of provision required in next year)
To Provision for Discount on Debtors a/c

The amount of provision for discount required for next year is calculated on trade debtors after deducting the provision for doubtful debts. *This amount of provision is shown to the debit of profit and loss account and shown as a reduction from trade debtors in the balance sheet.*

In the next financial year, the actual amount of discount allowed is not transferred to the profit and loss account. Instead it is transferred to 'provision for discount on debtors a/c' as brought forward from the previous financial year.

When provision for discount on debtors does not exist in the trial balance.

Example 7 Trial balance as on March 31, 2010 showed Sundry Debtors of ₹ 40,000; Bad Debts ₹ 2,700; Discount Allowed ₹ 250 and Provision for Doubtful Debts ₹ 3,500. It was decided to maintain provision for doubtful debts @ 5% of debtors and provision for discount on debtors @ 2% for next financial year. Show how both of these provisions are to be maintained and projected in the final accounts.

SOLUTION (i) Here actual bad debts of ₹ 2,700 is to be transferred to Provision for Doubtful Debts already existing and shown in the trial balance. After adjusting this, the balance of provision will be ₹ 800 (3,500 – 2,700). The provision to be carried to next financial year is 2,000; now only ₹ 1,200 (2,000 - 800) is to be charged to profit and loss account. The adjustment entries will be as follows:

Provision for Doubtful Debts a/c	Dr.	2,700	
To Bad Debts a/c			2,700
(Balance of bad debts transferred to provision for doubtful debts a/c)			
Profit & Loss a/c	Dr.	1,200	
To Provision for Doubtful Debts a/c			1,200
(Amount required for provision charged to profit and loss a/c)			

(ii) As provision for discount on debtors does not appear in the trial balance, therefore the discount allowed is to be shown to the debit of profit and loss account and new provision for discount on debtors is to be calculated @ 2% (₹ 760) on 38,000 (40,000 – 2,000) after deducting new provision for doubtful debts from trade debtors. The provision for discount on debtors is to be shown to the debit of profit and loss a/c and to be deducted from trade debtors after deducting new provision for doubtful debts required for next year. The adjustment entry will be as follows:

Profit & Loss a/c	Dr.	760	
To Provision for Discount on Debtors a/c			760
(Provision for discount on debtors maintained as required for next year)			

Profit & Loss A/C for the year ending March 31, 2010

Expenses		Amount	Income	Amount
To *Provision for Doubtful Debts*				
Required for next year	2,000			
Add: Bad Debts	2,700			
	4,700			
Less: Old provision	3,500	1,200		
To Discount Allowed		250		
To Provision for Discount on Debtors		760		

Balance Sheet as on March 31, 2010

Liabilities	Amount	Assets		Amount
		Sundry Debtors	40,000	
		Less: Provision for Doubtful Debts	2,000	
			38,000	
		Less: Provision for Discount on Debtors	760	37,240

Note: in the balance sheet always new provision required for next year is deducted from trade debtors.

When provision for discount on debtors exists in the trial balance.

EXAMPLE 8 Trial balance as on March 31, 2010 showed Sundry Debtors of ₹ 50,000; Bad Debts ₹ 2,500; Discount Allowed ₹ 550; Provision for Doubtful Debts ₹ 2,200 and Provision for Discount on Debtors ₹ 760. It was decided to maintain provision for doubtful debts @ 4% of debtors and provision for discount on debtors @ 1% for next financial year. Show how both of these provisions are to be maintained and projected in the final accounts.

SOLUTION The amount of provision (new) for doubtful debts required for next year will be ₹ 2,000. The amount to be charged to profit and loss account is to be calculated as follows:

Amount to be charged to profit and loss account:

New provision for doubtful debts required	₹ 2,000
Add: Actual bad debts for the year	₹ 2,500
	₹ 4,500
Less: Provision for doubtful debts given in trial balance, i.e., old provision	₹ 2,200
Amount to be charged to profit and loss account	₹ 2,300

The adjustment entries will be as follows:

Provision for Doubtful Debts a/c	Dr.	2,500	
To Bad Debts a/c			2,500
(Balance of bad debts transferred to provision for doubtful debts a/c)			
Profit & Loss a/c	Dr.	2,300	
To Provision for Doubtful Debts a/c			2,300
(Amount required for provision charged to profit and loss a/c)			

As provision for discount on debtors is already given in the trial balance, therefore the actual discount allowed is to be transferred to provision account and not to profit & loss account. The amount of provision for discount on debtors required for next year will be ₹ 480 1% of 48,000 (50,000 − 2,000).

Amount for provision for discount on debtors to be charged will be as follows:

New provision for discount on debtors required	₹ 480
Add: Actual discount allowed for the year	₹ 550
	₹ 1,030
Less: Provision for discount on debtors given in trial balance	₹ 760
Amount to be charged to profit and loss account	₹ 270

The adjustment entries will be as follows:

Provision for Discount on Debtors a/c	Dr.	550	
To Discount Allowed a/c			550
(Balance of discount allowed transferred to provision for discount on debtors a/c)			
Profit & Loss a/c	Dr.	270	
To Provision for Discount on Debtors a/c			270
(Amount required for provision charged to profit and loss a/c)			

Profit & Loss A/C for the year ending March 31, 2010

Expenses		Amount (₹)	Income	Amount (₹)
To *Provision for Doubtful Debts*				
Required for next year	2,000			
Add: Bad Debts	2,500			
	4,500			
Less: Old provision	2,200	2,300		
To *Provision for Discount on Debtors*				
Required for next year	480			
Add: Discount allowed	550			
	1,030			
Less: Old provision	760	270		

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹)	Assets		Amount (₹)
		Sundry Debtors	50,000	
		Less: Provision for Doubtful Debts	2,000	
			48,000	
		Less: Provision for Discount on Debtors	480	47,520

Note: In the balance sheet always new provision required for next year is deducted from trade debtors.

Provision for Depreciation on Fixed Assets

Fixed assets contribute in revenue generation and get consumed slowly-slowly over the economic life of the assets, but are not shown as an expense to profit and loss account directly. The only way to show the consumption of assets to profit and loss account is to provide depreciation on these assets.

Depreciation is charged on fixed assets to record the reduction in the value of assets on account of wear and tear of these assets due to business use. It is charged on fixed assets to record obsolescence effect also. The process of depreciation is called **amortization.** Due to depreciation, the book value of fixed assets gets reduced and the value so reduced is shown as an expense in the debit of profit and loss account. Entry for depreciation does not get passed in the routine course of maintaining accounts. Therefore, depreciation does not appear in the trial balance.

Depreciation is the mechanism to match capital expenditure against the revenue for the year.

Amortization is the process to spread the capital expenditure over the useful life of the asset generated as a result of capital expenditure.

Entry for depreciation

(i) For charging depreciation on fixed asset

Depreciation a/c Dr. (with the amount of depreciation for the year)
To Appropriate Asset a/c

(ii) To transfer the depreciation to profit and loss account

Profit & Loss a/c Dr.
To Depreciation a/c (with the amount of depreciation for the year)

Projection in final accounts

(i) Current year's depreciation is shown as an expense to the debit of P & L Account

(ii) Amount of depreciation is deducted from the appropriate asset.

EXAMPLE 9 In the trial balance on March 31, 2009 building appeared at a gross value at ₹ 1,20,000. The company has the practice of charging depreciation @ 10% on this asset.

SOLUTION Depreciation for the current year is ₹ 12,000 (10% on 1,20,000)

Depreciation a/c	Dr.	12,000	
To Building a/c			12,000
(Depreciation provided on building @ 10%)			
Profit & Loss a/c	Dr.	12,000	
To Depreciation a/c			12,000
(Depreciation transferred to profit & loss account)			

Profit & Loss A/C for the year ending March 31, 2009

Expenses	Amount (₹)	Income	Amount (₹)
To Depreciation on building	12,000		

Balance Sheet as on March 31, 2009

Liabilities	Amount (₹)	Assets		Amount (₹)
		Building	1,20,000	
		Less: Depreciation	12,000	1,08,000

The Common Practice About Depreciation

In usual practice, the book value of asset is not affected year after year by charging depreciation instead a provision for depreciation is created year after year. The fixed asset is shown in the balance sheet at its gross value, i.e., **original cost** less **accumulated depreciation** represented by the balance of provision for depreciation. Accumulated depreciation is the sum total of depreciation charged on the fixed asset till date. The adjustment entry is as follows:

> **Straight line method** (SLM) of providing depreciation results into charging same amount of depreciation every year to profit and loss account.

Profit & Loss a/c Dr. (with the amount of current year's depreciation)
To Provision for Depreciation a/c

Projection in final accounts

(i) Current year's depreciation is shown as an expense to the debit of P & L Account

(ii) Fixed asset is shown at its gross value in the inner column of balance sheet asset side

(iii) The closing balance of provision for depreciation is shown as deduction from the gross value of fixed asset, after deducting it the resulting value of fixed asset is net value.

EXAMPLE 10 In the trial balance on March 31, 2009 building appeared at a gross value at ₹ 1,20,000. Being first year there was no provision for depreciation account in the trial balance. The company has the practice of charging depreciation @ 10% on this asset.

SOLUTION Depreciation for the current year is ₹ 12,000 (10% on 1,20,000)

Profit & Loss a/c	Dr.	12,000	
To Provision for Depreciation on Building a/c			12,000
(Depreciation provided on building @ 10%)			

Profit & Loss A/C for the year ending March 31, 2009

Expenses	Amount (₹)	Income	Amount (₹)
To Provision for Depreciation on Building	12,000		

Balance Sheet as on March 31, 2009

Liabilities	Amount (₹)	Assets		Amount (₹)
		Building	1,20,000	
		Less: Provision for Depreciation	12,000	1,08,000

Example 11 In the trial balance on March 31, 2010 building appeared at a gross value at ₹ 1,20,000 and provision for depreciation account at ₹ 12,000 in the trial balance. The company has the practice of charging depreciation @ 10% as per written down value basis.

> **Written down value** (WDV) method of depreciation results into charging decreasing amount every year as depreciation to profit and loss account.

Solution Depreciation for the current year is ₹ 10,800 (10% on 1,08,000)

Profit & Loss a/c	Dr.	10,800	
To Provision for Depreciation on Building a/c			10,800
(Depreciation provided on building @ 10% on reduced value)			

Profit & Loss A/C for the year ending March 31, 2009

Expenses	Amount (₹)	Income	Amount (₹)
To Provision for Depreciation on Building	10,800		

Balance Sheet as on March 31, 2009

Liabilities	Amount (₹)	Assets		Amount (₹)
		Building	1,20,000	
		Less: Provision for Depreciation	22,800*	97,200

* Opening balance of ₹ 12,000 plus current year's depreciation ₹ 10,800.

Methods of Providing Depreciation

Depreciation on fixed assets can be provided by following several methods, such as SLM, WDV method, depletion method and hourly rate method. Out of these SLM and WDV methods are most common methods.

SLM method provides for charging equal amount of depreciation during each of the year over the useful life of the asset. Under this, total depreciable amount is spread equally over the useful life of the asset. Here percentage of depreciation is applied on the original cost (gross block) of the asset.

WDV method of charging depreciation provides for decreasing amount of depreciation charged on asset year after year. Under this, yearly depreciation is charged on the opening balance of asset for each of the year.

A business enterprise might change the method of providing depreciation from SLM to WDV or vice versa. However, there is a difference in the International Accounting Standards (IAS) and Accounting Standards (AS) followed in India. IAS provides for prospective change in the depreciation method, whereas AS provides for retrospective change in the depreciation method.

(Method of charging depreciation have been discussed in detail in the chapter measurement of assets of this book.)

DISPOSAL OF ASSETS

Assets, particularly fixed assets are purchased in the business organization not for sale but to use them for producing goods and services. However, the moment when an asset becomes dysfunctional or stops generating economic benefits due to certain reasons, it is to be sold to realize the resale value. Disposal of asset is also termed as **retirement of asset**. The accounting effect of such disposal of asset is on the **carrying cost,** i.e., **book value** of the asset as well as on the **accumulated depreciation** represented by **provision for depreciation** account, it is as follows:

Steps in Recording Disposal of Assets

(i) From the total gross value of assets, the gross value of asset disposed/sold is reduced by passing the following journal entry in journal proper:

Asset Disposal a/c Dr. (with the gross value of asset sold)
To Appropriate Asset a/c

(ii) From the provision for depreciation account, accumulated depreciation of asset disposed is transferred to asset disposal account by passing the following journal entry:

Provision for Depreciation a/c Dr.
To Asset Disposal a/c (with the amount of accumulated depreciation of asset sold)

(iii) Entry for sales is passed as follows:

Bank a/c Dr.
To Asset Disposal a/c (with the monetary value received on selling the asset)

(iv) When sales value is more than the book value, it is profit on sale of asset

Asset Disposal a/c Dr.
To Profit & Loss a/c (with the amount of profit on sale of asset)

(v) When sales value is less than the book value, it is loss on sale of asset

Profit & Loss a/c Dr.
To Asset Disposal a/c (with amount of loss on sale of asset)

Note: If Asset Revaluation Reserve exists then the profit/loss on sale of asset is to be transferred to this account and not to profit and loss account.

> Selling asset for a value more than the book value results into profit on sale of asset.

> Selling asset for a value less than the book value results into loss on sale of asset.

Example 12 On April 1, 2007 a business enterprise purchased amachinery at a cost of ₹ 70,000 and incurred ₹ 10,000 for its installation. The machine is being depreciated @ 20% on WDV basis every year. On March 31, 2010 the machine was sold for ₹ 41,500. Show the journal entries for this machine.

Solution

Journal Proper

Date	Particulars		Amt. Debit (₹)	Amt. Credit (₹)
April 1, 2007	Machinery a/c To Bank a/c (machinery purchased)	Dr.	70,000	70,000
April 1, 2007	Machinery a/c To Bank a/c (installation charge for machine paid)	Dr.	10,000	10,000
Mar.31, 2008	Profit & Loss a/c Provision for Depreciation a/c (depreciation provided on machine)	Dr.	16,000	16,000
Mar.31, 2009	Profit & Loss a/c Provision for Depreciation a/c (depreciation provided on machine)	Dr.	12,800	12,800
Mar.31, 2010	Profit & Loss a/c Provision for Depreciation a/c (depreciation provided on machine)	Dr.	10,240	10,240
Mar.31, 2010	Asset Disposal a/c To Machine a/c (gross value of machine sold transferred)	Dr.	80,000	80,000
Mar.31, 2010	Provision for Depreciation a/c To Asset Disposal a/c (accumulated depreciation transferred)	Dr.	39,040	39,040
Mar.31, 2010	Bank a/c To Asset Disposal a/c (sale of machine)	Dr.	41,500	41,500
Mar.31, 2010	Asset Disposal a/c To Profit & Loss a/c (profit of sale of machine transferred)	Dr.	540	540

Profit on Sale of Asset*:* Here asset has been sold at a value more than the book value. Therefore, there is a profit on sale of ₹ 540 (41,500 −40,960).

Calculation of Depreciation

Year	Opening Book Value	Depreciation	Closing Book Value
2007–08	80,000	80000 * 20/100 = 16,000	64,000 (80,000 − 16,000)
2008–09	64,000	64000 * 20/100 = 12,800	51,200 (64,000 − 12,800)
2009–10	51,200	51200 * 20/100 = 10,240	40,960 (51,200 −10,240)

Example 13 On April 1, 2006 a business enterprise purchased a machinery at a cost of ₹ 1,00,000 and incurred ₹ 50,000 for its installation. The machine is being depreciated @ 10% on WDV basis every year. On March 31, 2010 the machine was sold for ₹ 90,000. Show the journal entries for this machine.

Solution

Journal Proper

Date	Particulars	Amt. Debit (₹)	Amt. Credit (₹)
April 1, 2006	Machinery a/c Dr. To Bank a/c (Machinery purchased)	1,00,000	1,00,000
April 1, 2006	Machinery a/c Dr. To Bank a/c (Installation charge for machine paid)	50,000	50,000
Mar.31, 2007	Profit & Loss a/c Dr. Provision for Depreciation a/c (Depreciation provided on machine)	15,000	15,000
Mar.31, 2008	Profit & Loss a/c Dr. Provision for Depreciation a/c (Depreciation provided on machine)	13,500	13,500
Mar.31, 2009	Profit & Loss a/c Dr. Provision for Depreciation a/c (Depreciation provided on machine)	12,150	12,150
Mar.31, 2010	Profit & Loss a/c Dr. Provision for Depreciation a/c (Depreciation provided on machine)	10,935	10,935
Mar.31, 2010	Asset Disposal a/c Dr. To Machine a/c (Gross value of machine sold transferred)	1,50,000	1,50,000
Mar.31, 2010	Provision for Depreciation a/c Dr. To Asset Disposal a/c (Accumulated depreciation transferred)	51,585	51,585
Mar.31, 2010	Bank a/c Dr. To Asset Disposal a/c (Sale of machine)	90,000	90,000
Mar.31, 2010	Profit & Loss a/c Dr. To Asset Disposal (Loss of sale of machine transferred)	8,415	8,415

Loss on Sale of Asset: Here asset has been sold at a value less than the book value. Therefore, there is a loss on sale of ₹ 8,415 (90,000 – 98,415).

Calculation of Depreciation

Year	Opening Book Value	Depreciation	Closing Book Value
2006–07	1,50,000	1,50,000 × 10/100 = 15,000	1,35,000(1,50,000 – 15,000)
2007–08	1,35,000	1,35,000 × 10/100 = 13,500	1,21,500(1,35,000 – 13,500)
2008–09	1,21,500	1,21,500 × 10/100 = 12,150	1,09,350(1,21,500 –12,150)
2009–10	1,09,350	1,09,350 × 10/100 = 10,935	98,415(1,09,350 –10,935)

Recap 1

So far, we have discussed the following topics:

- Rectification of Errors
- Suspense Account
- Accrual System and Adjustments
- Accruals—Expenses—Outstanding Expenses, Pre-paid Expenses
- Accruals—Income—Unearned Income, Accrued Income
- Consumable Items—Expenses on Material Other Than Stock-In-Trade
- Provision for Doubtful Debts
- Provision for Discount on Debtors
- Provision for Depreciation on Fixed Assets
- Disposal of Assets

Self-assessment 1

1. 'Without rectification of errors, final accounts cannot depict true and fair view.' Explain.
2. Explain the concept of accrual regarding expenses and income items.

The following topics will be delved into next:

- Tax Expenses on Taxable Income vs on Accounting Income
- Deferred Tax Liability
- Deferred Tax Asset
- Closing Entries—Closing Ledger Accounts
- Preparation of
- Manufacturing Account
- Trading Account
- Profit and Loss Account
- Profit and Loss Appropriation Account
- Preparation of Balance Sheet
- Sequence Of Items in Balance Sheet—Liquidity vs Permanence
- Opening Entries
- Vertical Presentation of Profit and Loss Account and Balance Sheet
- Structure of Profit and Loss Account
- Structure of Balance Sheet
- Schedules Forming Part of Accounts (Final Accounts)
- Extraordinary Items and Prior Period Items
- Comprehensive Income
- Solved Questions

TAX EXPENSES ON TAXABLE INCOME VS ON ACCOUNTING INCOME

Every business enterprise is liable to pay tax on the profits earned by it. However, due to certain reasons there might be a difference between the amount of tax on taxable income as per tax laws and the amount of tax on accounting profits as disclosed by income statement prepared on the basis of financial accounting fundamentals—India GAAP. Such difference might be a permanent or temporary one.

Permanent Differences in Tax Expense

This arises on account of the items that are part of taxable income but not the part of accounting profit or vice versa. These items are considered only in one and not in both. There are certain **tax exempt income** items, such as agricultural income and income from backward area not included in taxable income but included in accounting profit. Similarly, there are certain **tax disallowed expense** items, such as client entertainment expenses and free gifts. They are not admissible as per tax laws but considered while calculating accounting profit. Difference in tax on taxable income and tax on accounting profit due to these reasons is termed **permanent difference in tax expense**.

Deferred tax liability is the amount of differential tax payable in future due to temporary difference in tax on taxable income and tax on accounting profit.

Temporary Difference in Tax Expense

This arises on account of the items that are part of both the income calculation mechanism but the timing of showing these items differ. Therefore, this difference is also called **timing difference**. This difference might arise on account of the following items:

Depreciation

Depreciation for tax purpose differs from the depreciation for financial accounting purpose. Depreciation as per WDV method is admissible as per tax laws, whereas in financial accounting, SLM of providing depreciation is also in practice.

Provisions and Estimated Losses

Financial accounting rules allow provisions for estimated expenses, provision for estimated losses, etc. but tax laws do not provide for these provisions.

Accruals

Certain items of indirect tax, such as sales tax and excise duty are allowed as per tax laws only when these have been paid but financial accounting rules allow the adjustment for accruals also.

The difference due to these reasons is temporary because finally the total tax payable under both the basis tends to be equal over the long-term period. This temporary difference between tax expense amount results into **deferred tax liability** and **deferred tax asset**.

Deferred tax liability

It is the amount of differential tax payable in future due to temporary difference as explained earlier. This tax is to be paid in the subsequent financial years. Such tax difference is recognized in the first year in which the amount of a particular expense shown in taxable income happens to be more as compared to the amount of same expenses as shown while calculating accounting profit. The difference between tax on accounting profit and tax on taxable income is recognized as **deferred tax liability** in this financial year. This deferred tax liability is reversed during the subsequent financial years, when expense under taxable income is less as compared to expense under accounting profit. However, the total amount of tax payable under both the methods over the long-term period happens to be the same. Therefore, this difference is a liability for the current financial year and shown as **deferred tax liability** in the balance sheet to be reversed during the subsequent financial years.

Example 14 XYLO Ltd purchased an electronic equipment costing ₹ 60,000 on April 1, 2007 this machine has a useful life of three years with zero salvage value at the end. The company decides to depreciate it using SLM of depreciation. The tax laws allow 100% depreciation in the year of purchase of the equipment. The company expects to have earning before depreciation and tax (EBDT) of ₹ 1,20,000 in each of the three years. The tax rate for the company is 30%. Show how tax differential will result into deferred tax liability.

Solution Here as per financial accounting, depreciation in all the three years will be ₹ 20,000 per annum but as per tax laws depreciation in the very first year will be ₹ 60,000 and in rest of the two years depreciation will be zero. This will result in tax differential identified as deferred tax liability in the year 2007–08 to be reversed over next two financial years.

TABLE **Tax on taxable income and tax on accounting profit (amount in ₹)**

Particulars	Taxable Income			Accounting Profit		
	2007–08	2008–09	2009–10	2007–08	2008–09	2009–10
EBDT	1,20,000	1,20,000	1,20,000	1,20,000	1,20,000	1,20,000
Less: Depreciation	60,000	– – –	– – –	20,000	20,000	20,000
Earning before tax (EBT)	60,000	1,20,000	1,20,000	1,00,000	1,00,000	1,00,000
Tax @ 30% on EBT	18,000	36,000	36,000	30,000	30,000	30,000
Earning after tax (EAT)	42,000	84,000	84,000	70,000	70,000	70,000

The table depicts that the total tax payable over all the three years is ₹ 90,000 under each of the calculation practice. The accounting entries for the **deferred tax liability** will be passed as follows:

Year 2007–08

Profit & Loss Appropriation a/c	Dr.	30,000	
To Tax Payable a/c			18,000
To Deferred Tax Liability a/c			12,000

Year 2008–09

Profit & Loss Appropriation a/c	Dr.	30,000	
Deferred Tax Liability a/c	Dr.	6,000	
To Tax Payable a/c			36,000

Year 2009–10

Profit & Loss Appropriation a/c	Dr.	30,000	
Deferred Tax Liability a/c	Dr.	6,000	
To Tax Payable a/c			36,000

Deferred tax asset

It is the amount of differential tax recoverable in future due to temporary difference as explained above. This tax is to be recovered in the sense by paying less tax in the subsequent financial years. Such tax difference is recognized in the first year in which the amount of a particular expense shown in taxable income happens to be less as compared to the amount of same expenses as shown while calculating accounting profit. The difference between tax on taxable income and tax on accounting profit is recognized as **deferred tax asset** in this financial year. This deferred tax asset is reversed during the subsequent financial years, when expense under taxable income is more as compared to expense under accounting profit. However, the total amount of tax payable under both the methods over the long-term period happens to be the same. Therefore, this difference is an asset for the current financial year and shown as **deferred tax asset** in the balance sheet to be reversed during subsequent financial years.

Deferred tax asset is the amount of differential tax recoverable in future due to temporary difference in tax on taxable income and tax on accounting profit.

EXAMPLE 14 XYLO Ltd advertising expenses was ₹ 60,000 on April 1, 2007 as per the company's philosophy these are to be shown as revenue expenses in the very first year. However, the assessing officer classified as deferred revenue expenses and allowed it to be written off equally over three year-time period during with benefit of this advertising is expected. The company expects to have earning before depreciation, amortization and tax (EBDAT) of Rs, 1,20,000 in each of the three years. The tax rate for the company is 30%. Show have tax differential with result into deferred tax liability.

SOLUTION Here as per financial accounting, the complete amount of ₹ 60,000 is to be shown as a revenue expense in the year 2007–08, but as per tax laws every year ₹ 20,000 is to be shown in the profit and loss account as an expense. This will result in tax differential identified as **deferred tax asset** in the year 2007–08 to be reversed over the next two financial years.

TABLE Tax on taxable income and tax on accounting profit (amount in ₹)

Particulars	Accounting Profit			Taxable Income		
	2007–08	2008–09	2009–10	2007–08	2008–09	2009–10
EBDT	1,20,000	1,20,000	1,20,000	1,20,000	1,20,000	1,20,000
Less: Depreciation	60,000	– – –	– – –	20,000	20,000	20,000
Earning before tax (EBT)	60,000	1,20,000	1,20,000	1,00,000	1,00,000	1,00,000
Tax @ 30% on EBT	18,000	36,000	36,000	30,000	30,000	30,000
Earning after tax (EAT)	42,000	84,000	84,000	70,000	70,000	70,000

The table depicts that the total tax payable over all the three years is ₹ 90,000 under each of the calculation practice. The accounting entries for deferred tax asset and its reversal will be passed as follows:

Year 2007–08

Profit & Loss Appropriation a/c	Dr.	18,000	
Deferred Tax Asset a/c	Dr.	12,000	
To Tax Payable a/c			30,000

Year 2008–09

Profit & Loss Appropriation a/c	Dr.	36,000	
To Deferred Tax Asset a/c			6,000
To Tax Payable a/c			30,000

Year 2009–10

Profit & Loss Appropriation a/c	Dr.	36,000	
To Deferred Tax Liability a/c			6,000
To Tax Payable a/c			30,000

CLOSING ENTRIES—CLOSING LEDGER ACCOUNTS

Closing ledger accounts means transferring the balance of different accounts to final accounts. Transfer of balance is executed by means of passing journal entry in the journal proper (general journal). This entry is called **closing entry**. After passing this entry, ledger accounts get closed. The effect of passing closing entries is that different revenue and expense accounts get closed and the closing balance of these accounts gets transferred either to the trading account or to the profit & loss account. The closing balance of different asset and liability accounts is shown in the balance sheet. The balances of different assets and liabilities are carried to the next accounting year.

Closing entries are passed to transfer expenses and revenue to income statement. These also help in linking profit and loss account to balance sheet.

Closing Entry for Direct Revenue and Direct Expenses

For Direct Revenue—Sales Revenue

Sales a/c Dr.
To Trading Account

For Direct Expenses

Trading Account Dr.
To Direct Expense a/c

Entry for Gross Profit and for Gross Loss

Net result of trading account is either a gross profit or a gross loss. When direct revenue is over and above, the sum total of direct expenses it is gross profit, otherwise it is a gross loss.

For Gross Profit

Trading Account Dr.
To Profit & Loss a/c
(Gross profit transferred to P & L a/c)

For Gross Loss

Profit & Loss a/c Dr.
To Trading Account
(Gross loss transferred to P & L a/c)

Closing Entry for Indirect Revenue and Indirect Expenses & Losses

For Indirect Revenue—Revenue other than Sales Revenue

Revenue a/c Dr.
To Profit & Loss a/c

For Indirect Expenses

Profit & Loss a/c Dr.
To Indirect Expense a/c

Entry for Net Profit and for Net Loss

Net result of profit and loss account is either net profit or net loss. When indirect revenue is over and above the sum total of indirect expenses and losses it is net profit, otherwise it is net loss. Net profit is a reward for the owner, whereas net loss is charged to the owner because he/she is the one who bears the risk of doing business.

For Net Profit

Profit & Loss a/c Dr.
To Capital a/c
(Net profit transferred to capital a/c)

For Net Loss

Capital a/c Dr.
To Profit & Loss a/c
(Net loss transferred to capital a/c)

Projection of Net Profit and Net Loss in the Balance Sheet

In case of **sole enterprises**, complete net profit/loss belongs to the single owner and it is adjusted to the owner's capital account. **Net profit** is added to the capital and **net loss** is deducted from the capital. In **partnership**, the net profit/loss is divided among all the partners as per the agreement of partnership and then each partner's capital account is adjusted with the respective profit/loss amount.
In case of a **limited liability company**, the net profit/loss is not adjusted to capital account, instead it is appropriated by preparing **Profit & Loss Appropriation Account**. *It is an account that shows the division of profit by transferring some part of the profit to reserves—general reserve, reserve for contingencies, reserve for repairs and renewal, some part of the profit is distributed as dividend among equity shareholder and preference shareholders.* The remaining amount of profit is carried to the liability side of the balance sheet as **surplus**.

Closing Entries for Assets and Liabilities

Balance of asset and liability accounts is shown in the balance and this closing balance of assets and liabilities is carried forward to the next year and becomes opening balance of assets and liabilities in the next accounting year. The closing entry is as follows:

Sundry Liabilities a/c Dr.
To Sundry Assets a/c
(Sundry assets and liabilities accounts closed)

Example 14 Show closing entries for the following accounts.

Trial Balance

As on ....

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		1,09,500	
2	Bank a/c		1,18,000	
3	Capital a/c			2,50,000
4	Furniture a/c		35,000	
5	Salary a/c		7,500	
6	Purchase a/c		27,000	
7	Sales a/c			55,000
8	Mohit's a/c		3,000	
9	Commission Received a/c			3,000
10	Rent a/c		8,000	
	Total		3,08,000	3,08,000

Solution

Journal Proper (General Journal)

Date	Particulars	V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
	Trading a/c Dr. To Purchase a/c (Purchase account closed and transferred to Trading account)			27,000	27,000

(*Contd*)

(*Contd*)

	Sales a/c Dr. To Trading a/c (Sales account closed and transferred to Trading account)			55,000	 55,000
	Trading a/c Dr. To P & L a/c (Gross profit transferred to P & L a/c)			28,000	 28,000
	P & L a/c Dr. To Salary a/c To Rent a/c (Sundry account balances transferred to P & L a/c)			15,500	 7,500 8,000
	Commission Received a/c Dr. To P & L a/c (Sundry account balances transferred to P & L a/c)			3,000	 3,000
	P & L a/c Dr. To Capital a/c (Net profit transferred to capital a/c)			15,500	 15,500
	Capital a/c Dr. ToCash a/c To Bank a/c To Furniture a/c To Sundry Debtors (Mohit's a/c) (Assets and liability accounts closed)			2,65,500	 1,09,500 1,18,000 35,000 3,000
				4,09,500	4,09,500

Note: Net profit has been adjusted in the amount of capital.

Example 15 Show closing entries for the following trial balance.

Trial Balance

As on ....

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		2,74,050	
2	Bank a/c		3,93,000	
3	Capital a/c			11,50,000
4	Machinery a/c		2,90,000	
5	Furniture a/c		1,74,500	
6	Salary a/c		31,000	
7	Insurance Premium a/c		10,000	
8	Advertising Expense a/c		31,200	
9	Bad Debts a/c		5,000	
10	Purchase a/c		78,100	
11	Stationery a/c		650	
12	Freight a/c		100	
13	Discount a/c		200	500
14	Sales a/c			1,34,000
15	Commission Received a/c			1,400
16	Kapil's a/c			13,000
17	Rent a/c		9,400	
18	Sales Return a/c		1,700	
19	Purchase Return a/c			1,000
20	Loss on Sale of Machinery a/c		1,000	
	Total		12,99,900	12,99,900

Journal Proper (General Journal)

Date	Particulars		V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
	Purchase Return a/c	Dr.			1,000	
	To Purchase a/c					1,000
	(Purchase return account closed)					
	Sales a/c	Dr.			1,700	
	To Sales Return a/c					1,700
	(Sales return account closed)					
	Trading a/c	Dr.			77,200	
	To Purchase a/c					77,100
	To Freight a/c					100
	(Sundry direct expense accounts closed)					
	Sales a/c	Dr.			1,32,300	
	To Trading a/c					1,32,300
	(Sales account closed)					
	Trading a/c	Dr.			55,100	
	To Profit and Loss a/c					55,100
	(Gross profit transferred)					
	Profit and Loss a/c	Dr.			88,450	
	To Salary a/c					31,000
	To Insurance Premium a/c					10,000
	To Advertising Exp. a/c					31,200
	To Bad Debts a/c					5,000
	To Stationery a/c					650
	To Discount Allowed a/c					200
	To Rent a/c					9,400
	To Loss on Sale of Machinery a/c					1,000
	(Sundry expense and loss accounts closed)					
	Commission Received a/c	Dr.			1,400	
	Discount Received a/c	Dr.			500	
	To Profit and Loss a/c					1,900
	(Accounts of other income closed)					
	Capital a/c	Dr.			31,450	
	To Profit and Loss a/c					31,450
	(Net loss transferred to capital a/c)					
	Capital a/c	Dr.			11,18,550	
	Kapil's a/c (Sundry Creditor) a/c	Dr.			13,000	
	To Cash a/c					2,74,050
	To Bank a/c					3,93,000
	To Machinery a/c					2,90,000
	To Furniture a/c					1,74,500
	(Assets and liability accounts closed)					
					15,20,650	15,20,650

Recap 2

So far, we have discussed the following topics:

- Rectification of Errors
- Suspense Account
- Accrual System and Adjustments
- Accruals—Expenses—Outstanding Expenses, Pre-paid Expenses
- Accruals—Income—Unearned Income, Accrued Income
- Consumable Items—Expenses on Material Other Than Stock-In-Trade
- Provision for Doubtful Debts
- Provision for Discount On Debtors
- Provision for Depreciation On Fixed Assets
- Disposal of Assets
- Tax Expenses on Taxable Income vs on Accounting Income
- Deferred Tax Liability
- Deferred Tax Asset
- Closing Entries—Closing Ledger Accounts

Self-assessment 2

1. Explain the concept of deferred tax liability and deferred tax asset.
2. Why are provision for depreciation and provision for doubtful debts made?

The following topics will be delved into next:

- Manufacturing Account
- Trading Account
- Profit and Loss Account
- Profit and Loss Appropriation Account
- Preparation of Balance Sheet
- Sequence of Items In Balance Sheet—Liquidity vs Permanence
- Opening Entries
- Vertical Presentation of Profit and Loss Account and Balance Sheet
- Structure of Profit and Loss Account
- Structure of Balance Sheet
- Schedules Forming Part of Accounts (Final Accounts)
- Extraordinary Items and Prior Period Items
- Comprehensive Income
- Solved Questions

PREPARATION OF MANUFACTURING ACCOUNT, TRADING ACCOUNT AND PROFIT AND LOSS ACCOUNT

At the end of the financial year, every business enterprise prepares income statement to ascertain net profit for the year. The income statement is represented by three accounts viz. (i) manufacturing account, (ii) trading account and (iii) profit and loss account.

Manufacturing Account

It is prepared to ascertain cost of goods manufactured during the year, this account is debited with opening balance of both raw material and work-in-process (WIP) and all the direct expenses incurred during the year and it is credited with the closing balance of both raw material and work-in-process. The excess of debit over credit is the cost of goods manufactured during the year. **Direct expenses** are the expenses incurred in the manufacturing of goods and services.

Manufacturing account is prepared to ascertain cost of goods manufactured during the year.

Trading Account

This account is prepared to ascertain gross profit earned during the year. **Gross profit** is the profit that is arrived at by deducting only manufacturing cost of goods and services sold from the sales value of such goods and services. The opening stock of finished goods and manufacturing cost are shown to the debit of this account and closing stock of finished goods and sales revenue are shown to the credit of this account. If credit happens to be in excess of debit then it is **gross profit.** On the contrary, if debit happens to be in excess of credit then it is **gross loss**.

Gross profit is such amount of profit that is arrived at by deducting only direct expenses from sales revenue, trading account is prepared to calculate it.

Profit and Loss Account

This account is prepared to ascertain net profit for the year. **Net profit** is the profit arrived by deducting indirect expenses and losses from gross profit and by adding other income to gross profit. Indirect expenses are also called **operating expenses**. These are office, administrative, selling and distribution expenses including amortization of assets. These expenses and losses are shown to the debit of 'profit and loss account' and gross profit as well as other income are shown to the credit of this account. If credit total exceeds debit total then it is **net profit** for the year; otherwise, it is **net loss** for the year. The net profit/loss is transferred to profit and loss appropriation account.

Net profit is the final amount of profit for the year, calculated by preparing profit and loss account.

Profit and Loss Appropriation Account

This is prepared to distribute the net profit for the current year and the surplus of the previous financial year. Net profit for the current year and previous financial year's surplus are shown to the credit of this account and different appropriation items are shown to the debit of this account. The appropriation might be like provision for tax, proposed dividend, transfer to general reserve, transfer to sinking fund for debentures, etc. Generally, closing balance of this account is credit and named **surplus carried to next year**.

Net profit for the year and opening balance of surplus are appropriated by preparing profit and loss appropriation account.

EXAMPLE 16 From the following trial balance, prepare manufacturing account, trading account as well as profit and loss account.

Trial Balance as on March 31, 2010

Name of Account	Credit Amount ('000)	Debit Amount ('000)
Plant a/c	1,80,000	
Capital a/c		2,10,000
Purchase a/c	1,80,000	
Sales a/c		3,90,000
Opening stock		
Raw material	2,000	
WIP	4,400	
Finished goods	3,600	
Wages	20,000	
Salary	40,000	
Advertising expenses	2,000	
Power	7,000	

(*Contd*)

(*Contd*)

Carriage inwards	1,000	
Freight charges	4,000	
Carriage outwards	6,000	
Bad debts	3,000	
Discount allowed	1,000	
Discount received		5,000
Interest paid	7,000	
Commission	3,000	5,000
Rent, rate and taxes	10,000	
Cash	16,000	
Building	1,00,000	
Sundry debtors	30,000	
Sundry creditors		10,000
Total	6,20,000	6,20,000

Additional Information (adjustments) (Amount in '000)

(i) Closing stock of raw material, work-in-process and finished goods was 3,500; 6,000 and 4,000, respectively.

(ii) Wages ₹ 2,000 was due but not paid so far.

(iii) Salary includes ₹ 1,000 relevant for next financial year.

(iv) Commission received includes ₹ 500 relevant for next financial year.

(v) Provide depreciation @ 10% on building.

(vi) Make provision for doubtful debts @ 4% and provision for discount on debtors @ 1%

Solution Adjustment entries for the additional information will be as follows:

(i) For closing stock of raw material and work-in-process

Stock a/c	Dr.	9,500	
To Manufacturing a/c			9,500

(Closing stock of raw material and WIP transferred to manufacturing account)

(ii) For closing stock of finished goods

Stock a/c	Dr.	4,000	
To Trading a/c			4,000

(iii) For adjustment no. (ii), it is an outstanding wage

Wages a/c	Dr.	2,000	
To Outstanding wages a/c			2,000

(iv) For adjustment no. (iii), it is pre-paid salary

Pre-Paid Salary a/c	Dr.	1,000	
To Salary a/c			1,000

(v) For adjustment no. (iv), it is unearned commission

Commission a/c	Dr.	500	
To Unearned Commission a/c			500

(vi) For adjustment no. (v), it is provision for depreciation on building

Profit & Loss a/c	Dr.	10,000	
To Provision for Depreciation a/c			10,000

(vii) For adjustment no. (vi), it is provision for doubtful debts and provision for discount on debtors

Profit & Loss a/c	Dr.	1,488	
To Provision for Doubtful Debts a/c			1,200
To Provision for Discount on Debtors a/c			288

Manufacturing and Trading A/C and P & L A/C for the year ending March 31, 2010

Particulars		Amount ₹ in ('000)	Particulars		Amount ₹ in ('000)
To Opening Stock			*By Closing Stock*		
Raw material		2,000	Raw material		3,500
Work-in-process		4,400	Work-in-process		6,000
To Purchase		1,80,000	**By Cost of goods manufactured c/d**		2,10,900
To Wages	20,000				
Add: Outstanding	2,000	22,000			
To Power		7,000			
To Carriage inwards		1,000			
To Freight charges		4,000			
		2,20,400			2,20,400
To Cost of goods manufactured b/d		2,10,900	By Sales		3,90,000
To Opening stock of finished goods		3,600	By closing stock of finished goods		4,000
To Gross Profit c/d		1,79,500			
		3,94,000			3,94,000
To Salary	40,000		**By Gross Profit c/d**		179,500
Less: pre-paid	1,000	39,000	By Commission earned	5,000	
To Advertising expenses		2,000	Less: Unearned	500	4,500
To Carriage outwards		6,000	By Discount received		5,000
To Bad debts		3,000			
To Discount allowed		1,000			
To Commission paid		3,000			
To Interest paid		7,000			
To Rent, Rate & Taxes		10,000			
To Provision for depreciation on building		10,000			
To Provision for doubtful debts		1,200			
To provision for discount on debtors		288			
To Net profit for the year		1,06,512			
		1,89,000			1,89,000

PREPARATION OF BALANCE SHEET

Balance is a statement comprising assets and liabilities at the end of the accounting year. Balance sheet is a static statement it depicts only such assets and liabilities that are as on the date of balance sheet, i.e., at the end of the accounting year. Balance sheet of **non-corporate** (sole enterprises and partnership firm) business enterprises is usually prepared by placing the assets either in ascending order of liquidity of assets, i.e., **liquidity preference** or in descending order of liquidity of assets, i.e., **permanence preference**. Whereas for a **corporate** (company) business enterprises, a particular flow of assets as provided in the accounting standard is followed.

Sequence of Items in Balance Sheet – Liquidity vs Permanence

Liquidity implies ease of converting an item into cash. **Liquidity preference** implies placing the items in the decreasing order of liquidity of assets and liabilities. And **permanence preference** implies placing the items in the ascending order or liquidity of assets and liabilities.

(A) Liquidity Preference—Presentation of Assets in Balance Sheet

(i) Current Assets and Advances—cash, bank, marketable securities, short-term investment, advances, stock/inventory, pre-paid expenses, accrued income.
(ii) Investment (long-term investment).
(iii) Fixed assets—land, building, property, plant, furniture, equipments, tools, other establishments.
(iv) Intangible assets—logo, copyrights, patents, goodwill, trademark.
(v) Fictitious assets—preliminary expenses, deferred revenue expenses, discount on issue of shares/debentures, issue expenses.

(B) Permanence Preference—Presentation of Assets in Balance Sheet

(i) Fictitious assets—preliminary expenses, deferred revenue expenses, discount on issue of shares/debentures, issue expenses.
(ii) Intangible assets—logo, copyrights, patents, goodwill, trademark.
(iii) Fixed assets—land, building, property, plant, furniture, equipments, tools, other establishments.
(iv) Investment (long-term investment).
(v) Current Assets and Advances—cash, bank, marketable securities, short-term investment, advances, stock/inventory, pre-paid expenses, accrued income.

Balance Sheet as on March 31, 2010 (Permanence preference)

Liabilities		Amount (₹)	Assets		Amount (₹)
Capital	2,10,000		Plant		1,80,000
Add: Net profit	1,06,512		Building	1,00,00	
		3,16,512	Less: Provision for depreciation	10,000	90,000
			Cash		16,000
Sundry creditors		10,000	*Stock*		
Outstanding wages		2,000	Raw material		3,500
Unearned commission		500	Work-in-process		6,000
			Finished goods		4,000
			Pre-paid salary		1,000
			Sundry Debtors	30,000	
			Less: Provision for doubtful debts	1,200	
			Less: Provision for discount	288	
					28,512
		3,29,012			3,29,012

Balance Sheet as on March 31, 2010 (Liquidity preference)

Liabilities	Amount (₹)	Assets	Amount (₹)
		Cash	16,000
Sundry creditors	10,000	*Stock*	
Outstanding wages	2,000	Raw material	3,500

(*Contd*)

(*Contd*)

Unearned commission		500	Work-in-process		6,000
Capital	2,10,000		Finished goods		4,000
Add: Net profit	1,06,512	3,16,512	Pre-paid salary		1,000
			Sundry Debtors	30,000	
			Less: Provision for doubtful debts	1,200	
			Less: Provision for discount	288	
					28,512
			Building	1,00,000	
			Less: Provision For depreciation	10,000	90,000
			Plant		1,80,000
		3,29,012			3,29,012

OPENING ENTRIES

Opening entry is passed in the beginning of the accounting year to bring in the opening balance of different asset and liability accounts in the ledger. Balances of assets and liabilities are continued from one accounting year to another accounting year until the account balance becomes zero. The opening entries are passed in journal proper. As assets always have debit balance and liabilities always have credit balance, therefore all the asset accounts are debited and liability accounts are credited to bring in the opening balance in the respective account. The opening entry is as follows:

Sundry Assets a/c Dr.
To Sundry Liability a/c
(Opening balances of assets and liabilities brought forward)

With the help of opening entry asset and liability accounts get opened in the ledger in the beginning of the accounting year.

> **Opening entries** are the means to bring forward assets and liabilities as depicted in the balance sheet of previous financial year.

EXAMPLE 17 From the following balance sheet pass opening entry in the beginning of next accounting year.

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Capital	9,00,000	Land & Building	5,30,000
Secured Bank Loan	1,50,000	Plant & Machinery	1,10,000
Bank Overdraft	70,000	Furniture	20,000
Sundry Creditors	30,000	Investment	90,000
Tax payable	1,85,000	Stock	95,000
Outstanding Expenses	50,000	Sundry Debtors	1,75,000
		Bills Receivables	25,000
		Cash and Bank	80,000
		Pre-paid Expenses	15,000
		Marketable Securities	20,000
		Preliminary Expenses	40,000
		Goodwill	1,10,000
		Patents	75,000
	13,85,000		13,85,000

Solution

Journal Proper

Journal Proper (General Journal)

Date	Particulars		V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
2010 April 1	Land & Building	a/c Dr.			5,30,000	
	Plant & Machinery	a/c Dr.			1,10,000	
	Furniture	a/c Dr.			20,000	
	Investment	a/c Dr.			90,000	
	Stock	a/c Dr.			95,000	
	Sundry Debtors	a/c Dr.			1,75,000	
	Bills Receivables	a/c Dr.			25,000	
	Cash and Bank	a/c Dr.			80,000	
	Pre-paid Expenses	a/c Dr.			15,000	
	Marketable Securities	a/c Dr.			20,000	
	Preliminary Expenses	a/c Dr.			40,000	
	Goodwill	a/c Dr.			1,10,000	
	Patents	a/c Dr.			75,000	
	To Owner's Capital	a/c				9,00,000
	To Secured Bank Loan	a/c				1,50,000
	To Bank Overdraft	a/c				70,000
	To Sundry Creditors	a/c				30,000
	To Tax payable	a/c				1,85,000
	To Outstanding Expenses	a/c				50,000
	(Opening balance of sundry assets and sundry liabilities brought forward)					
					13,85,000	13,85,000

Vertical Presentation of Profit and Loss Account and Balance Sheet

As per Indian GAAP, profit and loss account and assets and liabilities in a balance sheet may be presented in vertical form rather than in the horizontal form as presented previously. In the vertical form of profit and loss account, income items are shown first and expenses items are deducted from the total income in a particular sequence. In the vertical form of balance sheet **sources of funds**—liabilities are shown first and then the **application of funds**—assets are shown. Indian GAAP has specified the following format of vertical form of profit and loss account and balance sheet.

> Liabilities including share-holders' net worth are the **source** of funds and all the assets are the **application** of funds.

Recently in March 2011 ministry of corporate affairs has introduced changes in the schedule VI to Companies Act, 1956. These changes are about new format of company final accounts—profit and loss a/c and balance sheet. These have been discussed in Appendix-III of this book.

Structure of Profit and Loss Account

Profit and Loss Account for the year ending ......

Items	Schedule No.	Current year	Previous year
1. Income			
■ Sales			
■ Dividend			
■ Interest			
■ Other income			
Total			

(*Contd*)

(*Contd*)

2. Expenditures			
(a) Cost of goods sold			
Opening stock			
Add: purchase during the year			
Less: closing stock			
(b) Manufacturing expenses			
(c) Selling expenses			
(d) Salaries, wages and employee benefits			
(e) Managerial remuneration			
(f) Depreciation and amortization			
(g) Auditors remuneration			
(h) Provisions for doubtful debts/contingent liabilities			
(i) interest expenses			
(j) Other expenses			
3. Profit/loss before tax (1–2)			
4. Provision for tax			
5. Profit/loss after tax (3–4)			
6. Proposed dividend			
(a) preference dividend			
(b) equity dividend			
7. Transfer to reserves			
8. Surplus			

Structure of Balance Sheet

Name of the Company

Balance Sheet as on ....

Items	Schedule No.	Current year	Previous year
1. Sources of Funds			
(i) Shareholder's funds:			
(a) Share Capital			
(b) Reserve and surplus			
(ii) Loan funds:			
(a) Secured loans			
(b) Unsecured loans			
Total			
2. Application of Funds			
(i) Fixed assets:			
(a) Gross block			
Less: accumulated depreciation			
Net block			
(b) Capital work in progress			
(ii) Investments			
(iii) Current assets, loans and advances:			
(a) Inventories			
(b) Sundry debtors			
(c) Cash and bank balances			

(*Contd*)

(*Contd*)

(d) Other current assets
(e) Loans and advances
Less: Current liabilities and provisions
(a) Liabilities
(b) Provisions
Net current assets
(iv) Fictitious assets
(a) Miscellaneous expenditures
(to the extent not written off or adjusted)
(b) Profit and loss account
Total

(Details about different asset and liability items has been given in chapter three).

Schedules Forming the Part of Accounts (Final Accounts)

Format of balance sheet as given above contains the final amount of each and every item. Certain details are also to be disclosed along with the balance sheet in the form of schedules forming the part of balance sheet. These schedules contain the details of each of the items disclosed above.

Schedule No.	Current Year	Previous Year
Schedule 1		
Share capital		
Authorized capital		
Issued and subscribed capital		
Schedule 2		
Reserve and surplus		
Revaluation reserve		
Capital redemption reserve		
Capital reserve		
Debenture redemption reserve		
Securities premium		
General reserve		
As per last balance sheet		
Add: Transferred during current year		
Profit and loss account (surplus)		
Schedule 3		
Secured loans		
Schedule 4		
Unsecured loans		
Schedule 5		
Fixed assets—Tangible		
(a) Opening balance (gross block)		
Add: Additions		
Less: Assets disposed		
Fixed assets—Intangible		
Closing balance (gross block)		

(b) Opening balance (accumulated depreciation)
Add: depreciation for the year
Less: accumulated depreciation of assets disposed
Closing balance (accumulated depreciation)
Net block (a–b)
Fixed assets—Intangible
Goodwill
Patents
Copyrights
Trademark and logo

Schedule 6
Investments
(a) Long-term investments
(b) Current investments
(c) Investment in subsidiaries and group companies

Schedule 7
Current assets, loans and advances:
(a) Inventories
(b) Sundry debtors
(c) Cash and bank balances
(d) Other current assets
Loans and advances

Schedule 8
Current liabilities and provisions
(a) Current liabilities
- Acceptances
- Sundry creditors
- Other current liabilities

(b) Provisions
- Provision for tax
- Proposed dividend
- Other provisions

Schedule 9
Miscellaneous expenditures
(to the extent not written off)

Schedule 10
Contingent liabilities

Schedule 11
Sales and service

Schedule 12
Other income

Schedule 13
Manufacturing and operating expenses

Schedule 14
Staff expenses

Schedule 15
Administration, selling and other expenses

Schedule 16
Interest expenses

Schedule 17
Significant accounting policies

Extraordinary Items and Prior Period Items

Extraordinary items are such revenue and expenses items that arise from the activities and reasons distinct from the ordinary business activities/events; for example, loss due to speculation, losses due to earthquake, flood, and terrorist activities, etc. Likewise, there might be certain income/revenue that are not the recurring items, such as speculation gain, special grant or subsidy from government and gain from sale of non-business assets. These items are not likely to arise frequently as the ordinary items arise. While presenting income statement—profit and loss account—these items should be shown under separate heading and should not be mixed with the routine items or items relating to ordinary course of business.

Prior period items are the income and expense items that due to certain errors/mistakes could not be provided in the income statement of previous financial year. Although these are to be incorporated in the income statement of current financial year but under a separate heading. By doing this, a true representation of current profit/loss can be made and the impact of prior period items can be shown distinctly.

Presentation of both of these items distinctly helps in facilitating proper analysis of the financial results as depicted by income statement.

COMPREHENSIVE INCOME

Comprehensive income is all inclusive income, it comprises of net profit for the year as well as certain other income items that are not routed through the income statement but directly transferred to equity account. These items may be revaluation profit, capital profit, etc. directly recognized into net worth, i.e., equity of shareholders. The change in the equity from one accounting year to another accounting year is recorded by considering comprehensive income. As comprehensive income results into net change in the equity for reasons other than those with owners, therefore it is also called **clean surplus**.

> **Comprehensive income** is the final change in the owner's equity for the reasons other than those with owners.

The monetary effect of the items that are directly transferred to equity account is termed as **dirty surplus.** The equity of owners is arrived as follows:

Statement of Changes in Equity

Particulars	Amount (₹)
Opening Equity	
(i) Paid up capital	
(ii) Reserve & surplus	
Add:	

(*Contd*)

(*Contd*)

Comprehensive Income	
(i) Dirty Surplus	
■ Revaluation profit	
■ Capital profit	
■ Net securities premium	
(ii) Net Profit for the year	
Less: Dividend	
Closing Equity	

SOLVED EXAMPLES

EXAMPLE 18 Show opening entries and also show how the transactions for the year will be shown in journal.

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Capital	5,00,000	Plant & Machinery	3,10,000
Secured Bank Loan	50,000	Furniture	1,20,000
Bank Overdraft	1,70,000	Stock	1,90,000
Sundry Creditors	20,000	Sundry Debtors	25,000
		Cash	10,000
		Bank	25,000
		Preliminary Expenses	20,000
		Goodwill	40,000
	7,40,000		7,40,000

The following transactions were executed during April 2010:

(i) Cash sales ₹ 1,20,000

(ii) Sold goods to Mohan ₹ 85,000

(iii) Purchase of goods ₹ 34,000 and issued cheque

(iv) Paid rent by cheque of ₹ 23,500

SOLUTION

Journal Proper (General Journal)

Date	Particulars		V. No.	L.F.	Amt. Debit (₹)	Amt. Credit (₹)
2010 April 1	Plant & Machinery a/c	Dr.			3,10,000	
	Furniture a/c	Dr.			1,20,000	
	Stock a/c	Dr.			1,90,000	
	Sundry Debtors a/c	Dr.			25,000	
	Cash a/c	Dr.			10,000	
	Bank a/c	Dr.			25,000	
	Preliminary Expenses a/c	Dr.			20,000	
	Goodwill a/c	Dr.			40,000	
	To Owner's Capital a/c					5,00,000
	To Secured Bank Loan a/c					50,000
	To Bank Overdraft a/c					1,70,000
	To Sundry Creditors a/c					20,000
	(Opening balance of sundry assets and liabilities accounts brought forward by passing opening entry)					

(*Contd*)

(*Contd*)

	Cash a/c Dr. To Sales a/c (Sold goods in cash)			1,20,000	1,20,000
	Mohan's a/c Dr. To Sales a/c (Sold goods to Mohan on credit)			85,000	85,000
	Purchase a/c Dr. To Bank a/c (Purchased goods and issued cheque)			34,000	34,000
	Rent a/c Dr. To Bank a/c (Paid rent by cheque)			23,500	23,500
	Total			**10,02,500**	**10,02,500**

EXAMPLE 19 From the following trial balance, prepare trading account, profit and loss account and balance sheet.

SOLUTION

Dr. Trial Balance as on March 31, 2010 (₹ in crore) Cr.

Particulars	Amount	Particulars	Amount
Opening stock	7,500	Sales	35,000
Purchase	24,500	Discount	500
Productive wages	5,000	Profit & Loss a/c	1,503
Discount	700	(opening balance)	
Salary	750	Share Capital	10,000
Rent	495	(face value Re. 1)	
Insurance premium	1,705	Sundry creditors	1,750
Dividend paid	500	General Reserve	1,550
Interim dividend paid	400		
Sundry debtors	3,750		
Plant and Machinery	2,900		
Cash in hand and at bank	1,620		
Loan to Managing director	325		
Bad Debts	158		
Total	50,303		50,303

Additional Information (adjustments)

(i) Closing stock was ₹ 8,200 crore

(ii) Insurance premium for 6 months at the rate of ₹ 50 crore per annum was pre-paid.

(iii) one month rent ₹ 35 crore was due but not paid.

(iv) Provide depreciation on plant and machinery @ 10%.

(v) Make provision for doubtful debts @ 5% and provision for discount on debtors @ 2%

(vi) Goods costing ₹ 1,000 crore were dispatched on March 28, 2010 but a bill for the amount for ₹ 1,250 crore was raised only on April 2, 2010. One more credit sales transaction of ₹ 250 was completed in March, 2010 but not recorded in the books of accounts.

(vii) Bank statement revealed that bank had debited us for bank charges of ₹ 1 crore and for interest ₹ 2 crore but not recorded in cash book.

(viii) A cheque of ₹ 3 crore deposited by us was dishonoured, entered in pass book but not in cash book; it was disclosed that party had been declared insolvent and nothing is recoverable.

(ix) Cheques of ₹ 5 crore issued but not presented for payment till March 31, 2010.

(x) Goods costing ₹ 200 crore were destroyed by fire and insurance company admitted the claim for ₹ 175 crore only.

(xi) In case of sufficient net profit transfer ₹ 2,000 crore to general reserve.

(xii) Remaining profit, if any is to be kept as surplus.

Solution

Adjustment entries for the additional information will be as follows: (₹ in crore)

(i) For closing stock

Stock a/c	Dr.	8,200	
To Trading a/c			8,200

(ii) For pre-paid insurance premium

Pre-paid Insurance Premium a/c	Dr.	25	
To Insurance Premium a/c			25

(iii) For outstanding rent

Rent a/c	Dr.	35	
To Outstanding rent a/c			35

(iv) For provision for depreciation on plant and machinery

Profit & Loss a/c	Dr.	290	
To Provision for Depreciation on Plant and machinery a/c			290

(v) Provision for doubtful debts and discount on debtors has been made after incorporating the effect of adjustment entry for unrecorded sales of ₹ 250

Profit & Loss a/c	Dr.	276	
To Provision for Doubtful Debts a/c			200
To Provision for Discount on Debtors a/c			76

(vi) For goods in transit of sales value 1,250 (cost ₹ 1,000) revenue is to be recognized in the next financial year. Therefore, the goods in transit are to be recorded on March 31, 2010.

Goods in transit a/c	Dr.	1,000	
To Trading a/c			1,000

For sales executed but not recorded in the books, the following entry is to be passed.

Sundry Debtors a/c	Dr.	250	
To Sales a/c			250

(vii) Bank charge and interest, these are the items of adjusted bank balance

Bank charges a/c	Dr.	1.00	
Interest a/c	Dr.	2.00	
To Bank a/c			3.00

(viii) This is the case of dishonour of cheque as well as bad debts;, therefore, this will not affect debtors but have an effect on bank balance and bad debts.

(a) Sundry debtors a/c	Dr.	3.00	
To Bank a/c			3.00
(b) Bad Debts a/c	Dr.	3.00	
To Sundry debtors a/c			3.00

(ix) This is an item of bank reconciliation statement no entry is required.

(x) Here the insurance company will be debtor for ₹ 175 crore and remaining is the loss namely loss by fire to be shown in profit and loss account.

Insurance claim (company) a/c	Dr.	175	
Loss by fire a/c	Dr.	25	
To Trading a/c			200

Trading and Profit and Loss a/c for the year ending March 31, 2010

Particulars	Amount (₹ in crore)	Particulars	Amount (₹ In crore)
To Opening stock	7,500	By Sales (35,000 + 250)	35,250
To Purchase	24,500	By Goods in transit	1,000
To Productive wages	5,000	By Closing stock	8,200
		By Loss by fire	200
To Gross profit c/d	7,650		
	44,650		44,650
To Discount	700	By Gross Profit c/d	7,650
To Salary	750	By Discount received	500
To Rent 495			
Add: outstanding 35	530		
To Insurance premium 1,705			
Less: pre-paid 25	1,680		
To Bad debts (158 + 3)	161		
To Provision for depreciation	290		
To Provision for doubtful debts	200		
To provision for discount on debtors	76		
To Loss by fire	25		
To Bank charges	1		
To interest	2		
To Net profit for the year	3,735		
	8,150		8,150

Adjustment entry for adjustment no. (xi)

Profit and Loss Appropriation a/c	Dr.	2,000	
To General reserve a/c			2,000

Profit and Loss Appropriation a/c for the year ending March 31, 2010

Particulars	Amount (₹ in crore)	Particulars	Amount (₹ in crore)
To Interim dividend paid	400	By Balance b/f	1,503
To Dividend paid	500	By net profit for the year	3,735
To General reserve	2,000		
To Surplus carried to next year	2,338		
	5,238		5,238

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹ in crore)	Assets		Amount (₹ in crore)
Share Capital (face value ₹ 1/=)	10,000	Plant and Machinery	2,900	
General Reserve (1,550 + 2,000)	3,550	Provision for Depreciation	(290)	2,610
Profit & Loss (surplus)	2,338	Sundry Debtors	4,000	
Sundry Creditors	1,750	(3,750 + 250)		
Outstanding Rent	35	Provision for Doubtful debts	(200)	
		Provision for Discount	(76)	3,724
		Cash in hand and at bank		
		(1,620 − 6)		1,614
		Loan to MD		325
		Pre-paid insurance		25
		Closing Stock		8,200
		Goods in transit		1,000
		Insurance claim (company)		175
	17,673			17,673

Example 20 The following is the profit and loss account and balance sheet of Sevadar International Ltd. Redraft these in vertical form.

Profit and Loss Account for the year ending March 31, 2009

Particulars	₹	Particulars	₹
To **Opening Stock**		By Sales	20,00,000
Finished Goods	50,000	By **Closing Stock**	
Raw Material	40,000	Finished Goods	10,000
To Purchase of Raw Material	2,00,000	Raw Material	5,000
To Direct Wages	1,10,000	By Profit on sale of Assets	40,000
To Manufacturing Expenses	90,000		
To Administrative Expenses	10,000		
To Depreciation	80,000		
To Preliminary expenses Written off	5,000		
To Selling and Distribution Expenses	1,40,000		
To Loss on Sale of Plant	5,000		
To Interest on Debentures	40,000		
To Net Profit	12,85,000		
	20,55,000		20,55,000
To Provision for tax	3,50,000	By Balance b/f	1,15,000
To General Reserve	4,80,000		
To Preference Dividend	1,00,000	By Net Profit for the Year	12,85,000
To Final Equity Dividend	1,40,000		
To Balance c/f	3,30,000		
	14,00,000		14,00,000

Balance Sheet As on March 31, 2009

Liabilities	₹	Assets	₹
Equity Share Capital (face value ₹ 10)	10,00,000	Plant (Net)	22,00,000
		Building (Net)	5,80,000
12.5% Preference Share Capital	8,00,000	Land	4,60,000
General Reserve	6,80,000	Investment	2,70,000
Securities Premium	30,000	**Stock**	
P & L Account	3,30,000	Finished Goods	10,000
10% Debenture	4,00,000	Raw Material	5,000
Sundry Creditors	2,50,000	Sundry Debtors	1,85,000
Outstanding Expenses	30,000	Bank Balance	50,000
Tax Payable	3,50,000	Marketable Securities	20,000
Dividend Payable	1,40,000	Pre-paid Expenses	1,30,000
		Preliminary Expenses	1,00,000
	40,10,000		40,10,000

Solution

Income Statement
For the year ending March 31, 2009

Particulars	Details	Amount (₹)
Sales		**20,00,000**
Less: **Cost of Goods Sold (COGS)**		
Raw Material Consumed		
Opening stock of R.M.	40,000	
(+) Purchase of R.M.	2,00,000	
(–) Closing stock of R.M.	5,000	
Raw Material Consumed	2,35,000	
Direct Wages	1,10,000	
Manufacturing Expenses	90,000	
	4,35,000	
Add: Opening stock of finished goods	50,000	
Less: Closing stock of finished goods	10,000	
Cost of Goods Sold	4,75,000	(4,75,000)
Gross Profit		**15,25,000**
Less: *Operating Expenses*		
Administrative expenses	10,000	
Selling and Distribution expenses	1,40,000	(1,50,000)
Cash Operating Profit (EBDAIT)		13,75,000
Less: *Depreciation and Amortization*		
Depreciation	80,000	
Preliminary expenses written off	5,000	(85,000)
Operating Profit		**12,90,000**
Add: Non-operating Income (profit on sale of shares)	40,000	
Less: Non-operating expenses/losses (loss on sale of plant)	5,000	35,000
Earning Before Interest and Tax (EBIT)		13,25,000
Less: Interest		40,000
Earning Before Tax (EBT)		**12,85,000**
Less: Tax		3,50,000
Earning After Tax (EAT)		**9,35,000**
Surplus of Previous year		1,15,000

(*Contd*)

(*Contd*)

Ass: Profit for the year	9,35,000
Less: (1) Transfer to Genera Reserve	(4,80,000)
(2) Preference Divided	(1,00,000)
(3) Final Equity Dividend	(1,40,000)
Surplus Carried Forward	3,30,000

Sevadar International Ltd
Balance Sheet as on March 31, 2009

Items		Amount (₹)
1. Sources of Funds		
(i) Shareholder's funds:		
Share Capital	18,00,000	
Reserve and surplus	10,40,000	
(ii) Loan funds:		
Secured loans	4,00,000	
Total		
2. Application of Funds		**32,40,000**
(i) Fixed assets:		
Net block		32,40,000
(ii) Investments		2,70,000
(iii) Current assets, loans and advances	4,00,000	
Current liabilities and provisions	(7,70,000)	
Net current assets		(3,70,000)
(iv) Fictitious assets		1,00,000
Total		**32,40,000**

KEY TERMS

Suspense account
Consumable items
Provision for depreciation on Straight line method (SLM) and written down value (WDV)
Depreciation
Provision for doubtful debts
Deferred tax liability
Amortization
Provision for discount on debtors
Deferred tax asset

FINAL RECAP

- **Adjustments** are the monetary transactions affecting the financial result of current financial year but not provided for in the books of account.
- **Closing inventory** is the stock of unused raw material, work-in-process and unsold finished goods.
- **Outstanding expenses** are such expenses that have become due but not been paid by the end of the financial year.
- **Pre-paid expenses** are such expenses that have been paid during the current financial year but these relate to next financial year.
- **Unearned income** is such income that has been received during the current financial year but it relates to the subsequent financial year.
- **Accrued income** is such income that has been earned during the current financial year but not received so far till the end of the financial year.
- **Consumable stock,** i.e., material other than **stock-in-trade** are certain material, such as stationery items, crockery, medicines, lubricants, waste paper and clothes get consumed in producing goods and services.

- Keeping certain part of current year's profit to write of expected loss on account of bad debts that might take place in future is called **provision for doubtful debts**.
- Keeping aside certain part of current year's profit to write off discount to be allowed to debtors in future is called **provision for discount on debtors**.
- **Depreciation** is charged on fixed assets to record the reduction in the value of assets on account of wear and tear of these assets due to business use. It is also charged on fixed assets to record obsolescence effect also.
- **SLM** method provides for charging equal amount of depreciation during each of the year over the useful life of the asset.
- **WDV** method of charging depreciation provides for decreasing amount of depreciation charged on asset year after year.
- **Deferred tax liability** is the amount of differential tax payable in future due to temporary difference in tax amount on taxable income and amount of tax on accounting profit.
- **Deferred tax asset** is the amount of differential tax recoverable in future due to temporary difference in tax amount on taxable income and amount of tax on accounting profit.
- **Trading account** is prepared to ascertain gross profit earned during the year.
- **Gross profit** is the profit that is arrived at by deducting only manufacturing cost of goods and services sold from the sales value of such goods and services.
- **Profit and loss account** is prepared to ascertain net profit for the year.
- **Net profit** is the profit arrived by deducting indirect expenses and losses from gross profit and by adding other income to gross profit.
- **Profit and loss appropriation account** is prepared to distribute the net profit for the current year and the surplus of the previous financial year.
- **Balance sheet** is a static statement it depicts only such assets and liabilities that are as on the date of balance sheet, i.e., at the end of the accounting year.
- **Liquidity preference** implies placing the items in the decreasing order of liquidity of assets and liabilities.
- **Permanence preference** implies placing the items in the ascending order of liquidity of assets and liabilities.
- **Extraordinary items** are such revenue and expenses items that arise from the activities and reasons, distinct from the ordinary business activities/events.
- **Prior period items** are the income and expense items that due to certain errors/mistakes could not be provided in the income statement of previous financial year.
- **Comprehensive income** is all inclusive income, it comprises of net profit for the year as well as certain other income items that are not routed through the income statement but directly transferred to equity account.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Which of the following is the effect of outstanding expense on final accounts?
   (a) Net profit decreases and liabilities increase.
   (b) Net profit decreases and liabilities decrease.
   (c) Net profit increases and asset increase.
   (d) Net profit does not get affected but liabilities increase.
2. Which of the following is the effect of pre-paid expenses on final accounts?
   (a) Net profit decreases and liabilities increase.
   (b) Net profit decreases and liabilities decrease.
   (c) Net profit increases and asset increase.
   (d) Net profit does not get affected but liabilities increase.
3. Which of the following is the effect of accrued income on final accounts?
   (a) Net profit decreases and liabilities increase.
   (b) Net profit decreases and liabilities decrease.

(c) Net profit increases and asset increase.
(d) Net profit does not get affected but liabilities increase.

4. Which of the following is the effect of unearned income on final accounts?
   (a) Net profit decreases and liabilities increase.
   (b) Net profit decreases and liabilities decrease.
   (c) Net profit increases and asset increase.
   (d) Net profit does not get affected but liabilities increase.
5. When depreciation provided in financial accounts is ₹ 30,000 as compared to a depreciation of 50,000 in taxable income, and tax rate is 25%, then it will result into
   (a) Deferred tax asset of ₹ 5,000
   (b) Deferred tax liability of ₹ 5,000
   (c) Deferred tax liability of ₹ 20,000
   (d) Deferred tax assets of ₹ 20,000
6. When depreciation provided in financial accounts is ₹ 80,000 as compared to a depreciation of 50,000 in taxable income, and tax rate is 30%, then it will result into
   (a) Deferred tax liability of ₹ 9,000
   (b) Deferred tax asset of ₹ 30,000
   (c) Deferred tax liability of ₹ 30,000
   (d) Deferred tax assets of ₹ 9,000
7. If retained profit for the year is ₹ 30,000, securities premium received during the year is ₹ 20,000 and revaluation profit is ₹ 15,000, then what will be the amount of clean surplus and dirty surplus?
   (a) Clean surplus ₹ 50,000 and dirty surplus ₹ 35,000
   (b) Clean surplus ₹ 65,000 and dirty surplus ₹ 35,000
   (c) Clean surplus ₹ 15,000 and dirty surplus ₹ 35,000
   (d) Clean surplus ₹ 20,000 and dirty surplus ₹ 35,000

Descriptive Questions

1. Explain with reasoning why adjustments are necessary to be incorporated in the final accounts. Give suitable example.
2. 'Fixed assets, tangible as well intangible, are not charged directly to revenue for the year instead these are amortized over their useful life.' Do you agree?
3. Explain liquidity preference and permanence preference of placing the items in the balance sheet.
4. Discuss the concept of deferred tax liability and deferred tax asset. Explain with the help of a suitable example.
5. 'Income statement is based on flow concept, whereas balance sheet is based on static concept.' Discuss.
6. 'Balance sheet conceals more than what it reveals.' Explain.

Numerical Problems

1. Show closing entries for the following accounts:

Trial Balance

As on March 31, 2010

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		1,90,000	
2	Bank a/c		2,18,000	
3	Capital a/c			5,50,000
4	Furniture a/c		1,35,000	
5	Salary a/c		17,500	
6	Purchase a/c		27,000	
7	Sales a/c			55,000
8	Mohit's a/c		3,000	
9	Commission Received a/c			4,000
10	Rent a/c		18,500	
	Total		6,09,000	6,09,000

2. From the following balance sheet, pass opening entry in the beginning of next accounting year:

Balance Sheet as on March 31, 2010

Liabilities	Amount (₹)	Assets	Amount (₹)
Owner's Capital	19,00,000	Land & Building	15,30,000
Secured Bank Loan	11,50,000	Plant & Machinery	11,10,000
Bank Overdraft	70,000	Furniture	2,20,000
Sundry Creditors	30,000	Investment	90,000
Tax payable	2,85,000	Stock	95,000
Outstanding Expenses	1,50,000	Sundry Debtors	1,75,000
		Bills Receivables	25,000
		Cash and Bank	80,000
		Pre-paid Expenses	15,000
		Marketable Securities	20,000
		Preliminary Expenses	40,000
		Goodwill	1,10,000
		Patents	75,000
	35,85,000		35,85,000

3. Show how the following adjustments are to be shown in the final accounts:

Trial Balance for the year ending March 31, 2010

Particulars	Amount (₹)
Wages	1,39,000
Salary	1,52,000
Insurance Premium	78,000
Commission Received	20,000
Interest Received	50,000

Adjustments

(i) Wages due but not paid so far ₹ 21,000
(ii) Insurance premium paid on January 1, 2010 is for twelve month-period
(iii) Commission earned but not received so far ₹ 13,000
(iv) Interest received includes ₹ 9,000 relevant for next financial year.

4. Trial balance of a business as on March 31, 2009 showed Sundry Debtors ₹ 1,70,000 and Bad Debts ₹ 12,000. Business wishes to maintain a provision for doubtful debts @ 4% for the next year. Show adjustment entries and how these will appear in final accounts.
5. Trial balance as on March 31, 2010 showed Sundry Debtors of ₹ 80,000; Bad Debts ₹ 5,400; Discount Allowed ₹ 500 and Provision for Doubtful Debts ₹ 7,000. It was decided to maintain provision for doubtful debts @ 4% of debtors and provision for discount on debtors @ 2% for next financial year. Show how both of these provisions are to be maintained and projected in the final accounts.
6. In the trial balance on March 31, 2010 building appeared at a gross value at ₹ 11,20,000. Provision for depreciation in the trial balance is at ₹ 2,24,000. The company has the practice of charging depreciation @ 20% as per SLM on this asset. Show how adjustment entry and how this item will appear in the balance sheet.

7. Prepare final accounts using the following trial balance:

Trial Balance

As on March 31, 2010

S. No.	Name of Account	L. F.	Debit Amount (₹)	Credit Amount (₹)
1	Cash a/c		2,74,050	
2	Bank a/c		3,93,000	
3	Capital a/c			11,50,000
4	Machinery a/c		2,90,000	
5	Furniture a/c		1,74,500	
6	Salary a/c		31,000	
7	Insurance Premium a/c		10,000	
8	Advertising Expense a/c		31,200	
9	Bad Debts a/c		5,000	
10	Purchase a/c		78,100	
11	Stationery a/c		650	
12	Freight a/c		100	
13	Discount a/c		200	500
14	Sales a/c			1,34,000
15	Commission Received a/c			1,400
16	Kapil's a/c			13,000
17	Rent a/c		9,400	
18	Sales Return a/c		1,700	
19	Purchase Return a/c			1,000
20	Loss on Sale of Machinery a/c		1,000	
	Total		12,99,900	12,99,900

8. Rework the following balance sheet in vertical form:

Balance Sheet As on March 31, 2009

Particulars	₹	Particulars		₹
Equity Share Capital (face value ₹ 100)	1,50,000	Plant (Net)		2,00,000
		Land & Building (Gross)	5,00,000	
18% Preference Share Capital	1,00,000	Less Acc. Dep.	1,20,000	3,80,000
General Reserve	2,50,000	Investment		1,70,000
Securities Premium	30,000	Stock		90,000
P & L Account	70,000	Sundry Debtors		60,000
12.5 %Debenture	4,00,000	Bills Receivables		50,000
Sundry Creditors	1,18,000	Short-term investment		95,000
Tax Payable	51,000	Pre-paid Expenses		35,000
Proposed Dividend	31,000	Trademark		40,000
		Preliminary Expenses		80,000
	12,00,000			12,00,000

9. Rework the following income statement and balance sheet in vertical form:

Profit and Loss Account

For the year ending March 31, 2009

Particulars	₹	Particulars	₹
To **Opening Stock**		By Sales	35,00,000
Raw Material	1,50,000	By **Closing Stock**	
To Purchase of Raw Material	13,40,000	Raw Material	1,00,000
To Direct Wages	7,20,000	By Profit on sale of Assets	40,000
To Manufacturing Expenses	1,90,000		
To Administrative Expenses	60,000		
To Depreciation	60,000		
To Preliminary expenses Written off	30,000		
To Selling and Distribution Expenses	35,000		
To Loss on Sale of Plant	5,000		
To Interest on Debentures	70,000		
To Net Profit	9,80,000		
	36,40,000		36,40,000
To Provision for tax	2,25,000	By Balance b/f	1,20,000
To General Reserve	1,75,000		
To Preference Dividend	80,000	By Net Profit for the Year	9,80,000
To Final Dividend	2,40,000		
To Balance c/f	3,80,000		
	11,00,000		11,00,000

Balance Sheet as on March 31, 2009

Particulars	₹	Particulars	₹
Equity Share Capital (face value ₹ 100)	12,00,000	Plant (Net)	20,00,000
		Building (Net)	6,80,000
10% Preference Share Capital	8,00,000	Land	4,00,000
General Reserve	6,20,000	Investment	2,00,000
Securities Premium	1,30,000	**Stock**	
P & L Account	3,80,000	Raw Material	1,00,000
10% Debenture	7,00,000	Sundry Debtors	75,000
Sundry Creditors	1,50,000	Bank Balance	85,000
Outstanding Expenses	30,000	Marketable Securities	1,50,000
Tax Payable	50,000	Pre-paid Expenses	40,000
Dividend Payable	2,40,000	Patents	3,90,000
		Preliminary Expenses	1,80,000
	43,00,000		43,00,000

10. By using balance sheet, prepare trial balance:

Balance Sheet as on March 31, 2009

Particulars	₹	Particulars	₹
Equity Share Capital	2,00,000	Plant (Net)	1,00,000
(face value ₹ 10)		Building (Net)	80,000
10% Preference Share Capital		Investment	70,000
General Reserve	1,00,000	**Stock**	
Securities Premium	80,000	Finished Goods	1,50,000
P & L Account	10,000	Raw Material	1,00,000
Debenture	10,000	Sundry Debtors	80,000
Sundry Creditors	2,00,000	Bank Balance	40,000
Tax Payable	1,00,000	Marketable Securities	20,000
	50,000	Pre-paid Expenses	10,000
		Goodwill	30,000
		Preliminary Expenses	70,000
	7,50,000		7,50,000

11. From the following trial balance, prepare manufacturing account, trading account, as well as profit and loss account:

Trial Balance as on March 31, 2011

Name of Account	Debit Amount ('000)	Credit Amount ('000)
Plant a/c	2,75,000	
Capital a/c		2,80,000
Purchase a/c	1,90,000	
Sales a/c		4,09,000
Opening stock		
Raw material	12,000	
WIP	14,400	
Finished goods	13,600	
Wages	20,000	
Salary	40,000	
Advertising expenses	2,500	
Power	7,500	
Carriage inwards	1,500	
Freight charges	4,500	
Carriage outwards	8,000	
Bad debts	13,000	
Discount allowed	11,000	
Discount received		15,000
Interest paid	7,000	
Commission	3,000	45,000
Rent, rate and taxes	10,000	
Cash	16,000	
Building	2,50,000	
Sundry debtors	30,000	
Sundry creditors		30,000
Long-term loan		1,50,000
Total	9,29,000	9,29,000

Additional Information (adjustments)

(i) Closing stock of raw material, work-in-process and finished goods was 13,500; 16,000 and 14,000, respectively.
(ii) Wages ₹ 12,000 was due but not paid so far.
(iii) Salary includes ₹ 2,000 relevant for next financial year.
(iv) Commission received includes ₹ 1,500 relevant for next financial year.
(v) Provide depreciation @ 20% on building.
(vi) Make provision for doubtful debts @ 3% and provision for discount on debtors @ 2%

12. From the following trial balance prepare trading account, profit and loss account and balance sheet.

Dr. Trial Balance as on March 31, 2011 (₹ in crore) Cr.

Particulars	Amount (₹)		Amount (₹)
Opening stock	7,000	Sales	45,000
Purchase	24,000	Discount	1,500
Productive wages	6,000	Profit & Loss a/c	1,500
Discount	1,700	(Opening balance)	
Salary	1,750	Share Capital	11,000
Rent	1,495	(Face value Re. 1)	
Insurance premium	1,705	Sundry creditors	2,750
Dividend paid	1,500	General Reserve	1,560
Interim dividend paid	1,400	Secured loan	6,690
Sundry debtors	3,200		
Plant and Machinery	3,000		
Cash in hand and at bank	1,600		
Loan to Managing director	300		
Bad Debts	140		
Investment	10,000		
Goodwill	3,000		
Patents	2,210		
Total	70,000	Total	70,000

Additional Information (adjustments)

(i) Closing stock was ₹ 9,000 crore
(ii) Insurance premium for 3 months at the rate of ₹ 200 crore per annum was pre-paid.
(iii) One month rent ₹ 305 crore was due but not paid.
(iv) Provide depreciation on plant and machinery @ 20%.
(v) Make provision for doubtful debts @ 5%.
(vi) Write off goodwill and patents by 1/5
(vii) Bank statement revealed that bank had debited us for bank charges ₹ 11 crore and for interest ₹ 22 crore but not recorded in cash book.
(viii) Cheques of ₹ 5 crore issued but not presented for payment till March 31, 2010.
(x) Goods costing ₹ 1,200 were destroyed by fire and insurance company admitted the claim for ₹ 1,000 only.
(xi) In case of sufficient net profit transfer ₹ 2,000 crore to general reserve.
(xii) Remaining profit, if any is to be kept as surplus.

Answers

Multiple Choice Questions

1. (a), 2. (c), 3. (c), 4. (a), 5. (b), 6. (d), 7. (b)

Numerical Problems

1. Gross profit ₹ 28,000, net loss ₹ 4,000, total of balance sheet ₹ 5,46,000
2. Total of opening balance sheet ₹ 35,85,000
3. Wages ₹ 1,60,000; insurance premium ₹ 19,500; commission ₹ 33,000; interest received ₹ 41,000 to be shown in trading and profit & loss account.
4. Provision for doubtful debts charged to P & L account ₹ 6,800
5. Provision for doubtful debts charged to P & L account ₹ 1,600; new provision for doubtful debts shown in balance sheet ₹ 3,200; provision for discount ₹ 1,536.
6. Depreciation for current year ₹ 2,24,000; net block in balance sheet ₹ 6,72,000
7. Gross profit ₹ 55,100; Net loss ₹ 31,450
8. Total of balance sheet ₹ 10,00,000
9. Total of balance sheet ₹ 38,30,000
10. Total of trial balance ₹ 7,50,000
11. Gross profit ₹ 1,77,000; net profit ₹ 91,518; total of balance sheet ₹ 5,65,018
12. Gross profit ₹ 18,200 crore; net profit ₹ 10,620 crore; surplus carried to balance sheet ₹ 7,220 crore and total of balance sheet ₹ 31,525 crore.

CASE

Matched Balance Sheet: Accounting Misconception

A newly appointed financial accountant prepared the following profit and loss account and balance sheet of Tulip Ltd:

Profit and Loss Account for the year ending March 31, 2010

Particulars	₹	Particulars	₹
To Purchase of Raw Material	50,000	By Sales	20,00,000
To Direct Wages	40,000	By Closing Stock	
To Manufacturing Expenses	2,00,000	Finished Goods	10,000
To Administrative Expenses	1,10,000	Raw Material	5,000
To Outstanding Expenses	30,000		
To Preliminary expenses	10,000		
Written off	80,000		
To Selling and Distribution			
Expenses	5,000		
To Loss on Sale of Plant	1,40,000		
To Interest on Debentures	5,000		
To Net Profit	13,45,000		
	20,15,000		20,15,000

(*Contd*)

(*Contd*)

To Provision for tax	3,50,000	By Balance b/f	1,15,000
To General Reserve	4,80,000		
To Preference Dividend	1,00,000	By Net Profit for the Year	13,45,000
To Final Dividend	1,40,000		
To Balance c/f	3,90,000		
	14,60,000		14,60,000

Balance Sheet as on March 31, 2009

Particulars		₹	Particulars	₹
Equity Share Capital (face value ₹ 10)		10,00,000	Plant (Net)	22,00,000
12.5% Preference Share Capital		8,00,000	Building (Net)	5,80,000
General Reserve	6,80,000		Land	4,60,000
Add: Profit on sale of Assets	40,000	7,20,000	Investment	2,70,000
Secured Loan		6,80,000	*Closing Stock*	
10% Debenture		4,00,000	Finished Goods	10,000
Sundry Creditors		2,50,000	Raw Material	5,000
Tax Payable		3,50,000	Sundry Debtors	1,85,000
Dividend Payable		1,40,000	Bank Balance	50,000
Depreciation		90,000	Marketable Securities	20,000
			Pre-paid Expenses	1,30,000
			Preliminary Expenses	1,00,000
			Securities Premium	30,000
			P & L Account	3,90,000
		44,30,000		44,30,000

His efforts made the balance to tally but it has been challenged by the Assessing Officer for the purpose of income assessment.

Discussion Question

1. Assuming that you are an accounting expert, analyse Profit & Loss Account and balance sheet and comment on it.

CHAPTER

6

Final Accounts of a Limited Liability Company

Learning Objectives

After reading this chapter, you will be able to

- Understand the concept of revenue recognition
- Identify the matching of expenses against revenue
- Define company final accounts
- Make provisions about divisible profits, bonus shares and managerial remuneration

Revenue Recognition and Matching Concept

Zip Zap Ltd reported a total sales revenue of ₹ 65,000 crore and net profit of ₹ 20,000 crore for the year ending 2010–11. This was higher by 30% and 150% higher, respectively as compared to the same for the previous year, i.e., 2009–10. The chief finance officer's (CFO) report justified the performance by stating that the company had bagged goods sales orders as well as it successfully managed the bottom line also. Subsequent scrutiny and audit of the annual accounts revealed that during the year 2010–11, the sales revenue included ₹ 5,000 crore on account of sale on approval. Similarly, the service revenue, received ₹ 30,000 crore for a total period of thirty months on October 1, 2010 was also included in the revenue for the year. Apart from this, employee benefits were provided short to the tune of ₹ 1,200 crore.

The final effect of this resulted in only 10% increase in sales revenue and a similar increase in the net profit for the year as compared to the previous year's revenue.

This shows that a deviation from revenue recognition concept and improper mating of expenses can make wrong projection of financial results.

INTRODUCTION

The main purpose of maintaining books of accounts is to know about the financial performance of the business enterprises. This can be projected with the help of financial statements—final accounts. The books of accounts must present a true and fair view of the financial performance. In case of a limited liability company, true and fair presentation of financial statements becomes more important from two aspects: first because of separation of ownership and management and second due to the requirement of publication of these statements in the form of annual report of the company.

A limited liability company is required to present its financial statements in the form as prescribed under Companies Act and under accounting standards. The appropriate format for the presentation of financial statements—income statement and balance sheet of a company has been discussed in the previous chapter under the heading '*Vertical Presentation of Profit and Loss Account and Balance Sheet*'**.** We shall discuss different components of it in detail in this chapter. The following are the prominent concepts relevant while preparing financial statements of a company (LLC):

- Revenue Recognition—General Principles
- Measurement of revenue
- Collectability of revenue
- Sales of goods
- Service revenue
- Sales of real estate
- Interest and dividends
- Construction contracts
- Accounting for government grants
- Revenue recognition under Indian GAAP
- Accounting for borrowing costs
- Accounting for employee benefits
- Accounting for borrowing costs and employee benefits—Indian GAAP

REVENUE RECOGNITION—GENERAL PRINCIPLES

Revenue is the gross inflow of cash, receivables or other consideration arising in the course of the ordinary activities of an enterprise from (a) the sale of goods (b) the rendering of services (c) the use by others of enterprise resources yielding interest, royalties and dividends. Revenue is measured by the charges made to customers or clients for goods supplied and services rendered to them. In case of **sale of goods**, the revenue is recognized only when the seller has transferred the property in goods as well as risk and rewards associated with such property in goods have also been transferred in the favour of buyer of goods. In case of **rendering of services,** the service provider recognizes the revenue only when the service has been performed as per the contract/agreement. The revenue may be recognized either by using proportionate completion method or by using completed contract method as applicable in the situation. **Interest revenue** is recognized on the time basis by using the rate of interest on the outstanding amount. **Royalty** accrues in terms of the agreement and **dividend** is recognized in the profit and loss account only when the right to receive such dividend has become due.

Revenue is the gross inflow of cash whereas profit is the difference between revenue and cost.

Uncertainties and Revenue Recognition

Revenue recognition is affected by certainty about measurement of revenue and reasonableness of revenue measurement. Revenue is to be recognized only when the business enterprise is certain about its claim for the collection of revenue. This depends upon the accuracy in measurement and collectability of revenue. If a business enterprise is uncertain about any of these aspects then revenue should not be recognized in the income statement—profit and loss account.

Universal Principle—Principle of Matching

The incidence of revenue recognition gets completed only when expenses corresponding to the revenue have been matched. In absence of this, it leads to the overstatement of profits. **Overstatement of profit** is misleading as well as inappropriate. Therefore, the failure of a business enterprise in matching the expenses with certain revenue makes a case of revenue received in advance. Accordingly, such receipt should not be shown as revenue but as an advance from the customers to be shown as a liability in the balance sheet.

Example: KITE International College running five years integrated engineering and management courses has the practice of receiving from its students complete course fee of five years at the time of admission. The fee is non-refundable even if the candidates leave the course during these five years without completing the course. Total fee for management course is ₹ 25,00,000 per candidate for five years integrated course. Here, KITE should show ₹ 5,00,000 as revenue for the first year and rest of ₹ 20,00,000 should be shown as an advance in the first year because corresponding expenses for the remaining four years cannot be matched against the fee receipt for next four year. These ₹ 20,00,000 should be spread as revenue over the next four financial years. If KITE shows the complete fee as revenue in the very first year then it will lead to **overstatement of profits** because the corresponding expenses cannot be matched against such revenue.

MEASUREMENT OF REVENUE

Measurement of revenue is to be made by using fair value of the consideration to be received on account of sale of goods, rendering of services, interest, dividend, royalty, etc. The **fair value** is the present realizable value of the nominal amount of consideration measured in terms of currency applicable for seller. In case of revenue realizable in future, it is the present value of nominal amount of consideration receivable in future. Therefore, fair value of consideration is also termed as **present value** of consideration. The consideration for revenue may be realizable either in cash or in kinds.

Fair value is the present value of the revenue realizable in future. It is calculated by using prevailing rate of interest.

SALE OF GOODS

In case of sale of goods, something tangible is transferred by the seller to the buyer. The revenue is recognized on the basis of the following fundamentals:

Sale of Goods and Transfer of Risk and Rewards

Sale of goods can be recorded as revenue only when the seller has delivered the goods or title to property has been transferred in the favour of buyer. At the same time, significant risk and rewards related to ownership should get transferred in favour of the buyer. Sale of goods might be executed in different manner, such as ex-factory sale, free on board (FOB) sale, sale of goods subject to installation and sale of goods subject to technical training.

Ex-factory sale is such sales in which title to goods as well as risk and the reward gets transferred in favour of the buyer upon leaving the goods from the factory of seller. Therefore, at this point of time, the seller is free to recognize such transaction as revenue.

FOB sales is the case in which the seller has the responsibility of successful handing over the goods to the shipping agent of the buyer. Once goods have been shipped and duly acknowledged by the shipping agent of the buyer it can be considered as significant transfer of risk and reward. At this point of time, the revenue can be recognized.

Sale of goods subject to installation is such sale of goods in which the seller has the responsibility of proper installation of the goods being sold, the title in goods as well as risk and reward get transferred only when goods have been installed successfully. In most of the machinery and plant, this is applicable. Revenue is to be recognized only when goods supplied perform as per the specification of sales contract after the installation.

Sale of goods subject to technical training is a mixed case of sale of goods and sale of 'technical know-how' here as per the agreement of sale, seller has the task of providing satisfactory training and 'technical know-how' to the staff of the buyer, the revenue can be recognized only when such training has been completed up to the satisfaction of the buyer.

CONSIDERATION IN THE FORM OF CASH

When goods and services are rendered by the seller for which revenue is collected or to be collected in cash or cash equivalent then it is termed **consideration in the form of cash**. Such consideration may be received instantly in cash at the time of revenue recognition as explained earlier or it may be realized in future. The revenue is recognized at the fair value of transaction. In case of **cash sales** transaction, the fair value is the amount of cash received upon performing business activity. In case of **credit sales** transaction, the total monetary consideration is represented by two elements, i.e., revenue and interest income. But such classification is to be done only when the credit period is significantly longer than the usual credit period. Here, the usual credit period implies the normal credit period prevailing in the industry. In case of significant credit period, that is longer than the normal credit period, the following steps are followed:

(a) Calculate the present value (this is called **fair value of transaction**) of total consideration using prevailing rate of interest for the risk applicable for the type of company/industry.
(b) Fair value is the revenue (sales or service revenue) and the difference between nominal value and present value is the interest income.

Example 1 Zigna Ltd sold goods priced ₹ 9,00,000 to Sigma Ltd. on July 1, 2010 for a credit period of two months, which is also the normal credit period in the industry to which Zigna LTd belongs. Zigna allows for delayed payment but not exceeding a total of 12 months from the date of sale. In such case, the customer is required to pay a interest for the total period @ 4% p.a. the rate of interest prevailing in the industry is 14% p.a. Show how revenue is to be recognized when Sigma Ltd. makes the payment (a) within two month-period and (b) at the end of 12 months.

Solution (a) Two month-period is the normal credit period in the industry of Zigna Ltd. Therefore, the revenue is to be recognized at the nominal value of ₹ 9,00,000 in the books of accounts. There is no question of interest income to be recognized in the books of accounts.

(b) Here, Zigna Ltd will receive a total amount of ₹ 9,36,000. This nominal value will be realized at the end of 12 months. This is to be split into revenue and interest income for this we need to calculate fair value (present value) of ₹ 9,36,000, using 14% rate of interest for a total period of 12 months.

Fair Value = $9{,}36{,}000/(1.14)^1 = 8{,}21{,}053$, which is to be recognized as sales revenue and remaining ₹ 1,14,947 (9,36,000 − 8,21,053) is to be recognized as interest income.

Confirmed Order of Sales—Bill and Hold Sales

There are incidences of sale of goods in which the seller is ready with the goods to be supplied to the buyer; but he/she holds the goods in trust as per the instruction of the buyer. In this case, the seller should recognize the sales only when the goods can be identified and associated with the specific order of the buyer. This type of sale is called **bill and hold sales.** This can also be identified as holding the goods in **trust.** However, when the seller fails to identify and associate the specific goods with the order of the buyer then it should not recognize the sales revenue. However, it might have received an advance for such order.

Example Roopam Enterprises (RE) manufactures customer-specific water purifiers as well as standard water purifiers. It received a **confirmed order** (the order that is non-cancellable) from M.M. College (MMC) for the installation of both the types of water purifiers for which ₹ 2,00,000 for customized water purifier and ₹ 50,000 for standard water purifier as 100% advance on March 15, 2010. The goods are to be supplied only in the month of May 2011 when the college begins the new academic session. RE manufactured the specific water purifier on March 28, 2010 and kept it in its goods marked as specific delivery to be made to MMC but it did not identify the standard water purifier as a specific item for delivery to MMC. Suggest how RE should recognize the revenue.

Solution Here, specific water purifier is ready for delivery to MMC and specifically identifiable; therefore, the revenue of ₹ 2,00,000 should be recognized for the year ending March 31, 2010 under the heading **bill and hold sale.** But for the other water purifier being standard product cannot be marked for specific delivery to MMC therefore should not be recognized as revenue on March 31, 2010 and ₹ 50,000 is to be shown as an **advance from customer—a liability**.

Consideration Other Than Cash—in the Form of an Asset

When the seller receives the consideration for goods sold or service rendered in the form of non-monetary items, such as shares or some asset, then the revenue should be recognized at the fair value of the asset so received in lieu of cash. In case of shares listed on a stock exchange or asset having reasonable market value, the market value is the fair value and revenue should be recognized at this market value. When market value of the asset so received is not measurable reasonably then it is the fair value of the goods sold or service rendered at which the revenue is to be recognized.

If fair value of neither the consideration received nor the goods supplied can be assessed reasonably then no profit on such transaction is to be recognized as the revenue is to be recognized at the cost for the goods sold.

Consideration other than cash usually includes shares or debentures of purchaser.

Special Issues in Sale of Goods

Certain transactions of sale of goods are embedded with a few other types of transactions, such as sale of goods with repurchase obligation, sale of goods subject to approval, installment sale and hire purchase sale.

Sale of goods with repurchase obligation is a type of sale in which either seller or buyer or both the parties have the right/obligation to revert the deal after the sale has been executed and goods are in use by the buyer. Here, the main aspect for revenue recognition is the transfer of **risk** and **reward related to the ownership**. If the seller has transferred such risk and reward in the favour of the buyer then it should be recognized as **sales revenue** otherwise not.

Sometimes, goods are sold to the customer with a condition of approval or return within the stipulated time period. This is identified as **sale on approval**. If time for the return of goods by the buyer has expired then it should be recognized as **sales.** On the contrary, if the buyer still has the chance/time to return the goods so delivered then it should not be recognized as sales revenue. And the cost of goods so delivered is added to the **closing stock** of the seller.

Goods are sometimes sold for payment by the buyer in installments over a period. Such transaction is **installment sales**. Here title, risk and reward related to ownership get transferred in favour of the buyer at the time of delivery of goods; hence, the seller should recognize the **cash price**—present value of total installments as sales revenue and interest to be received in future is to be shown as interest income on time basis on the outstanding amount. Similar is the case for **hire purchase** transaction. Although in this, the case title does not get transferred in favour of the hire purchaser but risk and reward gets transferred in his/her favour. The revenue recognition is to be done similar to installment sales.

Consignment sale is a case in which principal transfers the goods to an agent (consignee) to be sold at the risk of principal. It should be considered as sales revenue in the books of consignor (principal) sales only when the consignee forwards account sale statement.

Cash on delivery is a mode of sales in which goods are dispatched by the seller through his/her agent. These are delivered to the buyer only when the agent has received the cash for the transactions. The sales revenue is to be recognized only when the seller's agent has received cash for the goods delivered.

Lay-away sales

Similarly, there are the incidences of confirmed order of sale for which goods have been identified and associated with the order of buyer but not delivered because of part-payment by the buyer. In this situation, the seller is required to apply the best judgement rule—if a significant amount covering the cost of the goods has been received in advance then such transaction should be recognized as **revenue** under the heading 'lay-away sales'. If a significant amount has not been received in advance then such revenue recognition should be deferred for the future and the amount received in advance is to be shown as liability—advance from the customer.

Consignment is an agency relationship between principal and agent. The agent sells goods at the risk of principal.

Sale on approval is the conditional sales subject to the approval by the customer within the specified time and terms and conditions as agreed upon.

Barter Transaction

A **barter transaction** is the one in which goods/services are exchanged for goods/services between two parties. Revenue recognition is to be done using the following facts:

(a) When goods and services exchanged are of similar nature then none of the party should recognize the revenue and expense in the books of accounts.

(b) When goods and services exchanged are of differing nature then revenue recognition depends upon the opportunity cost/revenue from the goods/services so exchanged. Therefore, in this case, revenue is to be recognized at the opportunity cost/revenue.

(c) If opportunity cost/revenue of goods/services so exchanged cannot be estimated reasonably then revenue and expense both should not be recognized.

Exchange of goods against the goods without exchanging the currency is a barter transaction.

Examples of Barter Transaction

1. Rajasthan Cricket Association (RCA) organizes cricket matches and Rajashtan Patrika (RP) is a state-level Hindi newspaper. During state-level cricket competition, RCA provided space to put hoardings for advertisement of RP in the cricket ground in exchange for RCA advertisements to be published in RP. Here the consideration for both the advertisements cannot be measured reasonably. Therefore, neither RCA nor RP should recognize revenue and expense in their books of accounts.
2. Fertilizer Corporation (FC) organizes regular training camps for agricultural graduates by charging a specified fee, and Farmers Association (FA) sells agricultural crop in the market. As per an agreement between FC and FA, if certain seats remain vacant in a training programme, then FC gives the admission without charging any fee to the members of FA. In return, FA sells surplus crop to FC that has a reasonable market value.

Here fair value of seats provided by FC cannot be assessed because it is allotting vacant seats to FA but fair value of crop provided by FA can be assessed because it has a certain market value that can be considered as **opportunity revenue/cost**. Therefore, revenue and expense can be recognized in the books of both the parties at the market value of crop provided by FA. This revenue and expense recognition will not have any effect on the profit calculation of both the parties.

COLLECTIBILITY OF REVENUE

Revenue recognition should be deferred till the time uncertainty about the collectibility of revenue is not resolved. If uncertainty about the collection of revenue exists at the time of transaction then revenue should not be recognized till the time certainty about the collection of revenue is attained.

ILLUSTRATION Dimpy Dairy LTd (DDL) supplies dairy products to Canteen Stores Department (CSD) of military across the globe. Normally, foreign government allows the revenue to be repatriated to India that is subject to change at short notice. In this situation, DDL should recognize the revenue only when the consideration has been repatriated into home country and not at the time of supply of goods.

In certain cases, collection of revenue becomes uncertain subsequently after the recognition of revenue in the books of accounts. This incidence of non-collectability of revenue not only affects the revenue recognition but non-collection of revenue also is recorded as a loss/expense namely **bad debt** to be shown in the profit and loss account.

ILLUSTRATION DDL supplied dairy products valuing ₹ 20,00,000 to an overseas buyer, the full consideration was subject to repatriation. The revenue was recognized at ₹ 20,00,000. Subsequently, the overseas buyer became insolvent and only ₹ 19,00,000 could be recovered from this sales transaction. Here revenue is to be shown at ₹ 20,00,000 and ₹ 1,00,000 is to be recorded as bad debts loss.

SERVICE REVENUE

Revenue recognition by a service provider is highly subjective depending upon the stage of completion of service as per the satisfaction of customer and terms and conditions of the agreement of service. The following are the fundamental principles governing revenue recognition.

Common Point for Service Revenue

In all the cases of revenue recognition from service, the following points are worth consideration:

(a) The completion stage can be measured reliably and appropriately.
(b) The measurement of revenue can be done as far as accurate and precise.
(c) The cost incurred so far can precisely be associated and matched with the completed work.
(d) Each of the party is in a position to enforce its rights and obligations with respect to the completed work
(e) The consideration for the service can be claimed by the service provider along with the manner to settle the claim is also clear.
(f) For all the service-related cases, revenue recognition is to be deferred if realization of revenue is contingent and depends upon the happening of some event in future.

Revenue recognition for services is done as per the provisions of accounting standard AS-9.

Completed Services

Here revenue is to be recognized when the service provider has performed the complete range of service as per the agreement. Either the consideration has been received or claim to receive the consideration has matured.

Incomplete Services

Here revenue is to be recognized depending upon the stage of completion. If completed work can be identified and acceptable as satisfactory service as per the agreement then revenue should be recognized at the proportionate amount of the full consideration agreed for the complete service agreement.

Continued Service Work

In certain situations, the service provider is required to provide the service over a long-term period, such as in case of annual maintenance contract (AMC) or software development. Here service is to be recognized on straight line basis by considering the proportionate amount for the time period of service contract completed to the total time period of service.

For incomplete service work that is considered as satisfactory as per the agreement total revenue is to be apportioned on straight line basis.

Service Complete but Unsatisfactory

When completed work cannot be regarded as satisfactory as per the specification of service agreement then the service provider should not recognize the revenue at the proportionate amount of the full consideration but the amount equal to the cost of service completed may be regarded as revenue from service, such revenue recognition will not influence the profit calculation.

Special Issues in Service Revenue

For **installation, fee revenue** is to be recognized upon the completion of installation work.

For **advertising fee/commission** revenue is to be recognized once desired advertisement has been made public as per the agreement.

Financial consultancy service and insurance agency function may be discharged in one shot or as a continued service. In one shot, service revenue is recognized upon discharging the service as per the agreement. In case of continued financial consultancy service, revenue is recognized on straight line basis for the completed period of service provided.

Tuition fee is to be spread over the period of instruction considering the tenure of course.

Life membership fee and entrance/admission fee are capitalized and added to the capital fund.

Annual subscription and annual membership fee is to be recognized as revenue when it has become due for recovery from the member.

Recap 1

So far, we have discussed the following topics:

- Revenue Recognition—General Principles
- Universal Principle—Principle of Matching
- Measurement of Revenue
- Sale of Goods
  - Sale of Goods and Transfer of Risk and Rewards
  - Consideration in the Form of Cash
  - Consideration Other Than Cash—in the Form of an Asset
  - Confirmed Order of Sales—Bill and Hold Sales
  - Special Issues in Sale of Goods
  - Barter Transaction
  - Collectability of Revenue
- Service Revenue
- Common Point for Service Revenue
- Completed Services
- Incomplete Services
- Continued Service Work
- Service Complete but Unsatisfactory
- Special Issues in Service Revenue

Self-assessment 1

1. Explain sale of goods on approval.
2. Discuss what are the common principles for service revenue.

The following topics will be discussed next:

- Franchise Fees
- Software Development, License Fees and Royalty
- Construction Contracts and Revenue Recognition
- Accounting for Government Grants—Accounting Standard AS-12
- Repayment/Refund of Grant
- Revenue Recognition and Indian GAAP
- Accounting For Employee Benefits—Accounting Standard AS-15
- Accounting For Borrowing Costs—Accounting Standard (AS-16)
- Recognition of Borrowing Cost and Indian GAAP
- Preparation of Company Final Accounts—Final Accounts of Limited Liability Company
- Divisible Profits
- Interest Out of Capital
- Provisions vs Reserves –
- Capitalization of Profits and Reserves—Issue of Bonus Shares
- Managerial Remuneration

FRANCHISE FEES

Franchise work involves a continued association between the franchisor and party taking the franchise. The franchise work might involve supply of goods, equipments and consultancy or any of these. The revenue recognition depends upon the agreement and the level of work completed.

Supply of Goods and Equipment

Franchisee is like an agency of the main company selling goods through sales outlet owned by the agency.

When a franchiser supplies goods and equipments necessary for carrying on the business as per the specification of franchiser, the revenue is to be recognized as follows:

(a) For goods and equipments supplied revenue is to be recognized as soon as the title in property as well as risk and reward associated with the property has been transferred in the favour of franchisee.

(b) For goods and equipments supplied where condition of repurchase of the unsold goods is applicable then revenue is to be recognized only when franchisee has confirmed the sale of goods/equipments. In this case, the unsold goods remaining with the franchisee is considered as **closing stock** belonging to franchiser.

For Intangible Assets—Trademark, Logo and Patents

When the franchisee is authorized by the franchiser to use trademark, logo and patents as per the specification of agreement then the franchiser should recognize the franchisee fee on proportionate basis most suitably using **straight line method of proportion**.

Continuing Franchisee Fee and Collection in Installment

There are the incidences when the franchiser agrees to collect the franchise fee in installments. Here, the revenue recognition depends upon the level of certainty about the collection to be made in future. If the franchiser is assured about collecting the franchisee fee then it is to be recognized on accrual basis. On the contrary, if there exists an element of uncertainty about the collection then revenue is to be recognized on cash basis.

SOFTWARE DEVELOPMENT, LICENSE FEES AND ROYALTY

Development of software as per the specification of customer is like a contract job—the revenue is to be recognized on the basis of stage of completion. If reasonable and reliable assessment about the stage of completion is not possible then revenue should not be recognized.

When the license holder of some method, job or work procedure passes on the right in favour of a user then the license provider charges **license fee** from the user. In case of one time use, revenue is to be recognized on completion of the use of license and in case of continued use of license, the fee received is to be recognized as revenue on straight line basis.

EXAMPLE: Apex Transport Company (ATC) owns the license to operate public transport vehicle on route no. 777. Sigma College (SC) wishes to use it license to operate for one round tour only and pays ₹ 35,000 license fee. ATC also passed on the license to GTC LTd for a period of two years by charging ₹ 24,00,000 upfront for the whole period. Out of this, nine months fall in the financial year 2009–10. Show how this license fee is to be recognized as revenue in the books of ATC.

Solution For license fee received from SC is to be recognized in the year 2009–10 and out of the amount received from GTC only ₹ 9,00,000 (relevant for nine months) in the year 2009–10, ₹ 12,00,000 for 12 months in the year 2010–11 and remaining ₹ 3,00,000 in the year 2011–12.

Royalty for films, songs and books is to be recognized revenue as it is done in case of license fee.

CONSTRUCTION CONTRACTS AND REVENUE RECOGNITION

Construction contracts are usually the one in which contractor builds or manufactures asset as per the specification of customer herein after called **contractee**—the party ordering for the construction of the asset. The assets to be built are usually interrelated to each other. Recognition of revenue and expense in the books of a contractor is regulated by accounting standard AS-07 issued and revised in the year 2002. The construction contract includes the following:

(a) Rendering of services that are directly related to the construction of the asset as per the specification of contractee.
(d) Demolition or renovation of asset as per the specification of contractee.

Special Features of Construction Contract

Construction contract is special due to the following inherent features:

(a) The timing of signing construction contract between contractor and customer and completion of contract is always different.
(b) The completion of contract is affected by uncertainties and future events.
(c) Both the contractor and the customer have significant right to enforce the completion of contract and receiving the consideration.
(d) The revenue is to be recognized by following the principle of '**as earned**' that implies that the revenue is to be recognized only when it has been earned, irrespective of the fact whether it has been received or not.

These special features are called **characteristics of construction contract** also.

Types of Construction Contracts

Construction Contract: It is a contract specifically negotiated between contractor and contractee to build the building, plant, bridge, road, etc. as per the specification. The contractee agrees to pay for the contract work either on the completion of work or in installments. Construction contracts are of following types:

Fixed Price Contract: It is a contract in which the contractor agrees to charge a fix price, irrespective of changes in the cost for the work to be completed. Such fixed price contract may be subject to escalation clause, if provided in the agreement to contract.

Cost Plus Contract: It is a type of construction contract in which the contractor is reimbursed cost incurred for the contract plus a certain percentage for profit margin. The costs to be reimbursed are as per the specification agreed in the construction contract.

Construction Costs

Construction costs include both direct and indirect costs attributable and associated to a particular contract. Here, **direct costs** are such costs that are incurred specifically for a particular contract, such as cost of direct material, cost of direct labour, cost of specific design, specific consultancy cost, on-site expenses, visit expenses, supervision expenses and cost incurred on consultancy for the asset under construction. **Indirect costs** are the costs that are attributable or apportioned to a particular contract out of the total cost incurred on a particular item of expense.

Example Apportionment of office and administration expenses, insurance expenses, routine consultancy and design fee, general advertising expenses.

Contract Revenue—Consideration for Contract

The consideration for contract is the total monetary value to be received by the contractor from the customer. The common practice is to receive certain contract amount at the starting of the contract and rest of the amount is reimbursed in installments. The subsequent payment depends upon the technical certification of completed work by the engineer of customer.

Recognition of Revenue and Expenses with Respect to Contract

The revenue and expense with respect to construction contract should be recognized only when it can be estimated reliably; otherwise, it should not be recognized in the books of accounts. Such recognition of revenue and expense is governed by the stage of completion of contract on the reporting date. If expenses on contract on the reporting date exceed the estimated consideration for contract then it is to be identified as **loss on contract** and to be shown in the profit and loss account for the financial year corresponding to reporting date.

RELIABLE MEASUREMENT OF EXPENSES AND REVENUE

Reliable measurement of expenses and revenue for both fixed price construction contract and cost plus construction contract is governed by the following rules:

(a) Total contract revenue can be measured reliably.
(b) The economic benefits associated with the contract work are expected to flow to the business enterprises executing the contract work, i.e., contractor.
(c) The stage of completion and the cost to completion can be estimated reliably.
(d) Comparison of actual cost including attributable costs and the estimated costs of the contract work completed is possible with reliability.

The revenue and expenses is recognized using percentage of completion method.

Percentage of Completion Method

The revenue and expense with regard to contract—construction and others is recognized by making a measurement of percentage of completion of contract work. The amount of consideration received but not recognized as revenue is to be recorded as **advance from customer**. Similarly, the expenses that cannot be attributed to the contract work but to be attributed in future are recognized as **pre-paid expenses**.

Contracts completed within one financial year The contracts that are started as well as completed within the same financial year the complete consideration for the contract is recognized as revenue and all the direct and indirect costs are also recognized as expense in this financial year.

Incomplete contracts The contract that is started during the financial year but does not get completed during the same financial year the revenue recognition is governed by the rule of percentage of completion of work. The revenue is recognized on proportionate basis. The revenue to be recognized is calculated as a proportion of value completed and approved work to the value of total work subject to the adjustment for cash received. By following this, the appropriate amount of profit gets recorded as revenue in the profit and loss account and at the same time, provision for unrealized revenue gets created in the form of work-in-progress.

Contracts nearing completion When a contract work is nearing completion and is likely to be completed in the beginning of the next financial year, the revenue and expense is recognized as follows:

(a) All the expenses incurred so far are recognized as an expense.
(b) Estimated expenses to be incurred for the completion of rest of the work are also provided for while calculating estimated profit on contract.
(c) The contract revenue is realized using estimated total profit after considering estimated expenses.

Uncertainty about outcome of contract and collection of revenue If on the reporting date, the outcome of a contract cannot be estimated precisely the revenue recognition is deferred and the following is provided in the books of accounts:

(a) The revenue is to be recognized to the extent of expenses recoverable from the customer.
(b) Expense should be recognized in the financial year in which it is incurred.

When there is uncertainty about the collection of contract revenue, the revenue should not be recognized in the books of accounts until it is collected. Usually, the collection of future revenue depends upon the satisfactory performance of the work to be completed in future.

ACCOUNTING FOR GOVERNMENT GRANTS—ACCOUNTING STANDARD (AS-12)

The accounting for government grants is regulated by the provisions of AS-12. The exclusive presentation of government grants in the books of accounts is necessary because of the following two reasons:

(a) The effect of government grant on the profitability of the business enterprise should be shown separately, so as to facilitate comparison.
(b) To comply with government regulation regarding accounting and audit.

Government Grants and Revenue Recognition

The revenue in the books of accounts should not be recognized only when

(a) there is a reasonable assurance that the business enterprises will comply with the terms and conditions specified for receiving and using the government grant.
(b) the business enterprise has earned the grant and it is certain about the receipt of such grant.
(c) performance of work is more important to consider the grant as revenue; mere receipt of grant is not sufficient for revenue recognition.

Government grant is usually given to compensate the loss or to promote the business activities in the backward area.

Accounting Treatment for Government Grants

Accounting treatment for government grants received or receivable is provided by following any one of the following two approaches:

- Capital Approach
- Revenue Approach

Government grant is like compensation of loss or reimbursement of expenses and not a profit.

Capital Approach

Capital approach of recognizing government grants is followed only when government grant is received as promoters' contribution and not earned by the business enterprises. Usually, these grants are one time and not recurring in nature. These are provided by the government to promote the business venture or to provide non-refundable seed capital. Normally, capital approach is applied for the grant received for certain assets or non-monetary items, such as land, building or infrastructure.

NON-MONETARY GRANTS—FIXED ASSETS AND PRESENTATION IN FINANCIAL STATEMENTS

In certain cases, government grant is released in the form of a piece of land, building or infrastructure facility, such as bridge or dam. The recognition of grant in the books of accounts depends upon the nature of asset. In case of **depreciable assets**, it is recognized as revenue by using either deferred revenue method or using direct deduction method. **Deferred revenue method** provides that total amount of grant received should gradually be recognized as revenue over the depreciable life of the asset exactly in the proportion of depreciation shown in the income statement. Under **direct deduction method,** the amount of grant received is directly deducted from the book value of asset thereby resulting in the reduced amount of depreciation to be shown in the income statement.

In case of **non-depreciable assets,** the amount of grant is shown as an addition to capital reserve or as an addition to capital fund. This method helps in identifying the asset as well as the amount of grant separately in the balance sheet.

When fixed asset is provided **free of cost** then it should be shown at the nominal value say at ₹ 1 only.

EXAMPLE 2 BJS College received grant of ₹ 35,00,000 from UGC. The details of the grant provided that ₹ 25,00,000 is for the construction of three rooms, ₹ 7,50,000 for computers and internet and ₹ 2,50,000 for books and journal. The work was to be completed in two years. The building was constructed by incurring a cost of ₹ 23,35,000. However, computers and internet was set up at a cost of ₹ 9,00,000 and books and journal were purchased for ₹ 2,45,000 within the specified period. Show how grant is to be recognized in the books of account.

SOLUTION As per the rules of grant, the amount of grant should be matched against the specific expense head; unutilized amount of a particular head cannot be adjusted against the amount spend in excess under certain other head of expense. Therefore, total ₹ 1,70,000 – ₹ 1,65,000 under the head 'construction', ₹ 5,000 under the head 'books' are to be refunded to UGC as unutilized and excess expenses ₹ 1,50,000 (9,00,000 − 7,500,00) on account of computers and internet has to be paid by the college from its own funds and not to be adjusted against the surplus of other head of expense.

Now the building and computers are depreciable assets but books and journals are non-depreciable assets. These should be recognized as follows:

First Alternate—Deferred Revenue Approach For building and computer, we assume the life of building 10 years and depreciation by straight line method then every year 1/10 of the building grant ₹ 23,35,000 should be shown as other income in the income statement and depreciation as an expense in the income statement. Similarly, we assume life of a computer as five years then 1/5 of ₹ 7,50,000 the grant amount for computers is to be shown as income and 1/5 of ₹ 9,00,000 as depreciation in the income statement in each of the five years.

Second Alternate–Direct Deduction Approach The building is to be shown at zero value in the books as complete cost of building has been received as grant. At the most, it can be shown at the nominal amount of ₹ 1. This will result into zero depreciation of the asset over depreciable life. For computers the reduced book value will be ₹ 1,50,000 (9,00,000 − 7,50,000) now amount of depreciation in each of the five years will be ₹ 30,000.

The books being non-depreciable asset to be shown at the acquisition cost ₹ 2,45,000 and the corresponding amount of grant to be added to capital reserve.

Revenue Approach

This approach of recognizing government grants is followed only when it is earned by the business enterprises or provided by the government as reimbursement of a particular expense. The grant so received is to be shown as income and matched against the corresponding expense incurred in complying with the conditions for receiving the grant. When grant is to be utilized over a long-time period then it can be spread over the period of grant either using proportion method, straight line method or reimburse method. The **proportion method** of recognizing the grant as revenue provides that amount of grant recognized as revenue in the income statement should be calculated as a proportion of certain monetary value. The proportion is derived by considering amount of matching expenses incurred to the total estimated amount of expenses as eligibility to earn the grant. **Straight line method** of recognizing grant as revenue is applied when the grant is released on time scale. The **reimburse method** of recognizing grant as revenue is applied when the grant is for the reimbursement of a particular expense or for acquiring a particular asset. Under this, matching proportion of grant related to the 'particular expenses' head is to be recognized as **revenue** and rest is shown as an **advance received grant**.

Revenue approach and presentation in the financial statements The revenue approach implies that the amount of grant to be recognized as revenue for the year is to be disclosed under the heading other income or by way of deduction from the concerned expense for which such grant has been received.

EXAMPLE 3 BGS College (BGS) was granted and paid a grant of ₹ 5,00,000 by UGC under border area. The major condition of the grant being released is that college should spend a total amount of ₹ 6,00,000 including the amount of grant over three years period for the development of a career counseling camps in the college. The college plans to spend ₹ 2,40,000 in the first year, ₹ 1,50,000 in the second year and rest in the third year. Show how grant amount is to be recognized as income in the books of accounts.

SOLUTION Here the grant amount is most appropriately matched by using proportion method using the amount of expense incurred by the college as base during these three years.

Proportion method for revenue recognition of government grant

Year	Expenses Amount	Proportion of Expense	Grant to be shown as Revenue	Grant to be shown as an Advance—Liability
1	2,40,000	40%	2,00,000 (500000 × 40/100)	3,00,000 (5,00,000 − 2,00,000)
2	1,50,000	25%	1,25,000	1,75,000
3	2,10,000	35%	1,75,000	—
Total	6,00,000	100%	5,00,000	

Example 4 BGS College (BGS) sanctioned and paid a grant amount of ₹ 2,00,000 for conducting classes for the minority students for a period of five years during the 11th Plan of government. The number of classes depends upon the enrolment of students. However, classes are to be run even only a few students are enrolled for the course. Show how grant amount is to be shown as revenue in the books of accounts.

Solution As the amount of grant received is for conducting the classes over five year-period therefore the best suited method will be the straight line method of recognizing the grant amount as revenue in the books of accounts. Therefore, ₹ 40,000 should be shown as revenue in each of the five years. In the first year, advance grant to be shown as liability in the balance sheet will be ₹ 1,60,000 (2,00,000 − 40,000). Likewise in the second year, ₹ 1,20,000 (1,60,000 − 40,000) and so on in the subsequent years.

REPAYMENT/REFUND OF GRANT

There are the incidences when the amount of grant does not get utilized due to any of the following reasons:

(a) Non-compliance with the terms and condition for being eligible for grant.
(b) Failure to acquire the specified asset.
(c) Failure to abide by the timing of utilization of grant amount.

The accounting entry for the refund of grant amount depends upon the accounting effect that might have been provided with regards to grant during the previous financial year or during the current financial year. When the amount of grant being refunded had been capitalized previously by way of an addition to capital fund or capital reserve then it should be deducted form the capital fund or capital reserve as the case may be. When the amount of grant has been shown by way of deduction from the book value of a particular asset then the amount of grant being refunded should be added back to the book value of the asset concerned. When the amount of grant had been shown as income or as a deduction for a revenue expense in the previous financial year then the amount now being refunded is shown as an expense under the heading, 'prior period expense'. If the amount of grant had been shown as revenue or adjustment in the expense for the current year then it is simply reversed before preparing the financial statements.

REVENUE RECOGNITION AND INDIAN GAAP

Provisions as specified in the accounting standards specified by the Institute of Chartered Accountants of India (ICAI) provide sufficient coverage for the recognition of revenue. The relevant accounting standards are AS-7, AS-9 and AS-12. These provide for recognition of revenue from different sources.

ACCOUNTING FOR EMPLOYEE BENEFITS—ACCOUNTING STANDARD (AS-15)

Every business enterprise provides benefits to its employees during the period of service rendered by them as well as post-retirement in one or the other form. The provisions of accounting standard (AS-15) are applicable for the following companies or institutions:

(a) Companies whose securities are listed on a recognized stock exchange or are in the process of listing.
(b) Banks including co-operative banks, insurance companies and financial institutions.
(c) All commercial, industrial and business enterprises whose turnover exceeded ₹ 50 crore during the preceding financial year.
(d) All commercial, industrial and business enterprises whose public deposit exceeded ₹ 10 crore at any time during the current financial year.
(e) Holding and subsidiary companies of any of the companies mentioned above.

The term **employee benefits** includes the following:

- **Short-term benefits**, such as wages, salary, emoluments, medical expenses reimbursement, fringe benefits and leave travel concession for regular services rendered by the employees.
- **Post-employment benefits**, such as gratuity, pension, provident fund contribution of employer, leave encashment and other **retirement benefits**.
- **Long-term benefits,** such as paid leave for skills advancement and off the job training and sabbatical leave.

Accounting for Short-Term Continuing Benefits—Wages, Salary and Routine Emoluments

Employees render their services for which the business enterprise pays the short-term benefits. These short-term benefits are mainly recognized as an **expense** when an employee has rendered the service and the economic benefit of such service has been received by the enterprises during the current financial year. If these benefits have been paid to the employee for whom the enterprise is likely to receive the economic benefit in the next financial year then it is to be recognized as **pre-paid expenses** in the balance sheet. When the employee has rendered the service and the business enterprise has received the economic benefit but the amount has not been paid so far then the amount to be paid in future is to be recognized as a **liability** namely **outstanding expenses** in the balance sheet so that profit/loss as well as assets and liabilities can be reported appropriately.

Accounting for Short Compensated Absences—Leave Encashment

Employees are granted earned leave—paid leave, sick leave, maternity leave, etc. Out of these, certain leaves get accumulated for future and others lapse by the end of the financial year and do not get accumulated for future. The type of leaves that get accumulated might be of two types—one for which the employer has the obligation to make payment for the accumulated leaves—accumulated earned (privileged) leaves and others for which there is no provision for the payment for accumulated leaves—accumulated sick leave. The business enterprise is required to make appropriate provision for the leave encashment to be made by the employer in future. This provision is made by passing the following entry:

Profit and Loss a/c	Dr.
To Provision for Leave Encashment a/c	

This provision is made as per the estimated amount that might be required to be paid by the employer in future.

Profit Sharing and Bonus Plans

Certain employers entitle the employees for profit sharing and payment of bonus out of the profits of the business enterprises. The payment of employees' share in the profit and bonus is subject to the approval by board of directors. The provision for such profit sharing and bonus is to be made while preparing profit and loss appropriation account. The following entry is passed for such provision:

Profit and Loss Appropriation a/c Dr.
To Proposed Bonus a/c
To Proposed Employee's Share in Profit a/c

Post-Retirement Benefits

These are the benefits that are paid to the employees when he/she retires from the service or leaves the service. These are such as provident fund, pension, family pension, gratuity, group insurance and health plans. Out of these, certain benefit plans are defined as **contribution plans** and others are defined as **benefit plans**. The accounting for these benefits completely depends upon the nature of plan.

Defined Contribution Plans

These are such post-retirement benefit plans for which the employer has the obligation to make a definite contribution to certain scheme for making post-retirement benefit to its employees. Like pension plan fund or contributory provident fund—in this employer has the obligation to make a fixed percentage of the salary (basic pay plus dearness allowance) towards provident fund account. Both the employee and employer are required to contribute the amount to this fund account either maintained with some government agency or private agency. On attaining superannuation, the employee receives the benefit from the agency with whom the fund is maintained without any recourse to the employer. The accounting entry for this is made as follows:

Entry when salary bill is raised

Salary a/c Dr. (with the amount of employer's share in provident fund)
To Employee Provident Fund or Pension Plan Fund a/c

When this share is deposited with provident fund agency

Employee Provident Funds or Pension Plan Fund a/c Dr.
To Bank a/c

After providing for this contribution employer has no obligation to make any more contribution for providing these benefits at the time of retirement of employee. Therefore, there is no requirement for making provision for any liability in the balance sheet.

Defined Benefit Plans

These are the plans in which the incidence making retirement benefit is definite but the amount of benefit to be paid depends upon certain future outcome. Like payment of gratuity is definite but the amount of gratuity depends upon the pay of employee at the time of retirement. Here calculation of accurate amount of gratuity to be paid cannot be assessed precisely. The provision for this is made on estimated basis so that the accumulated amount is sufficient for the payment of gratuity to employees. The estimation of amount to be contributed for gratuity can be made with the help of actuarial valuation method. Under **actuarial valuation method**, life expectancy of employees and the rate of escalation of future claim are used to estimate future amount of liability. This future amount of liability is discounted at the prevailing rate of interest to find out the amount to be provided every year as provision of gratuity. The amount so provided every year is shown as liability in the balance sheet.

If the employer has taken group gratuity policy of an insurance agency, then the amount of premium paid every year is shown as an expense in the profit and loss account. Then payment of gratuity to the employee is the obligation of insurance agency.

Employee Stock Option Plan (ESOP)—Share Based Employee Benefits/Payments

Under this plan of employee benefits, the employer either issues shares to its employees or grants them an option to receive the shares on pre-decided future date by making a specified payment for the shares. The cost of such benefit for the employer depends upon the terms and conditions of the benefit so granted. In these types of benefits, two dates are important, i.e., grant date and vesting date.

Grant Date

This is the date on which such benefit is sanctioned to the employee, if shares so issued are on the grant date then the expense is recognized on this date itself.

Vesting Date

Such a date is a future date by which the employee has the option to buy the shares from his/her employer by making pre-decided payment. In this case, the total cost of such benefit is to be allocated over the complete vesting period. For example, if vesting period is three years then it is to be allocated over these three years.

Vesting Condition

An employee is entitled to exercise the option granted under employee stock option plan subject to the fulfillment of certain conditions on the vesting date. The conditions are as follows:

(i) The employee should be in continuous service on the grant date as well as on vesting date.

(ii) The employee in the service on vesting date but not on grant date or vice versa are generally not eligible for the benefits of ESOP.

Every year a certain proportion of expense is show to profit and loss account by crediting a liability account for such benefit. On the vesting date, the amount accumulated in the form of liability is transferred to share capital account.

The cost of share based benefit is estimated at the **fair value**. Fair value is practically the present value of future benefits.

Example 5 On April 1, 2005 Gypsy LTd (GL) granted employee stock option plan (ESOP) to its employees for allotting 100 shares to each employee at a price of ₹ 20 per share, whereas face value and market value of the share on this date was ₹ 10 and ₹ 35, respectively. There were 400 employees who exercised the right to buy such shares granted by the company. Show how the expense is to be recognized.

Solution The cost of ESOP for GL is ₹ 15 per share, i.e., the difference between market price and issue price. Here it is assumed that GL could have issued shares otherwise at a market price of ₹ 35 as compared to the price of ₹ 20 per share. Total cost of ₹ 6,00,000 ($15 \times 100 \times 400$) is to be debited to profit and loss account as an expense and credited to securities premium account.

Bank a/c	Dr.	8,00,000	
Profit and Loss a/c	Dr.	6,00,000	
To Equity Share Capital a/c			4,00,000
To Securities Premium a/c			10,00,000

Example 6 On April 1, 2007 Gypsy Ltd (GL) granted employee stock option plan (ESOP) to its employees for allotting 100 shares to each employee at a price of ₹ 20 per share on the vesting date that is after three years from the grant date, i.e., April 1, 2010. The face value and market value of the share on grant date is ₹ 10 and ₹ 35, respectively the fair value of such option is ₹ 12 per share on the grant date. There are 500 employees on the grant date. It is assumed that at the end of first, second and third year there will be 480, 460 and 450 employees, respectively who will be eligible to exercise the option. Show how this employee benefit is to be recognized.

Solution At the end of first year ₹ 1,92,000 that is 1/3 of the total estimated cost of ₹ 5,76,000 ($12 \times 100 \times 480$) will be recognized as an expense to profit and loss and by transferring it to 'Outstanding ESOP' account.

At the end of second year, the total estimated cost of ESOP will be ₹ 5,52,000 ($12 \times 100 \times 460$). Out of this 2/3, i.e., ₹ 3,68,000 is relevant for first two years out of this ₹ 1,92,000 has already been shown as an expense in the first year. Therefore, remaining ₹ 1,76,000 (3,68,000 − 1,92,000) is to be shown to profit and loss account in the second year. Thereby increasing the 'Outstanding ESOP' account to ₹ 3,68,000 as liability.

At the end of third year, the total estimated cost of ESOP will be ₹ 5,40,000 ($12 \times 100 \times 450$), out of this a total amount of ₹ 3,68,000 has already been shown as an expense till second year the remaining ₹ 1,72,000 is to be shown as an expense. This will bring the amount in 'Outstanding ESOP' account to ₹ 5,40,000.

Now when actually ESOP is exercised and the company receives ₹ 9,00,000 ($20 \times 100 \times 450$) for shares issued the following entry will be passed:

Bank a/c	Dr.	9,00,000	
Outstanding ESOP a/c	Dr.	5,40,000	
To Equity Share Capital a/c			4,50,000
To Securities Premium a/c			9,90,000

ACCOUNTING FOR BORROWING COSTS—ACCOUNTING STANDARD (AS-16)

Borrowing costs include interest and other expenses incurred in the procurement of loan/borrowed funds raised to acquire qualifying asset. **Qualifying asset** is an asset that takes substantial time to become ready for use or sale by the business enterprises.

Illustration Power generation plant, over bridge, dam, transportation infrastructure, etc. intended to be used to generate goods and services. Similarly, there are certain saleable goods and services that consume substantial time to become ready for sale.

USEFUL INFO

What constitutes borrowing costs?
- Interest and commitment charges
- Discount or premium incurred in raising loan
- Finance charges in acquiring loan
- Exchange difference arising on account of foreign currency conversion.

The assets that are ready for use or sale at the time of acquisition are not identified as qualifying assets, such as ready-to-use plant or pre-constructed building. Similarly, the goods and services that are produced in large scale through a routine production process are also not identified as qualifying asset.

Measurement of Borrowing Costs Eligible for Capitalization

All the borrowing costs as specified above are eligible for capitalization and to be added to the acquisition cost of qualifying asset if the following conditions are fulfilled:

(a) Borrowing costs directly traceable and attributable to the acquisition of qualifying asset.
(b) Such borrowing costs will result in future economic benefits for business enterprises.
(c) Such borrowing costs could have been avoided till the time the process to acquire the qualifying asset had not started.
(d) Borrowing costs associated with the particular loan taken to acquire the qualifying asset.
(e) General borrowing costs that assist in the acquisition of qualifying asset.

Criterion for Direct Attributable Borrowing Costs

Borrowing of funds and incurring of borrowing costs is a routine course of activity in all the business enterprises. However, identification of a particular borrowing cost to be attributed to qualifying asset is a special case. For a particular borrowing cost to be attributed with certain asset, it is necessary to establish a relationship between the borrowing cost under consideration and the asset under construction/manufacturing. Normally, the following judgment criteria are adopted:

(a) The borrowing cost could have been avoided during the acquisition period had the qualifying asset in question not been acquired.
(b) Additional borrowing and its cost could have been eliminated had the qualifying asset in question not been acquired.
(c) By using the already borrowed funds for acquiring qualifying asset company could not repay borrowed funds that otherwise could have been repaid.

However, implied opportunity costs are not to be capitalized because these cannot be measured reliably.

Accounting for Borrowing Costs—Capitalization Period

The borrowing costs that are of capitalized nature as discussed above should be added to the cost of acquisition of qualifying assets. The criterion of capitalization is as follows:

(a) The borrowing costs are being incurred during the acquisition of qualifying asset.
(b) Expenditure—construction or production cost for the acquisition of qualifying asset is being incurred.
(c) The starting date for borrowing cost is not earlier then the starting date for the construction or production of qualifying asset.

Suspension of Capitalization of Borrowing Costs

When due to certain reasons construction or production activity of the qualifying asset is suspended or interrupted temporarily then the borrowing cost for such period is not to be capitalized, rather it should be shown are routine business expense.

Capitalization of cost means adding the cost to the book value of an asset.

Cessation of Capitalization of Borrowing Costs

Borrowing costs for the period till which qualifying assets is ready for possession or sale is capitalized. The process of capitalization ceases when the qualifying asset is ready for possession or sale, the borrowing costs relevant from this period onwards are considered the routine finance expenses of business enterprises to be matched against the revenue for the accounting year.

Borrowing Costs as Routine Finance Expense

Borrowing costs that cannot be capitalized should be recognized as revenue expenses for the period during which it is paid subject to the adjustment for accruals as applicable according to provisions of accounting standards (AS-1) for accruals.

RECOGNITION OF BORROWING COST AND INDIAN GAAP

Generally accepted accounting principles (GAAP) as embedded in accounting standards AS-16 applicable in India provide for the following rules regarding recognition of borrowing costs:

(a) Borrowing costs eligible for capitalization should be added to the acquisition cost of the qualifying asset and amortized over the depreciable life of the asset.

(b) Borrowing costs that are not of capitalized nature should be shown as routine (revenue expense) finance expenses in the profit and loss account.

PREPARATION OF COMPANY FINAL ACCOUNTS—FINAL ACCOUNTS OF LIMITED LIABILITY COMPANY

Final accounts are prepared to project financial performance of the business enterprises. Preparation of final accounts is like a ritual for every business enterprise but in case of a limited liability company, it is a regulatory requirement also. Every company is required to prepare and present its final accounts as per the format specified in the Companies Act. For a company listed on a recognized stock exchange apart from preparation of final accounts—financial statements the publication of abridged financial statements is also a regulatory requirement.

General Provisions

The following are the provisions of Companies Act with regards to maintenance of books of accounts and presentation of final accounts by a limited liability company.

Maintenance of Books of Accounts by Company

Section 209 of Companies Act, 1956 makes it a binding on a company to maintain books of accounts at its registered office. However, these can be maintained at any other office of the company if a resolution to this effect has been passed in the meeting of board of directors and communicated to registrar of companies within seven days from the date of such resolution. A company is required to maintain the following statutory books.

Statutory Books

- Register of investments by a company except the investment in own shares (Section 49)
- Register of members (Section 150–151)
- Register of debenture-holders (Section 152)
- Minute books (Section 193)
- Register of managing director, directors, secretary and manager (Section 303)
- Register of shares held by directors (Section 307)
- Register of guarantee given to other body corporate
- Documents and registers relating to issue of shares and debentures
- Share certificate book
- Register of foreign shareholders and debenture-holders

Annual Return

Section 149 of Companies Act provides that every company limited with shares shall file a return with registrar of companies within 60 days from the date of approval of final accounts in the meeting of shareholders—AGM. The return shall be filed in accordance with the format as specified in the part I of Schedule V of Companies Act.

FINAL ACCOUNTS

Section 210 of Companies Act requires that every company should prepare and the board of directors (BOD) shall put before the shareholders the following final accounts:

(i) Balance sheet at the end of the accounting year

(ii) Profit and loss account for the year ending as on the date of balance sheet

The above requirement are necessary for a company running the business for profit making, in case of a company running the business not for profit shall prepare and present an income and expenditure account and statement of affairs, i.e., balance sheet.

Every set of final accounts should be presented so as to have true and fair view of the financial results of the company. It should be presented in the form as specified in the Schedule VI of Companies Act, 1956. While preparing final accounts, the following facts should be adhered to.

- Requirement of Schedule VI (Recently provisions of Schedule VI have been amended, these changes are applicable from 1st April, 2011. These have been discussed in appendix III of this book.)
- Other statutory requirements specified under Companies Act or other act as applicable
- Accounting standards (AS-1 to AS-32) as issued and amended by ICAI. If final accounts—profit and loss account as well as balance sheet are not prepared by following these rules then the fact along with its effect on the reported profit should be disclosed.

DIRECTOR'S REPORT AND DIRECTOR'S RESPONSIBILITY STATEMENT

Section 217 sub-section 2A of Companies Act, 1956 requires that every annual report containing financial statements should be accompanied by **director's report** so as to explain the financial results and authenticate these results. The report should authenticate the following facts:

- Financial results
- Summary of previous financial year's results
- Details of dividend declaration

- Details about Demat
- Summary about capital and finance
- Summary of deposits
- Transfer to investor education and protection fund
- Summary report on subsidiary companies
- Summary on auditor's report
- Disclosures
- Directors' responsibility statement

Director's Responsibility Statement: The BOD of the company should confirm the following facts:

- In the preparation of the annual accounts—final accounts all the applicable accounting standards have been followed and there has been no significant departure from these standards.
- Required accounting policies were applied so as to give true and fair view about the financial position and financial results of the company.
- Due care has been taken for the maintenance of accounting records and books of accounts as specified in the Companies Act, 1956.
- That the company has prepared annual account by following going concern concept.

Part I of Schedule VI—Requirement as to Format of Final Accounts

Company final accounts are similar to the final accounts of sole enterprises or partnership firm with the difference in manner of presentation. Usually, company final accounts are presented in vertical form as compared to 'T-shape' presentation of final accounts of sole enterprises or partnership firm.

(The vertical format has been discussed in detail in chapter five.)

Company final accounts are presented in three stages, i.e., income statement—profit and loss account, profit and loss appropriation account and balance sheet. However, in the annual report, a detailed presentation is made that includes schedule forming part of final accounts, directors' report, vision statement of company, auditors' report, corporate governance report and related information.

Income Statement—Profit and Loss Account

This account is prepared to ascertain net profit, i.e., profit after tax (PAT) for the year. **Net profit** is the profit arrived by deducting all the relevant and matching expenses corresponding to sales revenue for the current financial year. The vertical presentation requires calculation of different level of profit, such as gross profit, operating profit, earning before interest and tax, earning before tax and earning after tax.

Profit and Loss Appropriation Account

This is prepared to distribute the net profit for the current year and the surplus of the previous financial year. Net profit for the current year and previous financial year's surplus are shown to the credit of this account and different appropriation items are shown to the debit of this account. The appropriation might be, such as provision for tax, proposed dividend, transfer to general reserve and transfer to sinking fund for debentures. Generally, closing balance of this account is credit and named **surplus carried to next year**.

Balance Sheet

As per Indian GAAP, profit and loss account and assets and liabilities in a balance sheet may be presented in vertical form rather than in the horizontal form as presented previously. In the vertical form of profit and loss account income items are shown first and expenses items are deducted from the total income in a particular sequence. In the vertical form of balance sheet, **sources of funds**—liabilities are shown first and then the **application of funds**—assets are shown. Indian GAAP has specified the following format of vertical form of profit and loss account and balance sheet.

(Format has been discussed in previous chapter).

Part II of Schedule VI—Requirement as to Profit and Loss Account

The profit and loss account shall disclose true and fair view of current year's profit. While arriving at current year's profit, the relevant accounting standards with regards to revenue recognition and matching of expenses as discussed in the previous section of this chapter should be followed. The current year's profit/loss should be shown distinctly by showing prior period items separately in the profit and loss account. All the accounting policies followed while preparing profit and loss accounts should be disclosed properly, any change in the policies should be disclosed along with the effect of such change on the reported profits, if any.

Part III of Schedule VI—Interpretation

A detailed note is to accompany the final accounts that shall explain the terms, such as provisions, reserves and related terms as provided in the final accounts. The details should be provided about the additions, diminution and depreciation on fixed assets.

Part IV of Schedule VI—Balance Sheet Abstracts and Company's General Business Profile

The annual report containing the financial statements—profit and loss account and balance sheet should disclose the following details also:

- Registration details of company—registration no and balance sheet date.
- Capital raised during the year—through public issue/right issue/bonus issue/private placement.
- Position statement—total liabilities, total assets, detail about sources of funds and application of funds.
- Performance of the company—turnover, total expenditure, profit before tax, profit after tax, earning per share (EPS) and dividend percentage
- Generic name of the principle products/services of company—product name, description of product and item code number, if any.

Certification by CEO/CFO/ Managing Director

The annual accounts—final accounts as presented by a company should accompany proper certification by any one from among chief executive officer (CEO), CFO or managing director. The certification is as an authentication of the financial results and as per the provision of Clause 49 of listing agreement is necessary for a listed company. Any one of these should verified the following fact to BOD:

- They have reviewed the accounts policies and financial statements including cash flow statement and these are true and fair to the best of their knowledge and belief.
- There was no fraudulent or illegal transaction. If these were there and brought to their knowledge then these have been explained to the auditors of the company.
- During the year changes in the internal control system were authenticated by them and the take the responsibility for the internal control system.
- Significant changes in the accounting policies, if any have been indicated to the auditors along with the effect of such changes.

EXAMPLE 7 Prepare final accounts for the year ending March 31, 2010 using the following trial balance:

Dr. **Trial Balance as on March 31, 2010** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
Stock	3,40,000	Equity share capital (face value ₹ 10 each)	12,50,000
Furniture	1,00,000	10% Debentures (as on April 1, 2009) (Secured)	2,50,000
Discount	20,000	Bank loan (Unsecured)	3,22,500
Loan to Directors	40,000	Bills payables	62,500
Advertisement	10,000	Creditors	78,000
Bad debts	17,500	Sales	21,34,000
Commission	60,000	Rent received	28,000
Purchases	11,59,500	Profit and loss account	69,500
Plant and machinery	4,30,000	Provision for depreciation on machinery	73,000
Rentals	12,500		
Current account	22,500		
Cash	4,000		
Interest on bank loan	58,000		
Preliminary expenses	5,000		
Fixtures	1,50,000		
Wages	4,50,000		
Consumables	42,000		
Freehold land	7,73,000		
Tools & equipments	1,22,500		
Goodwill	1,32,500		
Debtors	1,43,500		
Bills receivables	76,500		
Dealers aids	10,500		
Transit insurance	15,000		
Trade expenses	36,000		
Delivery van expenses	27,000		
Debenture interest	10,000		
	42,67,500		42,67,500

Additional Information:

1. Closing stock was ₹ 4,11,500.
2. Wages for the month of March ₹ 65,000 was due but not paid.
3. Make provision for tax @ 20% of EBT.
4. Transfer ₹ 50,000 to reserve account.
5. Equity dividend is proposed @ 10% subject to the availability of sufficient profits.

SOLUTION

Profit and Loss Account for the year ending March 31, 2010

Particulars		Details	Amount in ₹
Sales		21,34,000	21,34,000
Expenditures			
Cost of Goods Sold			
Raw material consumed			
Opening stock	3,40,000		
Add: Purchase	11,59,500		
Less: Closing stock	(4,11,500)	10,88,000	

(*Contd*)

(*Contd*)

Manufacturing expenses			
Wages including outstanding	(4,50,000 + 65,000)	5,15,000	
Consumables		42,000	16,45,000
Gross Profit			**4,89,000**
Operating Expenses			
Discount		20,000	
Advertisement		10,000	
Bad debts		17,500	
Commission		60,000	
Rentals		12,500	
Dealers aids		10,500	
Transit insurance		15,000	
Trade expenses		36,000	
Delivery van expenses		27,000	2,08,500
Operating Profit			**2,80,500**
Add: Other Income			
Rent received		28,000	28,000
EBIT (Earning Before Interest and Tax)			**3,08,500**
Less: *Debenture Interest*			
Paid	10,000		
Outstanding	15,000	25,000	
Interest on bank loan		58,000	83,000
EBT (Earning Before Tax)			**2,25,500**
Less: Provision for Tax @ 20%	(225500 × 0.20)		45,100
EAT (Earning After Tax)			**1,80,400**
Opening Balance of Profit and Loss Account		69,500	
Add: Profit for the year (EAT)		1,80,400	2,49,900
Less : Transfer to Reserve		50,000	
Proposed equity dividend (12,50,000 × 10/100)		1,25,000	1,75,000
Surplus Carried to Next Year			**74,900**

Explanation:

(1) Wages outstanding has been added to the amount of wages given in the trial balance

(2) Debenture interest @ 10% becomes ₹ 25,000, only ₹ 10,000 has been paid. Therefore, ₹ 15,000 is outstanding.

Balance Sheet as on March 31, 2010

Items		Amount (₹)
1. Sources of Funds		
(i) Shareholder's funds:		13,74,900
(a) Share Capital	12,50,000	
(b) Reserve and surplus	1,24,900	
(ii) Loan funds:		5,72,500
(a) Secured loans (Debentures)	2,50,000	
(b) Unsecured loans (Bank loan)	3,22,500	
Total		**19,47,400**

(*Contd*)

(*Contd*)

2. Application of Funds		
(i) Fixed assets:		
Gross block		15,75,500
Less: accumulated depreciation		(73,000)
Net block		15,02,500
(ii) Investments		nil
(iii) Current assets, loans and advances:		6,98,000
(a) Inventories	4,11,500	
(b) Sundry debtors	2,20,000	
(c) Cash and bank balances	26,500	
(d) Loans and advances	40,000	
Less: Current liabilities and provisions		(3,90,600)
(a) Liabilities	2,20,500	
(b) Provisions	1,70,100	
Net current assets		3,07,400
(iv) Intangible Assets		1,32,500
(iv) Fictitious assets		
(a) Miscellaneous expenditures		5,000
(to the extent not written off or adjusted)		
Total		**19,47,400**

Schedules Forming Part of Balancing Sheet (Only necessary schedules)

Schedule 1: Shareholders Fund

Equity share capital: 1,25,000 equity shares of ₹ 10 each		12,50,000
Reserves and Surplus		1,24,900
General reserve	50,000	
Surplus	74,900	

Schedule 2: Fixed Assets

Gross Block		15,75,500
Furniture	1,00,000	
Plant and machinery	4,30,000	
Fixtures	1,50,000	
Free hold land	7,73,000	
Tools and Equipments	1,22,500	
Less: provision for depreciation		**(73,000)**
Net Block		15,02,500

Schedule 8: Current liabilities and provisions

Current liabilities		3,90,600
Bills payables	62,500	
Creditors	78,000	
Outstanding expenses	80,000	
Provisions		
Provision for tax	45,100	
Proposed equity dividend	1,25,000	

EXAMPLE 8 The following balances have been taken from the books of Kashish Packaging Ltd as on March 31, 2010 (Rupees in crore):

Dr. **Trial Balance as on March 31, 2010** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
Cash in hand	1,900	Share capital	45,000
Cash at bank	6,300	9.00% debentures	15,000
Bills receivables	2,000	Accounts payables	14,500
Investments	500	Profit and Loss a/c	1,000
Sundry deposits	200	Secured loan	25,000
Advances	4,250	Gross profit	87,500
Debtors	37,500	Suspense account	1,500
Land and building	52,500	Outstanding expenses	6,000
Furniture	2,250	Sale of furniture	150
Motor car	12,500	Bank overdraft	1,550
Closing stock	47,500	Miscellaneous income	200
Establishment expenses	17,600		
Repairs and renewals	1,300		
Motor car expenses	2,100		
Travelling expenses	800		
Printing and stationery	450		
Telephone and internet	600		
Interest on debentures	1,000		
Sales commission	1,600		
Sales promotion	1,750		
Managing director's remuneration	1,800		
Director's fee	1,000		
	1,97,400		1,97,400

The following additional information is also available:

1. Share capital is represented by ₹ 9,000 crore equity shares of ₹ 5 each fully called and paid.
2. Profit and loss account balance of previous year is after charging short provision for tax of last year of ₹ 2,500 crore
3. Bank statement on April 5, 2010 shows interest on loan debited by bank on March 31, 2010 of ₹ 355 crore
4. Bank statement shows a wrong debit by bank of ₹ 1,500 crore on March 26, 2010
5. Sales of furniture represents sale of an old furniture having original cost ₹ 400 crore and accumulated depreciation ₹ 200 crore
6. Cost of land ₹ 15,000 crore is included in land and building
7. Sales promotion charges include material on hand ₹ 75 crore
8. Advances include ₹ 1,500 crore as security deposit for internet connection out of which ₹ 75 crore is to be written off for the current year.
9. An amount of ₹ 1,000 crore and ₹ 600 crore debited to purchase and wages, respectively belong to furniture making during the year
10. Charge depreciation building @ 2.5%; furniture 5%; motor car 20%
11. Managing director is entitled for 10% commission on net profit subject to minimum ₹ 150 crore per month. The net profit for this purpose is to be taken without charging income tax provision and his remuneration itself.
12. Bills discounted not matured by the end of the year ₹ 750 crore

13. Make provision for income tax ₹ 32,500 crore
14. Make the following appropriation:
    (a) Transfer ₹ 10,000 crore to general reserve
    (b) Dividend on paid-up equity @ 12%

Prepare final account for the year ending March 31, 2010.

Solution

Profit and Loss A/c for the year ending March 31, 2010

Particulars	Amount (₹ in crore)	Particulars	Amount (₹ in crore)
To Establishment expenses	17,600	By Gross profit	87,500
To Repairs and renewals	1,300	By cost of furniture	
To Motor car expenses	2,100	(expenses to be capitalized)	1,600
To Travelling expenses	800	By Miscellaneous income	200
To Loss on sale of furniture	50		
To Printing and stationery	450		
To Telephone & internet	675		
To Debenture interest	1,350		
To Bank interest	355		
To Sales commission	1,600		
To Sales promotion	1,675		
To Director's fee	1,000		
To Depreciation	3,803		
Furniture 365			
Building 938			
Motor car 2,500			
To *Prior period items*	2,500		
(short provisioning for income tax)			
To Managing Director's Remuneration	5,504		
To Provision for tax	32,500		
To net profit c/d	16,038		
	89,300		89,300
To Transfer to general reserve	10,000	By net profit for the year b/d	16,038
To Proposed Dividend	5,400	By Balance of previous year	3,500
To Tax on proposed dividend	540		
To Balance c/f	3,598		
	19,538		19,538

Balance Sheet as on March 31, 2010 (₹ in crore)

Liabilities	Amount	Assets		Amount
Authorizes Share Capital	—	*Fixed Assets*		
Issued and subscribed share capital		Land at cost		15,000
9,000 equity shares of 5 each fully		Building	37,500	
called and paid-up	45,000	Less: depreciation	938	36,562
Reserves and surplus	3,598	Furniture	2,250	
Profit and loss balance	10,000	Add: Addition	1,600	
General reserve		Less: disposed	200	
Secured Loan	25,000	Less: depreciation	365	3,285

(*Contd*)

(*Contd*)

Loan from bank	355	Motor Car 12,500	
Interest due		Less: depreciation 2,500	10,000
Unsecured Loan	15,000	Investments	500
9% debentures		*Current Assets, Loans and Advances*	
Current Liabilities and Provisions			
Current Liabilities		*Current assets*	
Accounts payables	14,500	Stock	47,500
Outstanding expenses	9,704	Debtors	37,500
(including outstanding		Bills receivables	2,000
remuneration to M.D.)		Cash in hand	1,900
Bank over draft	1,550	Cash at bank	6,300
Interest Outstanding on	350	Sales promotion material	75
debentures		*Advances*	4,375
Provisions		Deposits (200 + 4175)	
Provision for tax	32,500		
Proposed dividend	5,400		
Tax on dividend	540		
Suspense Account	1,500		
	1,64,997		1,64,997

Contingent liability: Bill discounted but not matured is a contingent liability.

Working Notes:

1. ₹ 1,000 crore debited in purchase and ₹ 600 crore debited in wages should have been shown as furniture purchase. Since gross profit has been calculated, therefore, ₹ 1,600 has been shown to the credit of profit and loss account and ₹ 1,600 added to furniture.
2. Debenture interest should be ₹ 1,350 (15,000 × 9/100) but amount given in trial balance is ₹ 1,000. Therefore, ₹ 350 becomes outstanding. Similarly, bank debited us for ₹ 355 for interest on loan it has been shown as expenses as well as outstanding in balance sheet.
3. Sales promotion material ₹ 75 to be shown as asset and deducted from sales promotion expenses.
4. Furniture book value for depreciation is ₹ 3,650 (2,250 − 200 + 1,000 + 600).
5. Profit before managing director's remuneration is ₹ 55,040 on this 10% commission; ₹ 5,504 out of which ₹ 1,800 has been paid. Therefore, remaining ₹ 3,704 is outstanding.
6. Deposits have been calculated as 200 + 4,250 – 75 (written off for internet charges)
7. Suspense account balance is credit, therefore, has been shown as liability.
8. Outstanding expenses include ₹ 6,000 given in trial balance and 3704 MD's outstanding remuneration.
9. For wrong debit by no effect is to be given.
10. Short provisioning of tax for previous year has been shown separately as per accounting standard AS-5.

Recap 2

So far, we have discussed the following topics:

- Revenue Recognition—General Principles
- Universal Principle—Principle of Matching
- Measurement of Revenue
- Sale of Goods
- Service Revenue
- Franchise Fees
- Software Development, License Fees and Royalty
- Construction Contracts and Revenue Recognition
- Accounting for Government Grants—Accounting Standard AS-12
- Repayment/Refund of Grant
- Revenue Recognition and Indian GAAP
- Accounting for Employee Benefits—Accounting Standard AS-15
- Accounting for Borrowing Costs—Accounting Standard (AS-16)
- Recognition of Borrowing Cost and Indian GAAP
- Preparation of Company Final Accounts—Final Accounts of Limited Liability Company

Self-assessment 2

1. Explain provisions for recognition of government grant.
2. Discuss how borrowing cost is recognized in books of account.

The following topics will be discussed next:

- Divisible Profits
- Transfer to General Reserve
- Dividends Out of Past Reserves
- Dividend—Procedure of Dividend Payment
- Interest Out of Capital
- Provisions vs Reserves—Revenue Reserves and Capital Reserves
- Corporate Dividend Tax
- Capitalization of Profits And Reserves—Issue Of Bonus Shares
- Guidelines of SEBI (Securities And Exchange Board of India) for Bonus Issue
- Managerial Remuneration
- Regulatory Provisions—Statutory Limits
- Calculation of Effective Capital
- Calculation of Profit for Managerial Remuneration
- Balancing Charge vs Capital Profit
- Solved Questions
- Final Recap
- Unsolved Questions
- Case Study

DIVISIBLE PROFITS

General Provisions

Divisible profits are such profits that can be distributed among shareholders as dividend. It is different from the profit as disclosed by current year's profit and loss account. A company can use the following amounts to distribute the dividend among its shareholders:

- Profits as disclosed by current year's profit and loss account.
- Accumulated profits, i.e., retained earning of previous financial years
- Amount received from government under dividend guarantee scheme

The sum total of these may be used to provide for dividends after providing for the following:

- Depreciation for current financial year.
- Unabsorbed depreciation of previous financial years.
- Accumulated losses of previous financial years.
- Transfer to general reserve as per the requirement specified in Companies Act.
- Amount to be carried forward as surplus as per the policy of company.

Usually, every company makes profit and loss appropriation account to show the appropriation of profits. **Appropriation of profits** means distributing profits among different heads by following the accounting prudence and regulatory requirements.

Transfer to General Reserve (Section 205 of Companies Act (Amendment), 1974)

Provisions of Companies Act provide that Government can compel the companies to transfer a minimum amount out of after tax profits to general reserve. The Act provides that a dividend cannot be declared unless a minimum required amount out of the current year's profits has been transferred to general reserve.

Compulsory Transfer to General Reserve

The provisions for compulsory transfer to general reserve are as follows:

Rate of compulsory transfer to general reserve

Proposed dividend percentage on equity shares	Percentage of current profit to be transferred to general reserve
More than 10% and upto 12.50%	2.50%
More than 12.50% and upto 15.00%	5.00%
More than 15.00% and upto 20.00%	7.50%
More than 20%	10.00%

If the rate of dividend is upto 10% then the management of the company is free to transfer any amount to general reserve as voluntary transfer.

Transfer to General Reserve More than Minimum Required Percentage

A company is free to transfer any amount more than the minimum prescribed limit as specified above if

(a) minimum dividend is equal to average of past three years dividend.

(b) profit is not being distributed as dividend but in this case transfer to general reserve cannot exceed average dividend percentage of past three years.

Waiver from this provision is provided if current profit is less by 20% or more as compared to past two years average profits.

Example 9 Falcon Ltd (FL) provides the following details about its financial results:
Equity share capital ₹ 50,00,000, Current year's profit ₹ 20,00,000, Average amount paid as equity dividend in the past three years ₹ 9,00,000. During the current year company wishes to declare a dividend of 14%. Suggest can it be implemented and how much maximum amount can be transferred to general reserve. If company wishes to declare a dividend of 22% then will it be possible. What if company does not declare any dividend?

SOLUTION (i) When dividend percentage for current year is 14% then minimum transfer to general reserve should be 5% of current profit, i.e., ₹ 1,00,000. Here this will be the maximum amount to be transferred to general reserve because current year's dividend percentage is less than the average dividend percentage of past three years. The average dividend percentage of past three years is 18% {(9,00,000/50,00,000) × 100}.

(ii) If the company wishes to give 22% percent dividend (₹ 11,00,000) that is more than the average rate of dividend of past three years. Then minimum transfer to general reserve should be 10% of current profits but company is also free to transfer more than this also. The maximum transferable amount will be the remaining amount after paying 22% dividend. It will be ₹ 9,00,000 (20,00,000 − 11,00,000).

RULES OF COMPANIES ACT FOR DEPRECIATION

For providing amount for dividend depreciation to be provided should be as follows:

(a) The depreciation should be as specified in Section 350 of Companies Act, 1956. The section specifies that the depreciation should be provided as provided in Schedule XIV of Companies Act, 1956.
(b) The amount of depreciation should be such that atleast 95% of the original cost of the asset should get spread across the specified life of the asset.
(c) Specified life of asset implies such time period by which 95% of the original cost of asset would have been depreciated over this period by any of the methods of depreciation

Schedule XIV of Companies Act

(a) Where any asset has been added during the year or sold off during the year then depreciation with respect to such addition/sales should be provided on pro rata basis for the period for which such asset was put to use during the year.
(b) Method of depreciation and percentage of depreciation should be disclosed properly.
(c) Extra depreciation should be provided for double and triple shift working.
(d) Number of days in a year in a seasonal product company should be counted as 180 days or actual days worked, whichever is more.
(e) Number of days in a year in other product company should be counted as 240 days or actual days worked, whichever is more.

Companies are free to provide higher amount of depreciation if they wish to do so but in none of the cases, it should be less than the rates as provided in the Schedule XIV.

Dividends Out of Past Reserves

Although a company is allowed to distribute dividend only out of current profits but provisions of Companies Act also provide for the distribution of dividend out of past reserves, i.e., general reserve. Usually, transfer from general reserve for this purpose is allowed only when either the current profits are not sufficient or there is a loss during the current financial year and company stills wants to distribute dividend among shareholders. Transfer from reserves out of past profits is subject to the following provisions:

- The dividend percentage should not exceed 10% or average of past immediate preceeding five years' dividend, whichever is less.
- Amount to be transferred from free reserves not to exceed 10% of paid-up capital and free reserves
- Balance in free reserves account after such transfer shall not fall below 15% of paid-up capital.

The amount so transferred should first be provided for writing off depreciation of current year unabsorbed depreciation of previous years and accumulated losses of past, thereafter the dividend can be distributed.

EXAMPLE 10 Zeta Ltd (ZL) wants to declare dividend out of past reserves for the year ending 2009–10. Suggest how and what percentage of dividend it can declare as per rules. The relevant details are as follows:

Paid-up equity capital ₹ 100 lakh, free reserves ₹ 40 lakh, loss of the current year ₹ 4 lakh. The dividend declared by the company during immediately preceding five financial years is 9%, 13%, 17%, 14% and 7.

Will your answer change if the amount of reserves is only 20 lakh?

SOLUTION To declare dividend out of past reserves, the following conditions should be met:

(i) Decision about dividend percentage

The rate of dividend should not exceed the average dividend rate of past five immediate preceding financial years subject to a maximum of 10%. Here average of past five years is 12% {(9 +13+17+14+7)/5}. Therefore, the company can declare a dividend of only 10%, i.e., ₹ 10 lakh as dividend, if sufficient amount is available.

(ii) Maximum withdrawal from free reserve

Maximum withdrawal allowed from reserve is 10% of sum total of paid-up capital and free reserves. Here it will be ₹ 14 lakh {(100 +40) × 10/100}

(iii) Residual reserve test

₹ 14 lakh can be transferred from free reserves only when the balance in the free reserves does not fall below the 15% of paid-up capital (₹ 15 lakh) after such withdrawal. Here, when ₹ 14 lakh is transferred the balance in the free reserves will be ₹ 26 lakh that is more than ₹ 15 lakh, i.e., 15% of paid-up capital. Hence, ₹ 14 lakh can be transferred from free reserves for divisible profits.

(iv) Utilization of ₹ 14 transferred from free reserves

Out of this, first of all loss of current year ₹ 4 is to be provided then the remaining ₹ 10 lakh can be used to distribute 10% equity dividend.

If Free Reserve is Only ₹ 20 lakh

(i) Decision about dividend percentage same as above.

(ii) Maximum withdrawal from free reserve

Maximum withdrawal allowed from reserve is 10% of sum total of paid-up capital and free reserves. Here it will be ₹ 12 lakh {(100 +20) × 10/100}

(iii) Residual reserve test

₹ 12 lakh can be transferred from free reserves only when the balance in the free reserves does not fall below the 15% of paid-up capital (15 lakh) after such withdrawal. Here when ₹ 12 lakh is transferred the balance in the free reserves will be ₹ 8 lakh which is less than ₹ 15 lakh, i.e., 15% of paid-up capital. Hence, only ₹ 5 can be transferred from free reserves by keeping the balance of ₹ 15

(iv) Utilization of ₹ 5 lakh transferred from free reserves

Out of this first of all loss of current year ₹ 4 lakh is to be provided then the remaining ₹ 1 lakh can be used to distribute equity dividend. Therefore, only 1% equity dividend can be distributed.

DIVIDEND—PROCEDURE OF DIVIDEND PAYMENT

Dividend is the distribution of divisible profits among shareholders. Preference shareholders have the priority over equity shareholder with regards to distribution of profits as dividend. On preference shares dividend is paid at the specified rate as associated with particular preference shares, whereas in case of equity share rate of dividend is decided every year and approved by annual general meeting (AGM). **Participating preference shares** are such shares on which there is a provision for making payment of extra dividend over and above the specified percentage of dividend. But payment of this extra dividend is subject to the availability of extra profits after paying nominal dividend on equity shares.

Payment of dividend by a company is governed by the Companies Act as well as bye laws of stock exchange on which shares of the company are listed. Distribution of dividend is regulated by the provisions of articles of association of the company. Where a company does not adopts articles of association then table 'A' of Companies Act is applicable, which is as follows:

1. Dividend distribution is subject to the proposal by board of directors and approval in the AGM of shareholders.
2. In the AGM, dividend percentage may be approved as proposed or reduced but it cannot be increased beyond the percentage as proposed.
3. Before dividend proposal appropriate amount should be transferred to reserves.
4. Except shares with differential rights for dividend all the shareholders of a particular category are entitled for equal dividend rights as per the proportion of capital contributed by them.
5. Dividend is to be paid on paid-up share capital.
6. Dividend cannot be paid on calls in advance.
7. Dividend is to be distributed by opening a separate dividend bank account.
8. Dividend warrants should be distributed within 30 days from the date of approval in AGM.
9. After 42 days from the date of approval of dividend, if any dividend amount remains unclaimed then such amount is to be transferred to unpaid dividend bank account.
10. If any particular amount in the unpaid dividend bank account as represented by unclaimed dividend remains in the account for seven years then it is to be transferred to **Investor Education and Protection Fund** as established by Government.

Transfer to this fund is to be made only when amount of dividend has remained unclaimed till seven years from the date of declaration of such dividend.

INTERIM DIVIDEND VS FINAL DIVIDEND

Interim dividend is such dividend that is declared and paid by the company for the current financial year in anticipation of good profits for the current financial year. The payment of such dividend is made just after the approval by BOD without waiting for the year end and approval by AGM.

Final dividend is such dividend that is declared and paid only after the year end. The payment of this dividend is done after proposal by BOD and approval by AGM. Both of these are the cash dividend paid by issuing dividend warrants by the company.

INTEREST OUT OF CAPITAL—INTEREST ON CAPITAL

Section 205 of the Companies Act (Amendments), 1975 provides that the payment of dividend can only be made only when company has revenue profits and not out of capital profits or capital of the company. This implies that in none of the cases a company can use its capital in distributing dividend. However, Section 208 of the Companies Act provides that a company may distribute interest on capital if the gestation period of the project is very long and it is justified to distribute such interest as reward to shareholders. The provisions of Section 208 of Companies Act are as follows:

(a) Such payment should be either authorized by the articles of company or by passing special resolution by the company in its meeting of shareholders.

(b) Prior sanction of Central Government has been obtained.
(c) The period of interest payment shall not exceed as agreed by the Central Government.
(d) The period of interest payment cannot exceed beyond six months after the completion of building or infrastructure.
(e) The rate of interest shall not exceed 4% as specified by the Central Government.
(f) Interest paid should not be deducted from capital rather it should be added to the cost of asset being constructed.

PROVISIONS VS RESERVES—REVENUE RESERVES AND CAPITAL RESERVES

Part III of Schedule VI of Companies Act, 1956 makes a distinction between provisions and reserves. Accordingly, **provision** means any amount provided for a known liability, loss or diminution of asset for which amount cannot be ascertained with full accuracy. This is like keeping aside certain part of profits to provide for a known liability but amount of such liability is not known definitely. *For example*, provision for doubtful debts, provision for depreciation, provision for repairs and renewals, etc. Amount specified like this is to be used only for the loss/liability for which it has been specified and not for any other purpose.

Revenue Reserve

Revenue reserve means representing retained profit for certain unknown losses/liabilities that might take place in future. Here amount as well as the heading of loss/liability is not known. The amount accumulated as reserves except specific reserves can be used to distribute dividend or bonus shares among shareholders. Therefore, these reserves are called **free reserves**. Similarly, amount of provisions in excess of regulatory requirement is also considered free reserves. Free reserves are also called **revenue reserves** because these are created by using revenue profits and not the capital profits.

Capital Reserves

These reserves are created by using profits of capital nature, the capital profits include the following:

- Unrealized profit on sale or revaluation of fixed assets.
- Profit prior to incorporation of company.
- Excess of the amount realized over the original cost of such asset.
- Profit on reissue of forfeited shares.
- Premium on issue of debentures or profit on redemption of debentures.
- Credit balance in capital reduction account.

USEFUL INFO

GENERAL RESERVE, SPECIFIC RESERVE AND RESERVE FUND

General reserve also called **reserve** is such reserve that is not earmarked for any specific purpose rather it can be used for any unknown loss/liability as well as for the distribution of dividend or bonus. Due to this, it is also called **free reserve.**

Specific reserve is such reserve that is created for a particular loss/liability, such as dividend equalization reserve and foreign exchange fluctuation reserve.

The amount of both of these reserves is not invested outside rather the amount remains invested in the business itself.

Reserve fund is such reserve that is created for a specific purpose and amount so kept is invested outside the business enterprises. Examples are debenture redemption fund, depreciation fund, etc.

CORPORATE DIVIDEND TAX

As per the provisions of tax laws every company is required to pay dividend distribution tax called **corporate dividend tax**. At present, the rate of such tax is 10% of the dividend distributed by the company to its shareholders. This tax amount is not to be adjusted from the dividends or corporate income tax payable by the company. When a company propose dividend at the time of preparing profit and loss appropriation account, it should provide for such dividend tax. The payment is to be made to central government within 14 days of declaration or payment of dividend, whichever happens earlier. This tax is payable on both interim dividend as well as on final dividend.

Journal Entries for Interim Dividend and Tax on Interim Dividend

When separate bank account is opened

Dividend bank a/c Dr.
  To Bank a/c

When dividend and tax on it are paid

Interim dividend a/c Dr.
Tax on Dividend a/c Dr.
  To Dividend bank a/c

When at the end of year profit and loss appropriation account is prepared

Profit and Loss Appropriation a/c Dr.
  To Interim dividend a/c
  To Tax on Dividend a/c

Journal Entries for Final Dividend and Tax on Final Dividend

When at the end of year dividend is proposed

Profit and Loss Appropriation a/c Dr.
  To Proposed Final dividend a/c
  To Tax on proposed final dividend a/c

When final dividend is approved in AGM

Proposed Final dividend a/c Dr.
Tax on proposed final dividend a/c Dr.
  To Final dividend a/c
  To Tax on final dividend a/c

When separate bank account is opened

Dividend bank a/c Dr.
  To Bank a/c

When final dividend and tax on it are paid

Final dividend a/c Dr.
Tax on final dividend a/c Dr.
  To Dividend bank a/c

Entries for Both Types of Unclaimed Dividend

Dividend bank a/c	Dr.
To Unclaimed dividend a/c	
Unpaid dividend bank a/c	Dr.
To Dividend bank a/c	

CAPITALIZATION OF PROFITS AND RESERVES—ISSUE OF BONUS SHARES

Capitalization of profits implies transferring retained earning into paid-up capital by way of issuing bonus shares to existing equity shareholders in the proportion of their holding. Every year a company transfers certain amount out of divisible profit to general reserve and retains certain profits as surplus also. These are collectively called **retained earning**. The amount of profits so retained get re-invested in expansion and modernization plans of the company. Some times despite of goods profits, the company is not able to pay cash dividend as discussed earlier. The reason may be liquidity crunch or re-investment of profits for developmental activities. In such situations, the most common way of rewarding equity shareholders is to capitalize the profit that means issuing bonus shares to existing equity shareholders free of cost. By issuing bonus shares, the company rewards its shareholders suitably and conserve the cash also. For the purpose of bonus shares the following profits may be capitalized:

(a) Securities premium account balance
(b) Capital redemption reserve
(c) Credit balance of profit and loss account
(d) General reserves and other free reserves
(e) Capital reserve/profits

Out of these first two can only be used to issue fully paid bonus shares free of cost to existing equity shareholders, whereas remaining can be used to issue fully paid bonus shares free of cost as well as to make existing partly paid equity shares fully paid.

Guidelines of SEBI (Securities and Exchange Board of India) for Bonus Issue

There is no specific provision in the Companies Act, 1956 with regard to the issue of bonus shares to existing equity shareholders. However, SEBI has made certain provisions regarding the issue of bonus shares, these are as follows:

- Bonus shares should be issued out of genuine profits or securities premium and not from revaluation profits.
- Bonus shares should not be issued in lieu of cash dividend.
- Bonus shares should not be issued unless existing shares have been made fully paid.
- Bonus shares cannot be issued if a company has defaulted in making payment of its statutory dues, such as employees' provident fund and gratuity.
- Bonus shares can be issued only if Articles of Association company provides for such issue otherwise a special resolution to this effect is to be passed.
- If the authorized share capital is likely to increase on account of bonus issue then a resolution be passed to increase the authorized share capital.
- Bonus shares cannot be issued pending conversion of debentures. If it is issued then required proportion of bonus issues is to be reserved for the convertible debentures. Such reserved portion is to be used to issue bonus shares on the converted debentures.

- Bonus shares once approved by the shareholders in their meeting should be issued within six months from the date of such approval.

Accounting Entries for Bonus Issue

From the stage of proposal till the issue of bonus shares appropriate accounting entries are passed in the books of accounts. These are as follows:

For Bonus Out of Current Year's Profits

(a) For making the proposal
Profit and Loss Appropriation a/c Dr.
To Proposed Bonus to Shareholders a/c
(b) When proposal is approved in AGM
Proposed Bonus to Shareholders a/c Dr.
To Bonus to Shareholders a/c
(c) When fully paid shares are issued as bonus shares
Bonus to Shareholders a/c Dr.
To Equity Share Capital a/c (with the amount of face value of shares issued as bonus)
To Securities Premium a/c (with the amount of premium on bonus shares, if any)
(d) When existing partly paid shares are made fully paid by way of bonus to shareholders
(i) Equity Share Final Call a/c Dr.
To Equity Share Capital a/c
(ii) Bonus to Shareholders a/c Dr.
To Equity Share Final Call a/c

For Bonus Out of Past Reserves

In this situation, an entry for the proposal is not passed instead a direct transfer entry is passed when bonus to shareholders gets approved in AGM
(a) When proposal is approved in AGM
General Reserve a/c Dr.
Other Free Reserves a/c Dr.
Securities Premium a/c Dr.
Capital Redemption Reserve a/c Dr.
To Bonus to Shareholders a/c
Rest of the entries as mentioned above in (c) and (d) are passed as applicable.

MANAGERIAL REMUNERATION

Every company has managerial staff that includes directors, managing director, manager and other such members who are not the employee of the company but appointed by the shareholders in their general meeting to manage the affairs of the company. The payment of remuneration to such members is restricted by the provisions of companies act. It is regulated by Sections 198, 309, 310, 349 and Section 350 of Companies Act, 1956.

Regulatory Provisions—Statutory Limits

As per the provisions of Sections 198, 309 and 310, the following is the maximum limit for managerial remuneration:

(A) For companies having profits

(i) Overall remuneration to all the managerial staff—maximum 11% of net profit in all.
(ii) If there is one whole time director/managing director/manager–5% of net profit.
(iii) If there are two or more whole time directors including managing director—10% of net profit in all
(iv) Remuneration to part-time directors
  (a) If there is no managing director/whole time director – 3% of net profit in all.
  (b) If there is a managing director/whole time director – 1% of net profit in all.

(B) For companies having no profit or inadequate profit

In case a company is not having profit or does not have sufficient profit then it is allowed to pay remuneration to a managerial person by way of salary, allowances and perquisites. The limits specified in the Schedule XIII of Companies Act are as follows:

Where the Effective Capital of the Company is:	Option I- monthly remuneration shall not exceed (₹)	Option II- monthly remuneration shall not exceed (₹)
(i) Less than ₹ 1 crore	75,000	1,50,000
(ii) ₹ 1 crore or more but less than 5 crore	1,00,000	2,00,000
(iii) ₹ 5 crore or more but less than 25 crore	1,25,000	2,50,000
(iv) ₹ 25 crore or more but less than 50 crore	1,50,000	3,00,000
(v) ₹ 50 crore or more but less than 100 crore	1,75,000	3,50,000
(vi) ₹ 100 crore or more	2,00,000	4,00,000

Option I: It is applicable when payment of remuneration has been approved by remuneration committee and company has not defaulted in the payment of its debts or interest thereon for a continuous period of 30 days during the preceding financial year before the appointment of such managerial person.

Option II: It is applicable when payment of remuneration has been approved by AGM for payment of remuneration for a period not exceeding three years.

The payment of remuneration as specified above may be paid without any prior approval from central government. However, a company can pay remuneration in excess of these limits subject to prior approval from central government.

Calculation of Effective Capital

The effective capital comprises of the following:

(i) Paid-up share capital excluding calls in advance and share application money
(ii) Securities premium
(iii) Reserves and surplus excluding revaluation reserves
(iv) Long-term loans
(v) Deposits maturing after one year

From these amounts investment and fictitious assets are to be deducted. However, investments are not deducted in case of a company whose principle business is investment in securities, such as a mutual fund or portfolio management company. Fictitious assets include accumulated losses, preliminary expenses, discount on issue of securities, share issue expenses, etc. to the extent not written off.

Calculation of Profit for Managerial Remuneration

The managerial remuneration is based upon the net profit for the year. The profit for the calculation of managerial remuneration is calculated as specified in the Section 349 of Companies Act, 1956. Accordingly, the following is adjusted to gross profit:

Adjustments Relating to Income

(i) Add subsidies and bounties received from government
(ii) All the incomes except securities premium, capital profits, balance of forfeited share account.

Adjustments Relating to Expenses

(i) All operating expenses
(ii) Director's fee
(iii) Interest on loan and debentures
(iv) Bonus and commission to employees
(v) Donation to charitable funds as per Section 293
(vi) Tax on abnormal profits
(vii) Repairs excluding capital expenditure
(viii) Professional tax
(ix) Penalties for statutory liabilities
(x) Bad debts written off during the current year
(xi) Depreciation as per Schedule XIV
(xii) Insurance premium
(xiii) Compensation by the imposition of legal liability but not voluntary compensation
(xiv) Unabsorbed net loss of previous financial year
(xv) Cess paid
(xvi) Remuneration to debenture trustee

USEFUL INFO

BALANCING CHARGE VS CAPITAL PROFIT

Balancing charge is ascertained when a fixed asset is sold for a value more than its book value. It is the difference between the sales value and written down value subject to a maximum of accumulated depreciation related to the asset being sold. This balancing charge is called **normal profit on sale of asset.** Therefore, it is added to gross profit while calculating profit for managerial remuneration.

Capital profit is the excess of sales value of fixed asset over its original cost. This being capital profit is not added to gross profit while calculating profit for managerial remuneration.

Items Not to be Adjusted While Calculating Profit for Managerial Remuneration

- Income tax and surcharge
- Voluntary compensation and all capital expense
- Fictitious assets written off
- Transfer to reserves and proposed dividend

- Excess provisions and loss on sale of fixed assets or investments
- Ex-gratia payment to employee
- Excess amount of depreciation (amount not permitted by Section 350 and Schedule XIV of Companies Act, 1956)

SOLVED EXAMPLES

Example 11 Calculate net profit for managerial remuneration from the following information:

Particulars	Amount (₹)	Particulars	Amount (₹)
Salaries and wages	12,500	Gross profit	5,12,500
Repairs	6,000	Subsidies from government	10,000
Miscellaneous expenses	12,500	Profit on sale of fixed assets (cost ₹ 60,000 and WDV 30,000)	35,000
Workmen compensation (including ₹ 1,000 legal compensation)	2,250		
Compensation for breach of contract	1,250	Profit on sale of forfeited shares	2,500
Donation to charitable fund	3,500		
Interest	6,500		
Depreciation (₹ 7,500 as per Schedule XIV)	10,000		
Loss on sale of investment	2,500		
Provision for tax	1,00,000		
Proposed dividend	75,500		
Scientific research (new installation)	47,500		
Director's remuneration	20,000		
Net profit after appropriations	2,60,000		
	5,60,000		5,60,000

Solution Calculation of Profit for Managerial Remuneration

Gross Profit			5,12,500
Add:			
(i)	Subsidies		10,000
(ii)	Profit on sale of fixed assets excluding capital profit		30,000
Total			5,52,500
Less:			
(i)	Salaries and wages	12,500	
(ii)	Repair	6,000	
(iii)	Miscellaneous expenses	12,500	
(iv)	Legal compensation	1,000	
(v)	Compensation for breach of contract	1,250	
(vi)	Interest	6,500	
(vii)	Donation	3,500	
(viii)	Depreciation as per Schedule XIV	7,500	
			50,750
Profit for managerial remuneration			5,01,750

Explanation: (i) only legal compensation is allowed, (ii) depreciation as per Schedule XIV is allowed, (iii) provision for tax, proposed dividend, scientific research of capital nature and director's remuneration, loss on sale of investment are not allowed. (iv) Total profit on sale of fixed asset ₹ 35,000 has been split into two ₹ 30,000 equal to the depreciation charged so far is the balancing charge and remaining ₹ 5,000 is the capital profit that is not allowed. Similarly, profit on forfeited shares is not allowed.

Example 12 The following balances have been taken from the books of Kashish Hotels Ltd as on March 31, 2010 (Rupees in crore):

Dr. Trial Balance as on March 31, 2010 Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
Preliminary expenses	3,500	*Sales*	
Freehold premises	46,500	Wines	3,900
Furniture and Fittings	9,000	Spirits	4,600
Glass and Jars	1,000	Beer	1,900
Linen	800	Minerals	2,200
Cutlery	400	Cigar & cigarette	400
Rent, rates and insurance	2,600	Meals	24,000
Salaries	4,400	Rooms	10,000
Wages	1,700	Sundry creditors	3,400
Opening stock (wines 1,200; spirits 400; beer 150; minerals 150; cigar and cigarette 100 ; provisions 180; coal 120) = 2,300	2,300	Share capital	57,595
		Profit and loss account	1,655
		Other income	2,500
Coal and gas & electricity	2,100		
Depreciation (premises 300; furniture and fittings 700; glass and jars 600 ; linen 400; cutlery 200) = 2,200	2,200		
Purchase (wines 1,800; spirits 2,100 ; beer 1,100 ; minerals 1,000; cigar and cigarette 200 ; provisions 4,000; meat 3,600; fish and poultry 5,200) = 19,000	19,000		
Bank	2,300		
Cash	100		
Visitors account	500		
Fire charges	600		
Washing	200		
Advertising	1,000		
Land	4,000		
Logo and trademark	1,000		
Discount on issue of shares	65		
Goodwill	3,000		
Investments	3,885		
	1,12,150		1,12,150

Additional Information (rupees in crore):

(1) Closing stock (wines 1,000; spirits 350; beer 175; cigar & cigarette 75; provisions 490;) = 2,090.
(2) Insurance premium ₹ 200 is prepaid and salary outstanding is ₹ 300.
(3) Make provision for discount to visitors @ 2%.
(4) Manager is to be provided 10% commission on net profit before tax but after charging such commission.
(5) Write off preliminary expenses by 20%.
(6) Authorized capital of the company is 10,000 crore shares of ₹ 10 each, out of which issued and subscribed capital is 5,800 shares as fully called. Calls in arrears is on ₹ 405 crore shares @ ₹ 1 each.

(7) Make provision for tax ₹ 4,300 crore and transfer ₹ 2,700 crore to general reserve.
Prepare final account for the year ending March 31, 2010.

Solution

Trading and Profit and Loss a/c for the year ending March 31, 2010

Particulars	Amount (₹ in crore)	Particulars	Amount (₹ in crore)
To Material consumed	19,210	By Sales	47,000
To wages	1,700		
To coal, gas and electricity	2,100		
To Fire charges	600		
To Gross profit c/d	23,390		
	47,000		47,000
To Rent, rates and insurance (2,600 – 200)	2,400	By Gross profit b/d	23,390
		By Other income	2,500
To Salaries (4,400 + 300)	4,700		
To Washing charges	200		
To Advertising expenses	1,000		
To Preliminary expenses written off	700		
To Depreciation on assets	2,200		
To Provision for discount	10		
To Manager's remuneration outstanding (14,680 × 10/110)	1,335		
To Net profit before tax	13,345		
	25,890		25,890
To Provision for tax	4,300	By Net Profit before tax	13,345
To Transfer to reserve	2,700	By Surplus brought forward	1,655
To Surplus c/f	8,000		
	15,000		15,000

Working notes:

1. Manager's commission has been calculated on the profit before tax. As it is given that it should be 10% after charging such commission. Therefore, calculation has been done by using the following formulae:
   Manager's commission = Profit before tax and managers' commission × profit percentage/(100 + profit percentage)
2. Materials consumed = Purchase + Opening stock – closing stock

Balance Sheet as on March 31, 2010 (₹ in crore)

Liabilities		Amount	Assets	Amount
Authorizes Share Capital		1,00,000	*Fixed Assets*	
10,000 crore equity shares of ₹ 10 each		-	Land at cost	4,000
Issued and subscribed share capital			Freehold Premises	46,500
			Furniture & fixtures	9,000
			Glass and jars	1,000
5,800 crore equity shares of			Linen	800
10 each fully called	58,000		Cutlery	400
Less: calls in arrear	405	57,595	Investments	3,885

(*Contd*)

(*Contd*)

Reserves and surplus		*Current Assets, Loans and Advances*	
Profit and loss balance	8,000	*Current assets*	
General reserve	2,700	Stock	2,090
Secured Loan	nil	Debtors (visitors account) 500	
Unsecured Loan	nil	Less: Provision for discount 10	490
Current Liabilities and Provisions		Cash in hand	100
Current Liabilities		Cash at bank	2,300
Creditors	3,400	Prepaid expenses	200
Outstanding expenses (including outstanding remuneration to Manager)	1,635	*Intangible and Fictitious Assets*	
		Logo and trademark	1,000
Provisions		Discount on issue of shares	65
Provision for tax	4,300	Goodwill	3,000
		Preliminary expenses (3,500 – 700)	2,800
	77,630		77,630

EXAMPLE 13 Dee Ltd presents the following trial balance for the year ending March 31, 2010. Prepare final accounts.

Dr. **Trial Balance as on March 31, 2010** **Cr.**

Particulars	Amount	Particulars	Amount
Stock	75,000	Sales	3,50,000
Purchases	2,45,000	Commission received	5,000
Production wages	50,000	Profit and loss a/c (1-4-09)	15,030
Discount	7,000	Capital 10,000 equity shares of ₹ 10.- each fully paid	1,00,000
Salaries	7,500		
Rent	4,950	Accounts payables (creditors)	17,500
Insurance	17,050	General reserve	15,500
Dividend paid (2009)	5,000		
Interim dividend	4,000		
Accounts receivables (debtors)	37,500		
Machinery	29,000		
Cash and bank balance	16,200		
Loan to Directors	3,250		
Bad debts	1,580		
	5,03,030		5,03,030

Adjustments

Depreciate machinery by 10%; write off further bad debts ₹ 500 reserve 2% for doubtful debts on debtors and 2% for discount on creditors; goods costing ₹ 3,000 were destroyed by fire and insurance company admitted the claim for only ₹ 2,000; insurance premium at the rate of ₹ 2,500 per annum is prepaid for six months; transfer ₹ 10,000 to general reserve. No provision for tax is required as company is in backward area. Closing stock for the year was ₹ 50,000.

Solution

Profit and Loss a/c for the year ending March 31, 2010

Particulars		Amount (₹)	Particulars	Amount (₹)
To Opening stock		75,000	By Sales	3,50,000
To Purchase		2,45,000	By Loss by Fire	3,000
To Productive wages		50,000	By Closing stock	50,000
To Discount allowed		7,000	By Commission	5,000
To Salaries		7,500	By Reserve for discount on	
To Rent		4,950	creditors	350
To Insurance Premium	17,050		By Net Loss for current year	3,620
Less: Prepaid insurance	1,250	15,800		
To Depreciation on Machinery		2,900		
To Bad Debts	1,580			
Add: further bad debts	500	2,080		
To Provision of doubtful debts		740		
To Loss by fire		1,000		
		4,11,970		4,11,970
To Net Loss for current year		3,620	By Surplus brought forward from	15,030
To Interim dividend paid		4,000	previous year	
To Final dividend paid		5,000		
To Surplus carried forward		2,410		

Balance Sheet as on March 31, 2010

Liabilities		Amount (₹)	Assets		Amount (₹)
Authorizes share capital			*Fixed Assets*		
Issued and subscribed share			Machinery	29,000	
capital			Less: Depreciation	2,900	26,100
10,000 equity shares of 10 each			Investments		nil
fully called and paid-up		1,00,000	*Current Assets, Loans and*		
Reserves and surplus			*Advances*		50,000
Profit and loss balance		2,410	*Current assets*		
General reserve		15,500	Stock		
Secured Loan		nil	Debtors	37,500	
Unsecured Loan		nil	Less: Further bad Debts	500	
Current Liabilities and Provisions			Less: Provision for		
Current Liabilities			doubtful debts	740	36,260
Creditors	17,500		Cash in hand & Cash at bank		16,200
Less: Reserve for Discount	350	17,150	Insurance claim		2,000
Provisions	nil		Prepaid expenses		1,250
			Loan to Director		3,250
			Intangible and Fictitious Assets		nil
		1,35,060			1,35,060

Note: Instead of preparing Trading and P & L A/c only P & L A/c can be prepared.

Example 14 The profit and loss account of Z Ltd is given below. Determine net profit for managerial remuneration and calculate managerial remuneration in each of the following cases:

(a) when there is no managing director or whole time director in the company.

(b) when there is one managing director,

(c) when there is one whole time director and one managing director.

Particulars	Amount	Particulars	Amount
Salaries and wages	16,500	Gross profit	4,65,000
Repairs	6,000	Subsidies from government	9,000
Miscellaneous expenses	4,500	Profit on sale of fixed assets (cost ₹ 90,000 and WDV 45,000 sold for 96,000)	51,000
Loss on sale of investment	3,000		
Donation to charitable fund	7,500		
Interest	7,500		
Depreciation (including development rebate 4,500)	30,000		
Debenture trustee remuneration	1,500		
Provision for tax	1,50,000		
Proposed dividend	1,50,000		
Provision for dividend tax	25,500		
Scientific research (new installation)	28,500		
Director's fee	10,000		
Net profit after appropriations	84,500		
	5,25,000		5,25,000

Solution

Calculation of Profit for Managerial Remuneration

Gross Profit		4,65,000
Add:		
(i) Subsidies		9,000
(ii) Profit on sale of fixed excluding capital profit		45,000
Total		5,19,000
Less:		
(i) Salaries	16,500	
(ii) Repair	6,000	
(iii) Miscellaneous expenses	4,500	
(iv) Interest	7,500	
(v) Donation	7,500	
(vi) Depreciation as per Schedule XIV	25,500	
(vii) Director's fee	10,000	
(viii) Debenture trustee remuneration	1,500	
		79,000
Profit for Managerial Remuneration		4,40,000

Explanation: (i) depreciation as per Schedule XIV is allowed, (ii) provision for tax, proposed dividend, scientific research of capital nature , loss on sale of investment are not allowed. (iv) Total profit on sale of fixed asset ₹ 51,000 has been split into two ₹ 45,000 equal to the depreciation charged so far is the **balancing charge** and remaining ₹ 6,000 is the capital profit that is not allowed. (v) director's fee is an expense allowed for calculating profit for managerial remuneration.

(a) Here 3% of ₹ 4,40,000 i.e. ₹ 13,200 is to be paid to other directors.

(b) Here ₹ 22,000 (5% of 4,40,000) to be paid to MD, and ₹ 4,400 (1% of 4,40,000) to other directors.

(c) Here ₹ 22,000 (5% of 4,40,000) each to be paid to MD and wholetime director and ₹ 4,400 to other directors.

KEY TERMS

Revenue recognition	Sale of goods	Service revenue
Franchise fee	Construction contract	Sale on approval
Divisible profits	Managerial remuneration	Bonus to shareholders
Borrowing costs	Employee benefits	

FINAL RECAP

- **Revenue** is the gross inflow of cash, receivables or other consideration arising in the course of the ordinary activities of an enterprise from (a) the sale of goods (b) the rendering of services (c) the use by others of enterprise resources yielding interest, royalties and dividends.
- **Sale of goods** can be recorded as revenue only when the seller has delivered the goods or title to property has been transferred in the favour of the buyer.
- A **barter transaction** is the one in which goods/services are exchanged for goods/services between two parties.
- **Franchise** work involves a continued association between the franchisor and the party taking the franchise.
- **Construction contracts** are usually the one in which the contractor builds or manufactures asset as per the specification of the customer herein after called **contractee**—the party ordering for the construction of the asset.
- Under **employee stock option plan,** the employer benefits its employees either issues shares to its employees or grants them an option to receive the shares on pre-decided future date by making a specified payment for the shares.
- **Capitalization** of cost means adding the cost to the book value of an asset.
- **Director's report** is like an authentication of final accounts and accounting policies.
- **Director's responsibility statement** is like due diligence certificate.
- **Divisible profits** are such profits that can be distributed among shareholders as dividend.
- **Capitalization of profits** implies transferring retained earning into paid-up capital by way of issuing bonus shares to existing equity shareholders in the proportion of their holding.
- **Balancing charge** is the difference between the sales value and written down value subject to a maximum of accumulated depreciation related to the asset being sold.
- **Capital profit** is the excess of sales value of fixed asset over its original cost.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Goods having cash sales price ₹ 20,000 with provision for installment payment in two equal installments of ₹ 11,000 to be paid at the end of six months and 12 months. The sales revenue to be recognized in books of accounts should be
   (a) ₹ 22,000 (b) 20,000
   (c) ₹ 11,000 after six months (d) ₹ 11,000 at the end of year
2. Fee received by a college in the first year for five years is ₹ 10,00,000. It should be shown as revenue in the first by which of the following amounts?

(a) ₹ 2,00,000 (b) ₹ 10,00,000
(c) ₹ 8,00,000 (d) None of these

3. For export of goods with free on board (FOB) sales the sales revenue is to be recognized at which point of time?
   (a) When goods are dispatched from the godown of seller.
   (b) When goods are handed over to the travel agent of buyer.
   (c) When payment is received from buyer.
   (d) None of the above.
4. In case of sale on approval basis when should revenue be recognized?
   (a) When goods have been delivered to customer.
   (b) When buyer has accepted to purchase or time for buyer's response has expired.
   (c) When payment is received from buyer.
   (d) None of these.
5. How life membership fee and entrance fee are recognized in the books of accounts?
   (a) At the present value of the fee so received.
   (b) These are to be shown as revenue in the year in which these are received.
   (c) These are to be capitalized by adding to capital fund or capital reserve.
   (d) These are to be apportioned over ten years' period.
6. Revenue recognition in case of construction contracts is governed by
   (a) Cash basis of revenue recognition
   (b) Accrual basis of revenue recognition
   (c) Percentage of completion of work
   (d) None of these
7. Government grant of ₹ 1,00,000 received for the construction of cycle stand in the college utilized fully. Cycle stand is to be depreciated over five years. How much is to be added to the book value of building when direct deduction method of recognizing government grant is being followed?
   (a) ₹ 1,00,000 (b) ₹ 20,000 in each of the year
   (c) Nothing is to be deducted (d) None of these
8. Government grant of ₹ 1,00,000 received for the construction of a cycle stand in the college utilized fully. Cycle stand is to be depreciated over five years. How much is to be added to the book value of building when deferred revenue method of recognizing government grant is being followed?
   (a) ₹ 1,00,000 (b) ₹ 20,000 in each of the year
   (c) Nothing is to be deducted (d) None of these
9. Securities premium is shown under which heading in the balance sheet?
   (a) Share capital (b) Current liabilities
   (c) Provisions (d) Reserve and surplus
10. ₹ 2,00,000 paid for preliminary expenses the expected benefit to be realized from these is over four years. How much is to be shown in the income statement and how much in the balance sheet of first year of expenses?
   (a) ₹ 50,000 in income statement and ₹ 1,50,000 in the balance sheet.
   (b) ₹ 2,00,000 in the income statement and nothing in the balance sheet.
   (c) ₹ 1,50,000 in the income statement and nothing in the balance sheet.
   (d) None of these.

Descriptive Questions

1. Explain the term divisible profit. State the regulatory provisions relating to it.
2. "Although payment of managerial remuneration is subject to the availability of profits still a loss making company can pay remuneration to its managerial staff." Discuss.

3. "Following consistent policy about revenue recognition is must to have true and fair view about the financial performance of a business enterprise." Explain.
4. "One single rule cannot govern the revenue and expense recognition for all the type of business enterprises, even in the same business enterprises different rules are applicable at different times." Do you agree? Discuss.
5. Bangla Cricket Association (BCA) organizes cricket matches and Tamil Patrika (TP), a state-level newspaper published in Telegu. During state-level cricket competitions, BCA provided space to put hoardings for advertisement of TP in the cricket ground in exchange for BCA advertisements to be published in TP. Discuss how both of these organizations should recognize revenue and expense in their books of accounts.

NUMERICAL PROBLEMS

1. Roopak Sales (RS) manufactures customer specific juicer and mixers as well as standard juicer and mixers. It received a confirmed order (the order that is non-cancellable) from a M.M. Hotels (MMH) for the installation of both the type of products for which ₹ 2,00,000 was received for customized product and ₹ 50,000 for standard product as 100% advance on March 15, 2010 for goods to be supplied in the month of May 2011 only when hotel is inaugurated. RS manufactured the specific product on March 28, 2010 and kept is in its goods marked as specific delivery to be made to MMH but it did not identify standard water purifier as specific item for delivery to MMH. Suggest how RS should recognize revenue.
2. Apex Transport Company (ATC) owns the license to operate public transport vehicle on route no. 777. Sigma College (SC) wishes to use its license to operate for one round tour only and pays ₹ 25,000 license fee. ATC also passed on the license to GTC LTd for a period of two years by charging ₹ 30,00,000 upfront for the whole period. Out of this, six months fall in the financial year 2009–10. Show how this license fee is to be recognized as revenue in the books of ATC in the year 2009–10.
3. BBS College received grant of ₹ 1,05,00,000 from UGC the details of the grant provided that ₹ 75,00,000 is for the construction of three rooms, ₹ 17,50,000 for computers and internet and ₹ 12,50,000 for books and journal. The work should be completed in two years. The building was constructed by incurring a cost of ₹ 73,25,000. However, computers and internet was set up at a cost of ₹ 19,00,000 and books and journal were purchased for ₹ 12,00,000 within the specified period. Show how grant is to be recognized in the books of account.
4. BJS College (BJS) was granted and paid a grant of ₹ 15,00,000 by UGC under border area. The major condition of the grant being released is that college should spend a total amount of ₹ 26,00,000 including the amount of grant over three years period for the development of a career counseling camps in the college. The college plans to spend Rs 7,80,000 in the first year, ₹ 5,20,000 in the second year and rest in the third year. Show how grant amount is to be recognized as income in the books of accounts.
5. On April 1, 2008 Gee Pee Ltd (GPL) granted employee stock option plan (ESOP) to its employees for allotting 200 shares to each employee at a price of ₹ 40 per share on the vesting date that is after two years from the grant date, i.e., April 1, 2010. The face value and market value of the share on grant date is ₹ 10 and ₹ 65, respectively the fair value of such option is ₹ 22 per share on the grant date. There are 300 employees on the grant date. It is assumed that at the end of first and second year there will be 280, 260 employees, respectively who will be eligible to exercise the option. Show how this employee benefit is to be recognized.
6. The following balances have been taken from the books of Kashish Packaging Ltd as on March 31, 2010 (Rupees in lakh):

Dr. **Trial Balance as on March 31, 2011** **Cr.**

Particulars	Amount	Particulars	Amount
Cash in hand	2,900	Share capital	45,000
Cash at bank	6,000	9.00% debentures	10,000
Bills receivables	2,700	Accounts payables	19,500
Investments	1,500	Profit and Loss a/c	11,000
Sundry deposits	1,200	Secured loan	15,000
Advances	2,250	Gross profit	97,500
Debtors	32,500	Suspense account	11,500
Land and building	57,500	Outstanding expenses	5,000
Furniture	12,250	Sale of furniture	1,150
Motor car	12,500	Bank overdraft	11,550
Closing stock	37,500	Miscellaneous income	1,200
Establishment expenses	17,600		
Repairs and renewals	2,100		
Motor car expenses	2,300		
Travelling expenses	1,800		
Printing and stationery	1,450		
Telephone and internet	2,600		
Interest on debentures	1,000		
Sales commission	1,600		
Sales promotion	1,750		
Managing director's fee	1,900		
Director's fee	1,600		
Patents	23,900		
	2,04,500		2,04,500

The following additional information is also available:

1. Share capital is represented by 4,500 lakh equity shares of ₹ 10 each fully called and paid.
2. Profit and loss account balance of previous year is after charging short provision for tax of last year of ₹ 15,000 lakh.
3. Bank statement on April 5, 2011 shows interest on loan debited by bank on March 31, 2011 of ₹ 500 lakh.
4. Bank statement shows a wrong debit by bank of ₹ 3,500 lakh on March 26, 2011.
5. Sales of furniture represents sale of an old furniture having original cost 1,400 lakh and accumulated depreciation 1,200 lakh.
6. Cost of land ₹ 22,500 lakh is included in land and building.
7. Sales promotion charges include material on hand ₹ 175 lakh.
8. Advances include ₹ 1,500 lakh as security deposit for internet connection out of which ₹ 150 lakh is to be written off for the current year.
9. An amount of ₹ 1,000 lakh and ₹ 600 lakh debited to purchase and wages, respectively belong to furniture making during the year.
10. Charge depreciation building @ 5 %; furniture 5%; motor car 10%.
11. Managing director is entitled for 5% commission on net profit subject to minimum ₹ 50 lakh per month. The net profit for this purpose is to be taken without charging income tax provision.
12. Bills discounted not matured by the end of the year ₹ 1,000 lakh.
13. Make provision for income tax ₹ 12,500 lakh:
    - Transfer ₹ 20,000 lakh to general reserve
    - Dividend on paid-up equity @ 12%

    Prepare final account for the year ending March 31, 2011.

7. Falcon Ltd (FL) provides the following details about its financial results:
   Equity share capital ₹ 70,00,000, Current year's profit ₹ 40,00,000, Average amount paid as equity dividend in the past three years ₹ 17,00,000. During the current year, the company wishes to declare a dividend of 18%. Suggest can it be implemented and how much maximum amount can be transferred to general reserve. If the company wishes to declare a dividend of 28% then will it be possible? What if the company does not declare any dividend?
8. Calculate net profit for managerial remuneration from the following information:

Particulars	Amount (₹)	Particulars	Amount (₹)
Salaries and wages	12,000	Gross profit	5,10,500
Repairs	6,500	Subsidies from government	12,000
Miscellaneous expenses	10,500	Profit on sale of fixed assets (cost ₹ 90,000 and WDV 30,000)	75,000
Workmen compensation (including ₹ 3,000 legal compensation)	4,250		
Compensation for breach of contract	4,250		
Donation to charitable fund	500		
Interest	5,500		
Depreciation (₹ 7,500 as per Schedule XIV)	11,000		
Loss on sale of investment	500		
Provision for tax	1,01,000		
Proposed dividend	75,500		
Scientific research (new installation)	57,500		
Director's remuneration	10,000		
Net profit after appropriations	2,98,500		
	5,97,500		5,97,500

Answers

Multiple Choice Questions

1. (b), 2. (a), 3. (b), 4. (b), 5. (c), 6. (c), 7. (d), 8. (a), 9. (d), 10. (a)

Numerical Problems

1. Revenue for current year ₹ 2,00,000 and ₹ 50,000 advance from customers.
2. Revenue for current year ₹ 7,75,000.
3. Repayment of grant ₹ 1,75,000 on account of building and ₹ 50,000 of books.
4. Show 30% in first year, 20% in second year and 50% in third year.
5. Cost of ESOP in first year ₹ 6,16,000 and in second year ₹ 5,28,000.
6. Profit before managerial remuneration ₹ 46,392. Managerial remuneration ₹ 2,320 and net profit before tax ₹ 44,072. Total of balance sheet ₹ 1,89,942.
7. Minimum and maximum transfer to reserve is ₹ 3,00,000. In the second situation, minimum transfer to reserve is ₹ 4,00,000 and maximum transfer is ₹ 20,40,000. In the last case transfer to reserves should be ₹ 9,71,423.
8. Profit for managerial remuneration ₹ 5,32,750.

CASE 1

Managerial Remuneration

Jay International has one whole-time director and one managing director as well. During the year, a total remuneration of ₹ 65,670 lakh was paid to managerial staff.

Profit and Loss Account for the year ending 2011 (₹ in lakh)

Particulars	Amount	Particulars	Amount
Salaries and wages	12,000	Gross profit	5,10,500
Repairs	6,500	Subsidies from government	12,000
Miscellaneous expenses	10,500	Profit on sale of fixed assets (cost ₹ 90,000 and WDV 30,000)	75,000
Workmen compensation (including ₹ 3,000 legal compensation)	4,250		
Compensation for breach of contract	4,250		
Donation to charitable fund	500		
Interest	5,500		
Depreciation (₹ 7,500 as per Schedule XIV)	11,000		
Loss on sale of investment	500		
Provision for tax	1,01,000		
Proposed dividend	75,500		
Scientific research (new installation)	57,500		
Director's fee	10,000		
Net profit after appropriations	2,98,500		
	5,97,500		5,97,500

Discussion Question

1. Asuming that you are an expert, evaluate the case and comment on the managerial remuneration paid by the company.

CASE 2

Reworking of Final Accounts: Change in Accounting Policies

Aaditya Industries Ltd

Balance Sheet as on March 31, 2010 (₹ in crore)

Liabilities		Amount	Assets	Amount
Authorizes Share Capital		1,00,000	*Fixed Assets*	
10,000 crore equity shares of ₹ 10 each			Land at cost	4,000
Issued and subscribed share capital			Freehold Premises	46,500
6,000 crore equity shares of 10 each			Furniture & fixtures	9,000
fully called	60,000		Glass and jars	1,000
Less: calls in arrear	2,405	57,595	Linen	800
Reserves and surplus			Cutlery	400
Profit and loss balance			Investments	3,885

(*Contd*)

(*Contd*)

General reserve	8,000	*Current Assets, Loans and Advances*		
Secured Loan	2,700	*Current assets*		2,090
Unsecured Loan	nil	Stock		
Current Liabilities and Provisions	nil	Debtors (visitors account)	500	490
Current Liabilities		Less: Provision for discount	10	100
Creditors	3,400	Cash in hand		2,300
Outstanding expenses	1,635	Cash at bank		200
(including outstanding remuneration to		Prepaid expenses		
Manager)		*Intangible and Fictitious Assets*		1,000
Provisions		Logo and trademark		65
Provision for tax	4,300	Discount on issue of shares		3,000
		Goodwill		2,800
		Preliminary expenses (3,500 – 700)		
	77,630			77,630

Abstracts from Accounting Policies:

(i) During the year sales of goods of ₹ 100 crore (cost ₹ 80 crore on approval has been included in sales revenue).

(ii) Advance from a customer ₹ 30 crore already included in the other revenue for consultancy to be provided over a total period of 15 months out of which nine months fall in next financial year.

(iii) Debtors include ₹ 75 crore as an advance to a supplier.

(iv) Goodwill is likely to realize the benefits over a period of six years including the current year but it was not written off during the year.

(v) Closing stock has the market value of ₹ 1,800 crore but it has been shown at the cost in the balance sheet.

(vi) Cutlery includes an item of book value ₹ 50 crore that should have been discarded so far but has not been effected.

(vii) Provision for tax has been made during the year out of current profits.

(viii) ₹ 700 crore was transferred to general reserve out of current year's profits.

Discussion Question

1. Rework the financial results and prepare the balance sheet making necessary assumptions.

CHAPTER

7

Financial Statement Analysis—Ratio Analysis

Learning Objectives

After reading this chapter, you will be able to

- Understand the mechanism of ratio analysis
- Define the mechanism of enhancing overall financial performance through decomposing
- Gain insight into the application of ratio analysis for different stakeholders
- Know comparative analysis
- Comprehend discriminant analysis

Beware of Black Holes—Red Flags before Using Ratio Analysis

SFIO (Serious Fraud Investigation Office), a multi-disciplinary body, under the Ministry of Finance , looks into white-collared crimes and frauds. In 2005–06, it was alleged that the Elder Pharmaceuticals Limited inflated its purchases to show less profit in order to save taxes.

The company had made disclosure of ₹ 13.35 crore as bogus purchases. Another complaint against the company was that it had incurred expense on advertisement of ₹ 20 crore for three years, but debited it in one year, thus reflecting an unfair picture. It was also found that the company had not credited the unpaid dividend amount to the Investor Education & Protection Fund as required under the Companies Act. Besides, it had also not made proper asset disclosure against which loans were taken.

These facts indicate that before using published financial statement, these may be duly audited as one should make rework on these for possible 'black holes–red flags'.

(*Source:* official website of SFIO).

RATIO ANALYSIS—AN INTRODUCTION

This is the most important tool available to financial analysts for their work. An **accounting ratio** is the mathematical relationship between two interrelated accounting figures. The figures have to be interrelated because no useful purpose will be served if ratio is calculated between two figures that are not at all related to each other. The **ratio analysis** in one of the most useful and common methods of analysis of financial statements. A **ratio** can be defined as an indicator of the relationship between two variables having either cause and effect relationship or connected with each other in some or the other manner.

A **ratio** is the relationship between two variables that are linked to each other through some relationship.

These two variables may be selected either from the balance sheet or from the profit and loss account or one from the balance sheet and the other from the profit and loss account. The usefulness of the ratio lies in the fact that the data to be analysed are reduced and expressed in a simple form that makes it very convenient to study and evaluate the relationship between various related items as well as changes that have taken place. Ratios have to be expressed in mathematical terms, such as percentages or the number of times or in numbers. Different ratios are grouped into five categories as follows:

- Liquidity ratios
- Solvency ratios
- Profitability ratios
- Market-related ratios
- Activities ratios

Table 7.1 depicts classification of items for ratio analysis.

TABLE 7.1 Classification of Items for Ratio Analysis

Current Assets	Stock, Sundry Debtors, Bills Receivable, Marketable Securities (short-term investment), Cash and Bank Balance, Pre-paid expenses, Accrued income, others
Current Liabilities	Sundry creditors, Bills payables, tax payable, Outstanding expenses, Unearned income, Short-term bank loan, Bank overdraft, Provision for doubtful debts, others
Fixed Assets (long-term assets)	Land & Building, Plant & Machinery, Equipments, Long-term investment, Furniture & Fixtures, Freehold Property, others
Intangible and Fictitious Assets	Goodwill, Patents, Copyrights, Trade Mark & Logo, Preliminary Expenses, Discount/Expenses on Issue of Shares/Debentures, Deferred Revenue Expenses
Long-Term Liabilities	Debentures, Secured Loan, Long-term Loan
Shareholders' Net Worth (Tangible Net Worth)	Equity Share Capital + Preference Share Capital + Reserve & Surplus – Intangible & Fictitious Assets
Net Capital Employed	Shareholders' Net Worth + Long-term Liabilities Alternatively, Fixed Assets including Investment + Total Current Assets – Current Liabilities
Gross Capital Employed	Shareholders' Net Worth + Total Liabilities Alternatively, Fixed Assets including Investment + Total Current Assets

ACCOUNTING POLICIES

Accounting policies are the guiding force in preparing books of accounts and presentation of financial results. Due to the adoption of **accrual system** of accounting, there is very little scope for having deviation in the accounting policies across different financial years. Till **unregulated regime**, a financial officer had the freedom to adopt accounting policies according to their convenience that affected the projection of earning of the business firm. But such freedom has been restricted in the **regulated regime**. Now a finance officer is required to abide by the fundamentals as imposed by the accounting standards and accounting principles derived from these standards. As a result of the prescribed accounting standards, manipulation of accounting records to achieve desired financial result is a remote possibility in routine course of business activities.

> Each and every set of annual accounts is to be interpreted in view of the accounting policies adopted while preparing such accounts.

The internal freedom in applying accounting standards is permitted, subject to the business circumstances, environmental conditions and need of the business situation. This limited freedom in applying accounting standards is helpful in situational interpretation of the accounting standards. Due to this, a uniform solution for each and every accounting problem or business transaction cannot be prescribed.

Features of Accounting Policies

The accounting policies adopted by the finance officer in preparing books of accounting and presenting annual accounts must help in achieving uniformity, consistency and comparability of financial results. Therefore, every accounting policy must have the following features:

Uniformity

Uniformity implies maintaining books of accounts and presentation of annual accounts in a particular format across the years. Such uniformity is the pre-condition for achieving consistency and comparability.

Consistency

Consistency means providing same or almost similar accounting effect for a particular type of transaction across different accounting years. This helps in having uniform effect of costs and revenue so that a consistent projection of financial statements can be made.

Comparability

The evaluation of financial results involves horizontal as well as vertical **comparison**. Horizontal comparison implies comparing financial statements of two of more companies, whereas vertical comparison implies comparing the financial statements of one single company across different financial years. Accounting policies should help in presenting the annual accounts so as to facilitate comparison as discussed.

FEATURES OF ACCOUNTING POLICIES AND QUALITY OF EARNING

Different features of accounting policies as discussed earlier reflect the quality of earning. **Quality of earning** implies having consistent pattern of reporting earning across the years. The consistency is must to have a comparative analysis of the financial performance. However, interpretation of quality of earning is different for different stakeholders.

The foregoing discussion about **quality of earning** implies that the accounting policies adopted in presenting annual accounts should (i) maintain consistency of reported earning (ii) facilitate comparability of financial results, specially the earning (iii) be based on uniform set of accounts as well uniform accounting policies.

Shareholders, moneylenders, banks—financial institutions, suppliers—creditors, tax authorities, internal management team, employees are the prominent **stakeholders.**

STAKEHOLDERS AND MEANING OF QUALITY OF EARNING

For **finance officer**, the projection of earning as per the accounting standards is the measurement of good quality of earning. For **shareholders** of the company, increasing level of earning represents good quality of earning. For **tax authorities,** presentation of profits as per tax laws implies good quality of earning. For **employees** of the business firm, earning likely to bring reward for them is the measurement of good quality of earning. For **prospective investors**, estimation and reporting of future profitability indicates good quality of earning. For **moneylenders,** earning capable of providing sufficient coverage for default risk indicates good quality of earning.

EARNING MANAGEMENT

Earning management implies managing earning of the business firm by adopting certain presentation skills and manipulations in the accounts so as to have desired amount and quality of earning. However, earning management is a bad accounting practice and accounting standards prohibit such management of earning. The common motives for earning management might be to report (i) increased revenue, (ii) increased profit, (iii) reduced costs and (iv) desired projection of assets and liabilities.

(Earning management has been discussed in detail in Appendix I on Window Dressing vs Accounting.)

BLACK HOLES—RED FLAGS

In view of the limitation of ratio analysis, the financial analysts should detect the following black holes before carrying out interpretation with the help of financial ratios:

- Changes in accounting policies and their effect on financial results
- Unexplained changes in accounting policies and their impact on reported profits
- Report of CFO
- Directors' reports
- Corporate governance practices
- Comment of audit committee
- Auditors' report
- Unusual increase or decrease in certain expenses or losses
- Unusual increase or decrease in certain revenue or profits
- Disclosure to annual accounts

The financial results and financial position as disclosed by financial statements should be analysed only after taking the effect of these black holes. Then only true and fair presentation of financial performance can be made. Before calculating financial ratios, income statement and balance sheet should be reworked by giving due consideration to the black holes discussed above. The above-mentioned list is not exhaustive; rather it is only an illustrative list.

ASSESSING THE LIQUIDITY OF THE FIRM—LIQUIDITY RATIOS

Liquidity means the ability to repay short-term debts.

The sound principle of finance is to meet long-term requirements out of long-term sources and never from short-term funds. Rather, some part of the long-term sources should be invested in current assets. If this principle of hedging is maintained then liquidity of a business organization is not only maintained but enhanced too. **Liquidity ratio** is also termed as **working capital** or **short-term solvency ratio**. The following are the prominent liquidity ratios that help in assessing liquidity position of business.

Liquidity ratios are primarily used by suppliers of goods and suppliers of short-term funds.

Current Ratio

This ratio is an indicator of the firm's commitment to meet its short-term liabilities. Current assets are either used up or converted into cash within a year's time or normal operating circle of the business. Current liabilities are payable within a year or operating cycle, out of the existing current assets or by creation of current liabilities. If this ratio is more than 1, it suggests that the current assets are adequate to pay off all current liabilities. If it is 1, they are just sufficient and if less than 1, a company shall be unable to pay current dues when asked for. It is used by the banker while granting working capital loan and by the suppliers while extending trade credit.

Current Ratio = Current Assets/Current Liabilities

Quick or Acid Test Ratio

All the current assets are not equally current or liquid. Cash is the most liquid asset; receivable can also be discounted and converted into cash. Marketable securities can also fetch cash very easily, when sold. But inventory is the most illiquid assets as it cannot be sold till there are buyers available. The standard result of the quick ratio is considered as 1:1, which means that the cash yield from the most liquid assets is sufficient to pay off short-term liabilities. It is also called liquid ratio.

Quick or Acid test Ratio = Quick Assets/Current Liabilities

(Note: Quick Assets = Current Assets- Inventory & pre-paid expenses)

Quick assets	Current assets other than stock and pre-paid expenses are the quick assets.

Absolute Liquidity Ratio

$$\frac{\text{Cash and Bank balance + Marketable securities, including short-term investment}}{\text{Current liabilities}}$$

This ratio measures the ability in making the payment of current liability if an immediate payment at a short notice is to be made. Usual standard for this is 0.5:1, which implies that for the repayment of one rupee's current liability, one must have absolute liquid assets of fifty paise.

Absolute Liquidity Ratio = (Cash and Bank Balance + Marketable Securities including short-term investment)/Current Liabilities

Absolute liquid assets	Cash in hand, bank balance, short-term investment and marketable securities are absolute liquid assets; if liabilities are to be repaid in a very short notice, these can be used to pay these liabilities.

Note: Standard for current ratio is 2:1 for quick ratio 1:1 and for absolute ratio 0.50:1.

EXAMPLE 1 From the following balance sheet, calculate liquidity ratio.

Liabilities	Amount (₹)	Assets	Amount (₹)
Equity Share Capital	1,00,000	Fixed Assets	1,00,000
Reserves	50,000	Stock	50,000
P & L Account	50,000	Sundry Debtors	75,000
Bank Overdraft	30,000	Bills Receivables	20,000
Bills Payable	25,000	Cash and Bank	30,000
Sundry Creditors	45,000	Prepaid Expenses	5,000
		Marketable Securities	20,000
	3,00,000		3,00,000

SOLUTION

Current Assets = (Stock + Sundry Debtors + Bills Receivables + Cash & Bank + Pre-paid Expenses + Marketable Securities)
Current Liabilities = (Bank Overdraft + Bills Payable + Sundry Creditors)
Current Assets = (50,000 + 75,000 + 20,000 + 30,000 + 5,000 + 20,000) = 2,00,000
Current Liabilities = (30,000 + 25,000 + 45,000) = 1,00,000

1. Current ratio = 2,00,000/1,00,000
   Current ratio = 2:1
   It is exactly as per the standard value. Therefore, it is appropriate. However, accurate interpretation can be made after considering the industry's current ratio to which this company belongs.
2. Quick ratio = (2,00,000 – 50,000 – 5,000)/1,00,000
   Quick ratio = 1.45:1
   Normally accepted standard for this is 1:1 and it is better than this. This implies that the company has sufficient liquid assets to make an immediate payment of its current liabilities in the short run.
3. Absolute Liquidity ratio = (30,000 + 20,000)/1,00,000
   Absolute Liquidity ratio = 0.50:1
   This ratio is as per the expected standard that implies that the company is maintaining cash, bank balance and marketable securities as per the prescribed standards.

ASSESSING SOLVENCY—SOLVENCY/LEVERAGE RATIOS

These ratios help in ascertaining the long-term solvency of a firm, which depends basically on three factors:

- Whether the firm has adequate resources to meet its long-term funds requirements
- Whether the firm has used appropriate debt–equity mix to raise long-term funds
- Whether the firm earns enough to pay interest and installment of long-term loan in time

When debt funds are included in a capital structure of a company, the resulting capital structure is called **leveraged capital structure**. The level and effect of leverage is measured with the help of solvency ratios, these ratios are also called **leverage ratios**.

The prominent solvency/leverage ratios are discussed below.

Solvency ratios are primarily used by the suppliers of long-term funds, particularly providers of debt fund.

Debt-Equity Ratio

The debt-equity ratio is determined to ascertain the soundness of the long-term financial policies of the company. The term, **external equities** refers to total outside liabilities and the term, **internal equities** refers to shareholders' funds or the tangible net worth. In case the ratio is 1, it is considered to be quite satisfactory.

Debt-Equity Ratio = Long-Term Liabilities/Shareholders' Net Worth

Long-term debt or long-term liabilities or term liabilities	Debentures, Secured Loan, Long-Term Loan
Total debt	Long-term debt and current liabilities
Shareholders' net worth[1] (tangible net worth)	Equity Share Capital + Preference Share Capital + Reserve and Surplus—Intangible and Fictitious Assets

Note: Standard ratio is 2:1.

Solvency or Total Indebtedness Ratio

This ratio differs slightly from the debt-equity ratio as instead of term liabilities only, we take the total outside liabilities, i.e., the term and the current both. This may reflect the solvency position in a better way. In this case too, the lower the ratio, the better it shall be, as it indicates the adequacy of the firm's equity in making payment of outside liabilities.

Solvency/Total indebtedness Ratio = (Total outside liabilities)/Tangible net worth

Total outside liabilities include both long-term debt as well as current liabilities. And tangible net worth as discussed earlier.

Fixed Assets Ratio

This ratio indicates whether the value of fixed assets is sufficient to cover the amount of the loan granted to the firm. The ratio should not be more than 1. If it is less than 1, it shows that a part of the working capital has been financed through long-term fund.

Net Capital Employed	Shareholders' Net Worth + Long-term Liabilities Alternatively, Fixed Assets including Investment + Total Current Assets – Current Liabilities
Gross Capital Employed	Shareholders' Net Worth + Long-term Liabilities + Current Liabilities Alternatively, Fixed Assets including Investment + Total Current Assets

Thus,

Fixed Assets Ratio = Net fixed Assets/Net Capital Employed

Proprietary Ratio

It represents proportion of tangible assets financed through owner's funds.

It is a variant of debt-equity ratio. It established relationship between the proprietors' fund and the total tangible assets. The higher the ratio, the stronger is the financial position of the company and the higher is the capability of bearing financial stress. A low ratio indicates lesser-owned funds and higher dependence on borrowed funds.

Proprietary Ratio = (Shareholders' Funds, i.e., Net Worth)/Total Tangible Assets

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[1]While calculating it, the realizable value of intangible and fictitious assets is assumed to be zero. If there is some realizable value of these assets then such realizable value is to be added to the shareholders' net worth.

Debt Ratio

It represents inverse of proprietary ratio, i.e., it represents as to what proportion of total tangible assets has been financed by borrowed funds. If it is 0.56, i.e., 56% then it implies that 56% of the tangible assets have been financed by external funds—long-term as well as short-term external liabilities. Thus,

Debt Ratio = Total Debt (Long-term Debt and Current liabilities)/Total Tangible Assets

Interest Coverage Ratio

It represents as to how much coverage is provided by EBIT to interest to be paid by the business firm. Interest coverage ratio implies EBIT as number of times of interest. It is calculated as follows:

Interest Coverage Ratio = EBIT/Interest

A higher ratio implies low leverage, whereas lower ratio implies high leverage or probably negative impact of leverage.

Financial Leverage—Analysis of Leverage Effect

Introduction

Presence of fixed charge sources of finance—debt instruments and preference shares in the capital structure of a business firm is identified as use of financial leverage. Financial leverage might have favourable or unfavourable impact on the earning belonging to equity shareholders—EPS or return on equity (ROE).

Impact of Financial Leverage

Financial leverage will have a favourable impact on EPS only when before tax return on capital employed (ROCE) is more than before tax cost of fixed charge sources of funds. Favourable impact implies a higher increase in EPS for every increase in EBIT from the given level of EBIT; whereas financial leverage will have adverse impact when ROCE is less as compared to before tax cost of fixed charge sources of funds. Unfavourable impact implies a faster decrease in EPS for every decrease in EBIT from the given level of EBIT.

Measurement of Financial Leverage—Degree of Financial Leverage (DFL)

DFL is a sensitivity measurement representing percentage change in EPS or ROE corresponding to every one percent change in EBIT from the given level of EBIT. DFL is unique for every level of EBIT.

DFL = EBIT/{EBT – (Preference dividend amount)/(1 – t)}

Here, EBIT = earning before interest and tax, EBT = earning before tax, t = tax rate.

Financial Leverage—Financial Risk

Financial leverage indicates financial risk in a company. By **financial risk**, we mean risk on accounting of financing pattern, and financing pattern is affected by the strategic decision about the capital structure of the company. **Degree of financial leverage** is the indicator of such risk. Comparatively, high level of DFL indicates high financial risk and vice versa. DFL can be used to assess the changes in EPS towards given changes in EBIT from a particular level.

Percentage change in EPS = DFL × Percentage change in EBIT

Example 2 EBIT of a company for the year is ₹ 9 lakh and capital structure of the company includes equity share capital (face value ₹ 10 each) of ₹ 30 lakh, 10% debentures of ₹ 10 lakh and 12% preference share capital of ₹ 10 lakh. Tax rate for the company is 30%. Calculate financial leverage and EPS. Also interpret financial leverage. Also show by how much EPS will change if EBIT changes by 40% from the current level.

Solution

Table Showing Income Statement

Particulars	Amount (₹ in lakh)
EBIT	9.00
Less: Interest on debt	1.00
EBT	8.00
Less: Tax @ 30% o EBT	2.40
EAT	5.60

DFL = EBIT/{EBT − (Preference dividend amount)/(1 − t)}

DFL = 9/{8 − (1.20)/(1 − 0.30)} = 1.43

EPS = (5.60 − 1.2)/3 = ₹ 1.47

DFL 1.43 implies that if EBIT changes by 1% from the given level of ₹ 9 lakh, then the EPS will change by 1.43 from the present level of EPS ₹ 1.47.

Now when EBIT changes by 40% then EPS will change by 57.20 % (1.43 × 40).

Example 3 From the following balance sheet, calculate solvency group ratio.

Liabilities	Amount (₹)	Assets	Amount (₹)
Equity Share Capital	5,00,000	Land & Building	5,30,000
Preference Share Capital	1,50,000	Plant & Machinery	1,10,000
General Reserves	70,000	Furniture	20,000
Securities premium	30,000	Investment	90,000
P & L Account	1,25,000	Stock	95,000
Debentures	1,50,000	Sundry Debtors	1,75,000
Secured Bank Loan	1,00,000	Bills Receivables	25,000
Bank Overdraft	45,000	Cash and Bank	80,000
Sundry Creditors	55,000	Prepaid Expenses	15,000
Tax Payable	1,00,000	Marketable Securities	20,000
Dividend Payable	60,000	Preliminary Expenses	40,000
		Goodwill	1,10,000
		Patents	75,000
	13,85,000		13,85,000

Solution

Long-term debt = 1,50,000 + 1,00,000 = 2,50,000

Total debt = 2,50,000 + 45,000 + 55,000 + 1,00,000 + 60,000 = 5,10,000

Shareholders' net worth[2] = 5,00,000 + 1,50,000 + 70,000 + 30,000 + 1,25,000 – 40,000 – 1,10,000 – 75000 = 6,50,000

1. Debt-equity Ratio = 2,50,000 /6,50,000

   Debt-equity ratio = 0.38:1

   It shows that long-term debt is just 38% of the owner's equity indicating a low level of leverage and the firm can be considered as safe from the angle of long-term solvency.

[2]It has been assumed that the intangible and fictitious assets have zero realizable value. If we consider that goodwill and patents will have realizable value equal to the book value and preliminary expenses have no realizable value (as fictitious assets usually do not have realizable value) then the net worth will be equal to ₹ 8,35,000.

2. Solvency/Total indebtedness ratio = 5,10,000/6,50,000

   Debt-Equity ratio = 0.78:1

   It shows total indebtedness of business organization. It can be interpreted as total debt—long-term debt and current liabilities is just 78% of the owner's equity indicating a low level of leverage and the firm can be considered as safe from the angle of long-term as well as short-term solvency.
3. Fixed Assets Ratio = 7,50,000/9,00,000

   Net fixed assets = 5,30,000 + 1,10,000 + 20,000 + 90,000 = 7,50,000

   Net capital employed = Shareholders' net worth + long-term debt

   Net capital employed = 6,50,000 + 2,50,000 = 9,00,000

   Fixed Assets Ratio = 0.83, i.e., 83%

   It shall be interpreted as 83% of the net capital employed is being used to finance fixed assets. This shows better and sound solvency position. It can be considered as a high level of coverage for the repayment of long-term liabilities.
4. Proprietary Ratio = 6,50,000 /11,60,000

   Total tangible assets = 13,85,000 – 40,000 – 1,10,000 –75,000 = 11,60,000

   Proprietary Ratio = 0.56, i.e., 56%

   56% of the tangible assets have been financed through the shareholders funds and the remaining have been financed through borrowed funds—long-term debt and current liabilities.
5. Debt Ratio = 5,10,000 /11,60,000

   Debt Ratio = 0.44, i.e., 44%

   44% of the tangible assets have been financed through borrowed funds—long-term debt and current liabilities.

ASSESSING OPERATING MANAGEMENT EFFICIENCY—SALES-BASED PROFITABILITY RATIO

Operating management is the managerial team that is concerned with the execution of policies resulting into the operating activities. The assessment of performance of operating level management can be done by analysing level of operating profit and operating expenses. To evaluate the performance of operating management, sales-based profitability ratios are used.

Sales-based profitability ratios are the one in which profit is reflected with reference to sales for the year.

> **Profitability ratios** are calculated with reference to net sales as well as with reference to the invested capital.

Gross Profit Ratio

This ratio expresses relationship between gross profit and net sales. This ratio indicates the degree to which the selling price of goods per unit may decline without resulting in losses from operations to the firm.

Gross Profit Ratio = (Gross Profit/Net Sales) × 100

Operating Profit Ratio

The ratio denotes the margin of profit on sales revealing the operational efficiency of the unit.

Operating Profit Ratio = (Operating profit/Net sales) × 100

Net Profit Ratio

This ratio indicates net margin earned on a sale of 100. This ratio helps in determining the efficiency with which affairs of the business are being managed.

Net Profit Ratio = (Net profit/ Net sales) × 100

OPERATING LEVERAGE—ANALYSIS OF EFFECT OF LEVERAGE ON OPERATING PERFORMANCE

Introduction

Presence of fixed cost in the total operating cost of a firm implies the use of operating leverage. Operating leverage is ought to have favourable or unfavourable impact on the EBIT (earning before interest and tax), i.e., operating profit.

Impact of Operating Leverage

Favourable impact of operating leverage is visualized as a comparatively faster increase in EBIT towards every increase in sales from the given level of sales, whereas unfavourable impact implies a comparatively faster decrease in EBIT for every decrease in sales from the given level of Sales.

Measurement of Operating Leverage—Degree of Operating Leverage (DOL)

DOL is a sensitivity measurement representing percentage change in EBIT corresponding to every one percent change in sales from the given level of sales. DOL is unique for every level of sales.
DOL = Total Contribution/EBIT
Here, EBIT = earning before interest and tax

Operating Leverage—Operating Risk

Operating leverage indicates operating risk in a company. By **operating risk**, we mean risk on accounting of low level of operating activities, i.e., low level of sales as compared to the expectation. DOL is the indicator of such risk. Comparatively, high level of DOL indicates high operating risk and vice versa. DOL can be used to assess the changes in EBIT towards given changes in sales from a particular level of sales.

Percentage change in EBIT = DOL × Percentage change in sales

EXAMPLE 4 A company is selling 30,000 units of its product @ ₹ 40 per unit, variable cost per unit is ₹ 22 and total operating fixed cost of the company is ₹ 1,80,000. Calculate operating leverage and show by how much percentage EBIT will increase if sales increases by 25 percentage from the present level of sales.

> Presence of fixed cost in the total operating cost generates operating leverage.

SOLUTION

Table showing income statement

Particulars	Amount (₹ in lakh)
Sales	12,00,000
Less: Total variable cost	6,60,000
Total Contribution	5,40,000
Less: Total Fixed Operating Cost	1,80,000
EBIT	3,60,000

DOL = 5,40,000/3,60,000 = 1.5

This implies that EBIT will change 1.50% (+ or -) against every one percent change in sales from the given level of sales. Now when sales increases by 30%, i.e., it becomes ₹ 15,60,000, then EBIT will increase by 45% (30 × 1.5) from the present level of EBIT, i.e. ₹ 3,60,000. New EBIT will be ₹ 5,22,000.

MEASURING OVERALL PERFORMANCE IN RELATION TO INVESTMENT—INVESTMENT-BASED PROFITABILITY RATIOS

Profitability of a business enterprise can be measured in terms of investment in different assets as well as in terms of capital employed. Capital employed includes total long-term funds used by a business enterprise in financing its assets. To assess whether a firm has generated sufficient return on the total funds employed in the firm, specially long-term funds—debt funds and owners' funds, the following ratios in this category are calculated:

Return on Investment (ROI)

It reflects earning capacity of total assets. By using it, one can assess the profitability in terms of total assets used to earn the profits. It is calculated as follows:

$$= (\text{EBIT}/\ \text{Total Assets}) \times 100$$

By using it, profitability can be evaluated without considering the effect of leverage and tax structure.

The ROI can be computed for different purposes. Some of these are as follows:

(a) Return on Shareholders' Fund (RONW–Return on Net Worth)

$$= \frac{\text{EAT}}{\text{Shareholders' net worth}} \times 100$$

(b) Return on Equity Shareholders' Funds (ROE)

$$= \frac{\text{EAT} - \text{Preference dividend}}{\text{Equity shareholders' funds}} \times 100$$

(c) Return on Total Assets (ROTA)

$$= \frac{\text{Net profit after tax} + \text{Interest}}{\text{Total assets}} \times 100$$

(d) Return on Gross Capital Employed

$$= \frac{\text{Net profit before interest and tax}}{\text{Gross capital employed}} \times 100$$

(e) Return on Average Capital Employed

$$= \frac{\text{Net profit before interest and tax}}{\text{Average capital employed}} \times 100$$

Return on Capital Employed (ROCE)

It indicates the percentage of return on the capital employed in the business.

$$= \frac{\text{EBIT}}{\text{Net capital employed}} \times 100$$

It represents earning capacity in terms of long-term capital—shareholders' net worth and long-term debt. But it does not take into consideration leverage and tax effect. Its another variant can be

$$= \frac{\text{EAT + Interest}}{\text{Net Capital employed}} \times 100$$

Gross Gearing—Financial Leverage and Spread-Decomposing of ROE

Gross Gearing—Measurement of Aggregate Financial Leverage

It represents a relationship between leveraged funds and owners' funds but it is measured indirectly by using the facts about invested capital and equity shareholders' net worth.

Gross Gearing = Invested Capital/Equity Net Worth

It shows as to how many times is the invested capital that of equity net worth. A higher ratio indicates higher level of financial leverage and vice versa. This is the measurement of aggregate financial leverage.

Financial Leverage and Spread

Presence of fixed charge sources of finance in the capital structure is called **financial leverage**. The difference between ROI (Return on Investment) and pre-tax cost of such sources is called **spread**. When this spread is positive, the financial leverage has favourable impact on ROE and a negative spread is unfavourable on ROE. The relationship between Net PAT and NOPAT also represents spread.

Spread Ratio—Relationship between Net PAT and NOPAT

Net PAT (PAT less preference dividend amount) is the amount of PAT available for equity shareholders. A comparison of net profit after tax (PAT) and net operating profit after tax (NOPAT) represents as to how much out of NOPAT is available for equity shareholders. Comparatively, lower proportion represents negative spread resulting into unfavourable effect of financial leverage, whereas comparatively higher proportion represents positive spread resulting into favourable effect of financial leverage.

Spread Ratio = Net PAT/NOPAT

Return on Equity (ROE)

ROE is the measurement of profitability for equity owners. It represents the profitability with reference to equity shareholder's equity – equity shareholder's net worth.
Return on Equity Shareholders' Funds (ROE)

$$= \frac{\text{PAT} - \text{Preference dividend}}{\text{Equity shareholders' funds}} \times 100$$

ROIC (Return on Invested Capital)

ROIC is a measurement indicating effective earning available for the contributors of capital invested in a business firm. It is shown as effective profit as a percentage of invested capital.

ROIC = (NOPAT/IC) × 100

Decomposing of ROE

ROE can be viewed as the function of ROIC, Gross Gearing and Spread represented by the relationship between Net PAT and NOPAT. Therefore, ROE is represented as follows:

ROE = ROIC × Spread Ratio × Gross Gearing

ROE = NOPAT/IC × Net PAT/NOPAT × IC/Equity Net Worth

This decomposing helps in establishing the relationship between ROIC, Spread Ratio and Gross Gearing. It can be interpreted that ROE can be increased if any one is increased by keeping rest of the two constants. Similarly, an increase in all the three will have multiplying effect on ROE.

EXAMPLE 5 The following facts have been extracted from the annual accounts of Zavit Ltd:
Net sales ₹ 30 lakh, EBIT ₹ 6 lakh, equity net worth ₹ 18 lakh, long-term debt 6 lakh, short-term interest bearing debt ₹ 2 lakh. Total interest payment ₹ 1.5 lakh.
If tax rate is 30%, then calculate (i) ROIC (ii) ROE and show how both of these can be decomposed to analyse the effect of changes in different constituents.

Presence of fixed charge sources in the capital structure results into financial leverage.

SOLUTION NOPAT = EBIT (1 − *t*) + Interest × *t*
NOPAT = 6 (1 − 0.03) + 1.5 × 0.30 = 4.65
PAT = 3.15 {(6 − 1.5) × (1 − 0.30)}, here preference share capital is not given; therefore, PAT is net PAT.
IC = 26 (18 + 6 + 2)
ROIC = 4.65/26 = 0.1788 or 17.88 %
Equity Net Worth = 18
Spread Ratio = Net PAT/NOPAT
Spread Ratio = 3.15/4.65 = 0.6774
Gross Gearing = IC/ Equity Net Worth
Gross Gearing = 26/18 = 1.4444
ROE = Net PAT/Equity Net Worth
ROE = 3.15/18 = 0.1750, i.e., 17.50 %

Decomposing ROE
ROE = ROIC × Spread Ratio × Gross Gearing
ROE = NOPAT/IC × Net PAT/NOPAT × IC/Equity Net Worth
ROE = 0.1788 × 0.6774 × 1.4444 = 0.174944 or 17.50%
Therefore, ROE will be affected as soon as any of these three are changed.

INDICATOR OF OVERALL FINANCIAL PERFORMANCE

Overall financial performance of a business firm should be evaluated with reference to the level of profits it has generated on the total invested capital. For this, Return on Invested Capital (ROIC) is the best measurement that indicates aggregate return generating capacity of total amount of capital invested on which the business firm has some obligation to pay either interest or dividend.

ROIC

ROIC is a measurement indicating effective earning available for the contributors of capital invested in a business firm. It is shown as effective profit as a percentage of invested capital.

Invested Capital (IC)

Invested capital comprises different long-term sources as well as interest bearing short-term sources also. It comprises the following:

- Shareholders' net worth
- Long-term debt
- Short-term interest bearing debt

NOPAT—Net Operating Profit after Tax

Net operating profit after tax represents the amount of profit available with adjustment for tax benefit on interest. It represents the amount of profit and reward available for the contributors of invested capital. NOPAT is calculated as follows:

NOPAT = PAT + Interest including interest on short-term borrowings

Alternatively, EBIT $\times (1 - t)$ + Interest $\times t$

Formulae:

ROIC = (NOPAT/IC) $\times$ 100

NOPAT = Operating Profit after tax + Tax shield on interest

Tax shield on interest = Interest $\times t$

ROIC = return on invested capital, NOPAT = net operating profit after tax, t = tax rate

Example 6 Firms A and B are identical with respect to their working except the difference in leverage. X is an unleveraged firm and Y is a leveraged firm. Total capital invested in each of the company is ₹ 10,00,000; the debt and equity in Y is in equal ratio with rate of interest on debt 12%. EBIT of both of the firms is ₹ 2,00,000 with a tax rate of 30% . Calculate NOPAT and ROIC.

Solution Here firm B has the obligation to pay interest of ₹ 60,000 (5,00,000 $\times$ 0.12) every year.

Table Showing Calculation of ROIC

Particulars	Firm A (Amount in ₹)	Firm B (Amount in ₹)
EBIT	2,00,000	2,00,000
Less: Interest	----	60,000
EBT	2,00,000	1,40,000
Less: Tax @ 30%	60,000	42,000
EAT (PAT)	1,40,000	98,000
NOPAT = PAT + Interest	1,40,000	1,58,000
Invested Capital (IC)	10,00,000	10,00,000
ROIC = (NOPAT/IC) × 100	14%	15.80%

Firm B has higher ROIC because of the favourable impact of leverage. The before tax cost of debt for firm B is 12%, whereas ROI is 20% {(2,00,000/10,00,000) $\times$ 100}

Operating vs Non-Operating Assets and Income

Out of all the assets held by a business firm, not all the assets are operating assets; few of the assets are held for investment purpose as 'investment' and 'investment property'.

Operating Assets

Operating assets are the assets that are held for performing routine business activities—production and sales. Operating assets are also called **trading assets.** These assets are held with the prime objective of using these for business activities and not to have any gain from the appreciation in the market value of these assets.

Non-operating Assets

Non-operating assets, also called **non-trading assets**, are the assets that do not relate to the routine-operating activities but are held by the business firm for the purpose of investment; such as investment in the government securities and purchase of land for investment purpose and not for business use. These assets are held to have gain from the appreciation in the market value of theses assets or from interest/dividend from these assets.

Income from Operating and Non-operating Assets

Income from operating assets is the main source of revenue, i.e., sales revenue. It is also called **direct revenue.** Income from non-operating assets—interest, dividend and profit/loss from the sale of such assets is called **other income**. Other income is shown separately in the income statement.

Excluding Other Income and Non-operating Assets in Profitability Analysis

Every income statement discloses separately core revenue and other income in its income statement. While analysing profitability of the business firm, other income relating to non-operating assets is to be excluded from the profit; at the same time, the amount of investment held up in non-operating assets should not be included in the invested capital/capital employed/total assets as the case may be.

Reasoning for Exclusion: The apparent reason for excluding other income and non-operating assets while calculating profitability ratios is to have a fair assessment of profitability resulting from the business activities.

EXAMPLE 7 The following is the profit and loss account and balance sheet of Sach International Ltd. Redraft these for the purpose of ratio analysis and calculate profitability ratios based on sales.

Profit and Loss Account

For the year ending March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
To **Opening Stock**		By Sales	10,00,000
Finished Goods	1,00,000	By **Closing Stock**	
Raw Material	50,000	Finished Goods	1,50,000
To Purchase of Raw Material	5,00,000	Raw Material	1,00,000
To Direct Wages	2,00,000	By Profit on sale of shares	50,000
To Manufacturing Expenses	1,00,000		
To Administrative Expenses	30,000		
To Depreciation	20,000		
To Preliminary expenses Written off	10,000		
To Selling and Distribution Expenses	40,000		
To Loss on Sale of Plant	55,000		
To Interest on Debentures	10,000		
To Net Profit	1,85,000		

Note: Tax for the year provided ₹ 50,000.

SOLUTION

Income Statement

For the year ending March 31, 2009

Particulars	Details	Amount (₹)
Sales		**10,00,000**
Less: **Cost of Goods Sold (COGS)**		
Raw Material Consumed		
Opening stock of R.M.	50,000	

(*Contd*)

(*Contd*)

(+) Purchase of R.M.	5,00,000	
(−) Closing stock of R.M.	1,00,000	
Raw Material Consumes	4,50,000	
Direct Wages	2,00,000	
Manufacturing Expenses	1,00,000	
	7,50,000	
Add: Opening stock of finished goods	1,00,000	
Less: Closing stock of finished goods	1,50,000	
Cost of Goods Sold	7,00,000	(7,00,000)
Gross Profit		**3,00,000**
Less: *Operating Expenses*		
Administrative expenses	30,000	
Selling and Distribution expenses	40,000	(70,000)
Cash Operating Profit (EBDAIT)		2,30,000
Less: Depreciation and Amortization		
Depreciation	20,000	
Preliminary expenses written off	10,000	(30,000)
Operating Profit		**2,00,000**
Add: Non-operating Income (profit on sale of shares)	50,000	
Less: Non-operating expenses/losses (loss on sale of plant)	55,000	(5,000)
Earning Before Interest and Tax (EBIT)		**1,95,000**
Less: Interest		10,000
Earning Before Tax (EBT)		1,85,000
Less: Tax		50,000
Earning After Tax (EAT)		**1,35,000**

Gross Profit Ratio

$$\frac{3,00,000}{10,00,000} \times 100$$

Gross profit ratio = 30%

Operating Profit Ratio

$$\frac{2,00,000}{10,00,000} \times 100$$

Operating profit ratio = 20%

Net Profit Ratio

$$\frac{1,35,000}{10,00,000} \times 100$$

Net profit ratio = 13.50%

Operating ratio = 100 – 20 = 80%

It implies that operating cost, i.e., cost of goods sold plus operating expenses is 80% of the sales value.

Example on Calculation of Investment-based Profitability Ratio

EXAMPLE 8 By using the income statement of Example 7 and the following balance sheet, calculate investment-based profitability ratios.

Balance Sheet as on March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
Equity Share Capital	2,00,000	Plant (Net)	1,00,000
(face value ₹ 10)		Building (Net)	80,000
10% Preference Share Capital	1,00,000	Investment	70,000
General Reserve	80,000	**Stock**	
Securities Premium	10,000	Finished Goods	1,50,000
P & L Account	10,000	Raw Material	1,00,000
Debenture	2,00,000	Sundry Debtors	80,000
Sundry Creditors	1,00,000	Bank Balance	40,000
Tax Payable	50,000	Marketable Securities	20,000
		Pre-paid Expenses	10,000
		Goodwill	30,000
		Preliminary Expenses	70,000
	7,50,000		7,50,000

Solution

Position Statement

Particulars	Details	Amount (₹)
1. Fixed Assets		1,80,000
■ Plant	1,00,000	
■ Building	80,000	
2. Investment		70,000
3. Current Assets		4,00,000
Liquid Assets		
■ Sundry Debtors	80,000	
■ Bank Balance	40,000	
■ Marketable Securities	20,000	
Non-Quick Assets		
■ Stock of raw material	1,00,000	
■ Stock of finished goods	1,50,000	
■ Pre-paid expenses	10,000	
Less: Current Liabilities		**1,50,000**
■ Sundry creditors	1,00,000	
■ Tax payable	50,000	
Net Current Assets		2,50,000
Net Capital Employed		**5,00,000**
4. Intangible and Fictitious Assets		1,00,000
■ Goodwill	30,000	
■ Preliminary expenses	70,000	
1. Shareholders' Net worth		
■ Equity share capital	2,00,000	
■ 10% Preference share capital	1,00,000	
■ General reserve	80,000	
■ Securities premium	10,000	
■ P & L Account	10,000	

(*Contd*)

(*Contd*)

Less: Intangible and Fictitious Assets		
■ Goodwill	30,000	
■ Preliminary expenses	70,000	
Shareholders' Net Worth		**3,00,000**
2. Long-Term Debt		
■ Debentures		2,00,000
Net Capital Employed		**5,00,000**
Add: Current Liabilities		1,50,000
Gross Capital Employed		**6,50,000**

Return on Investment (ROI) = (1,95,000/7,50,000) × 100 = 26%

Return on Capital Employed (ROCE)

$$\frac{1,95,000}{5,00,000} \times 100$$

= 39.00%

Alternatively,

$$\frac{1,35,000 + 10,000}{5,00,000} \times 100$$

= 29.00 %

Return on Shareholders' Funds

$$\frac{1,35,000}{3,00,000} \times 100$$

= 45.00%

Return on Equity Shareholders' Funds

$$\frac{1,35,000 - 10,000}{2,00,000} \times 100$$

= 62.50%

Return on Total Assets

$$\frac{1,35,000 + 10,000}{7,50,000} \times 100$$

= 19.33%

Return on Gross capital Employed

$$\frac{1,95,000}{6,50,000} \times 100$$

= 30.00%

Decomposing Combined Effect of Turnover of Assets and Profitability Reflected by ROIC and ROCE

ROIC and ROCE are the two measurements that help in evaluating the profitability of a business firm. The **profitability** as measured with the help of these two ratios is the function of turnover of assets or capital employed as well as the profitability with reference to sales value. Therefore, profitability is not an independent measurement but it is a combined effect of the following ratios:

Invested Capital Turnover: It represents the velocity of invested capital with reference to net sales. It measures the efficiency with which invested capital is used in generating net sales. It also implies as to how many times invested capital is rotated into net sales.

Invested Capital Turnover = Net Sales/Invested Capital

Capital Employed Turnover: It represents the velocity of capital employed with reference to net sales. It measures the efficiency with which capital employed is used in generating net sales. It also implies as to how many times capital employed is rotated into net sales.

Capital Employed Turnover = Net Sales/Net Capital Employed

Operating Profit Ratio—Profitability of Sales: It represents the profit earning capability of net sales.

Profitability of Sales = (EBIT/Net Sales) × 100

NOPAT to EBIT Ratio: It represents NOPAT as a proportion of EBIT. On account of leverage effect and tax shield due to leverage effect (interest tax shield), all the operating profit resulting from sales is not available for the contributors of invested capital or capital employed. Therefore, a ratio between NOPAT and EBIT can help in decomposing the profitability between the leverage effect and effect of turnover of capital employed and turnover of invested capital.

NOPAT to EBIT Ratio = NOPAT/EBIT

Similarly, for the decomposition of ROE we shall use PAT to EBIT ratio.

Decomposing ROIC and ROCE

Decomposing of both of these is represented as follows:

ROIC = IC Turnover × Operating Profitability Ratio × NOPAT to EBIT Ratio

ROCE = CE Turnover × Operating Profitability Ratio × NOPAT to EBIT Ratio

ROIC and ROCE are the synergy effect of several factors. To increase ROIC or ROE, any or all of the factors should be increased.

Why Decomposing of ROIC and ROCE?

ROIC and ROCE are the indicators of overall profitability in terms of amount of capital used by a business enterprise. The overall profitability is the outcome of operating efficiency as well as the effect of financial leverage on account of strategic decision about the sources of finance and level of interest, if any paid on such sources.

Decomposing of ROIC and ROCE is helpful for the management in measuring the individual and independent effect of operating efficiency on the profitability and individual and independent effect of financing strategy of strategic management. Profitability of sales represents **operating efficiency** and efficiency of **strategic management** is represented by the combined effect of (i) ROIC or ROCE and (ii) NOPAT/EBIT ratio.

Inferences from Decomposing

An increasing trend of profitability of sales combined with the increased turnover of invested capital or capital employed will have a **synergy effect** on the overall profitability, whereas increasing trend of profitability coupled with decreasing turnover of invested capital or capital employed indicates a **negative impact** of **over capitalization.** The inferences from decomposing can help the management in taking right steps in right direction to improve overall profitability of the business firm.

EXAMPLE 9 The following facts have been extracted from the annual accounts of Zeta Ltd:
Net sales ₹ 30 lakh, EBIT ₹ 6 lakh, equity net worth ₹ 18 lakh, long-term debt 6 lakh, short-term interest bearing debt ₹ 2 lakh. Total interest payment ₹ 1.5 lakh.
If tax rate is 30%, then calculate (i) ROIC and (ii) ROE and how both of these can be decomposed to analyse the effect of changes in different constituents.

SOLUTION NOPAT = EBIT $(1 - t)$ + Interest $\times$ t

NOPAT = 6 (1 − 0.03) + 1.5 × 0.30 = 4.65

PAT = 3.15 {(6 − 1.5) × (1 − 0.30)}

IC = 26 (18 + 6 + 2)

ROIC = 4.65/26 = 0.1788 or 17.88 %

CE = 24 (18 + 6)

ROCE = (PAT + Interest)/CE = (3.15 + 1.5)/24 = 0.19375 or 19.375%

NOPAT/EBIT = 4.65/6 = 0.775

IC Turnover = 30/26 = 1.1538

CE Turnover = 30/24 = 1.25

Operating Profitability Ratio = EBIT/Sales = 6/30 = 0.20 or 20%

Decomposing ROIC

ROIC = IC Turnover × Operating Profitability Ratio × NOPAT to EBIT Ratio

ROIC = 1.1538 × 0.20 × 0.775 = 0.1788, i.e., 17.88%; therefore, ROIC is dependent upon these three elements. It will be affected as soon as any of these three are changed.

Decomposing ROCE

ROCE = CE Turnover × Operating Profitability Ratio × NOPAT to EBIT Ratio

ROCE = 1.25 × 0.20 × 0.775 = 0.19375, i.e., 19.375. Therefore, ROCE is dependent upon these three elements. It will be affected as soon as any of these three are changed.

CAPITAL MARKET-RELATED RATIO

These ratios are used with the aim to assess financial performance from the angle of investment and generally used by the investors while making investment decision.

Earning per share (EPS)

The EPS helps in determining the market price of the equity shares of the company. It also helps in estimating the company's capacity to pay dividend to its equity shareholders.

Earning per share = (EAT − Preference dividend)/Number of equity shares

Price Earning Ratio (P/E Ratio)

This ratio indicates the number of times the earnings per share is covered by its market price.

Price Earning Ratio (P/E Ratio) = Market Price per equity share/Earning per share

Pay-out Ratio

This ratio indicates what proportion of earning per share has been used for paying dividend.

Pay-out Ratio = (Dividend per equity share / Earning per equity share) × 100

Dividend Yield Ratio

This ratio is particularly useful for those investors who are interested only in dividend Income.

Dividend Yield Ratio = (Dividend per share/ Market price per share) × 100

Example 10 Calculate market-related ratio using the data of Examples 7 and 8 market price per share can be taken as ₹ 125 and equity dividend ₹ 40,000

Solution **Earning per share** = (1,35,000 – 10,000)/20,000 = ₹ 6.25 per share that implies that on each equity share of ₹ 10, the company is earning a net profit of ₹ 6.25

Price Earning Ratio (P/E Ratio) = 125/6.25 = 20 times that implies that the current market price is 20 times of the EPS.

DPS (Dividend Per Share) = 40,000/20,000 = ₹ 2 that implies that out of EPS ₹ 6.25, ₹ 2.00 is being distributed as dividend to equity shareholders.

Pay-out Ratio = (2/ 6.25) × 100 = 32.00 %, it implies that 32% of the earning belonging to equity shareholders is being distributed as dividend and remaining 68% is the retained earning.

Retention Ratio = 100 – payout ratio = 100 − 32 = 68%

Dividend Yield Ratio = (2/125) ×100 = 1.60%. It can be interpreted as current dividend yield for an investor who buys it at the current market price.

ASSESSING THE EFFICIENCY IN USING RESOURCES—TURNOVER RATIO

Those ratios that indicate the efficiency of the enterprise in the utilization of available funds, particularly of a short-term nature, the following ratios fall under this category. These are also called activity ratios. These are as follows:

Inventory Turnover Ratio

The cost of goods sold can be derived, by deducting the gross from the sales. **Average inventory** indicates the average of opening and closing stocks of the goods figures. This ratio indicates as to how quickly the goods are sold in the business or how many times, the inventory turns over during a year. A high ratio would mean accumulation of lesser inventory and thus a lesser chance of the stock containing obsolete or unsaleable items.

Inventory Turnover Ratio = Cost of goods sold/Average inventory

Turnover refers to the efficiency with which different assets are put to use.

Average Inventory Holding Period

This ratio represents the average time duration for which inventory items are held in godown before these are used for production/sales.

Average Inventory Holding Period Ratio = 365/Inventory Turnover Ratio

With the help of it, the amount of average or closing inventory can be estimated.

DIFFERENT INVENTORY ITEMS AND TURNOVER RATIOS

The inventory held by a firm includes items, such as raw material, semi-finished stock (work-in-process) and finished stock; therefore, sometimes specific turnover ratio is calculated with reference to each of these elements. These are as follows:

(a) Raw material turnover ratio
= Annual consumption of raw material/Average stock of raw material

(b) Work-in-process turnover ratio
= Cost of production for the year/Average stock of work-in-process

(c) Finished stock turnover ratio
= Cost of goods sold for the year/Average stock of finished stock

Note: If average stock cannot be calculated then closing stock should be used.

Average Debt Collection Period

This ratio indicates the average time lag in days between sales and the collection of debt, i.e., the number of days the credit remains outstanding at a time. An increasing trend means more credit being extended that may be due to poor realization or competitive forces compelling a liberal policy of credit. A decreasing trend would mean less likelihood of doubtful debts.

Average Debt Collection Period
= {(Bill receivable + Sundry Debtors)/ Annual Credit Sales} × 365

Average Payables Period

This ratio indicates the period for which credit is enjoyed by the unit. An increasing trend shall mean an increasing credit worthiness of the party, resulting in lesser dependence on banks. A declining trend may mean that the company is promptly paying its creditors.

Average Payables Period
= {(Bills payable + Sundry Creditors)/Annual Credit Purchases} × 365

Fixed Assets Turnover Ratio

The ultimate object of fixed assets is to generate sales and this ratio can indicate efficiency with which the company has utilized its fixed assets acquired through internal or external sources of funds. An increasing trend shall indicate an efficient utilization and a falling trend shall mean an inadequate utilization.

Fixed Assets Turnover Ratio = Net Sales/ Fixed Assets

EXAMPLE 11 Taking data of Examples 7 and 8, calculate the following activity ratios:

1. Inventory turnover ratio
2. Average inventory holding period
3. Average debt collection period
4. Average payables period
5. Fixed assets turnover ratio

SOLUTION

Inventory Turnover Ratio = 7,00,000/2,00,000 = 3.5 times

The inventory items have the velocity of 3.5 times. It can be used to calculate inventory holding period as follows:

Average Inventory Holding Period = 365/3.5 = 104.29 days

It can be interpreted as organization is holding the inventory equal to 104 days requirement.

Average Debt Collection Period = (80,000/10,00,000) × 365 = 29.20 days

Average Payables Period = (1,00,000/ 5,00,000) × 365 = 73 days

Fixed Assets Turnover Ratio = 10,00,000/2,50,000 = 4 times

Recap 1

So far, we have discussed the following topics:

- Accounting Policies and Quality of Earning
- Introduction to Ratio Analysis
- Liquidity Ratios
- Solvency Ratios
- Profitability Ratios
- Turnover Ratios
- Decomposing of ROIC, ROCE and ROE
- Operating and Financial Leverage

Self-Assessment 1

1. Explain the concept of accounting policies and how it is likely to affect quality of earning.
2. Discuss decomposing of ROIC and ROE.

The following topics will be discussed next:

- Stakeholders and Inferences from Calculated Ratios
- Common Size Statement
- Trend Analysis
- Precautions While Using Ratio Analysis
- Stakeholders And Ratio Analysis
- Distress Analysis—Discriminant Analysis
- Cases, including a Case using Data from Tata Motors Ltd

STAKEHOLDERS AND INFERENCES FROM CALCULATED RATIOS

- Did you know that the different ratios calculated from the financial statements reveal important facts about the working of a business organization?
- How do banks evaluate liquidity and solvency of a business enterprise?
- How can one decide at what time to buy the shares of a company or sell the shares already held by an investor.

All these questions indicate about the proper evaluation of financial results of a company. Although this evaluation is nothing more than a post-mortem of the past financial data, it conveys many meanings for decisions-making. The interpretations about ratios can be carried from the angle of different stakeholders—suppliers, creditors, employees, debenture holders, shareholders, investors, competitors and others. The interpretation of different financial ratios helps in analysing liquidity, solvency, profitability and efficiency of the business organization in using different assets and capital employed.

Creditors' and Suppliers' Viewpoint—Interpretation about Liquidity Ratio

Liquidity of a business organization translates into short-term solvency. A firm is considered to be solvent in short-term if it has sufficient liquid resources. The **liquid resources** are primarily the current assets—the assets that are in the form of cash or likely to be converted into cash within one financial year or one operating cycle. The level of liquidity much depends upon the quality and variety of current assets.

Modus operandi of interpreting about liquidity

Current ratio

It can be compared against the generic standard that is 2:1; however, the current ratio can be interpreted as follows:

- A significantly higher level of current ratio indicates excessive investment in current assets as compared to the requirement. On one side, it indicates sufficient liquidity as well as low risk; on the other side, it has an adverse impact on the profitability of the business due to idle-lying funds in the form of current assets.
- Current ratio is significantly less than the standard indicates danger about the liquidity and conveys high level of risk; at the same time, it translates into trading on liquidity to manage the profitability.

Analysis of gap between current ratio and liquid ratio

A large gap between current ratio and liquidity ratio implies that significant amount of funds have been blocked into stock and pre-paid expenses. This indicates poor liquidity; it also indicates excessive investment of funds in the stock that might result into loss due to obsolescence or result into high cost of maintaining inventory.

Ratio Analysis and Internal Users

Ratios as explained in the preceding section are not only useful for the external users but these are also used by all the levels of managerial staff. **Strategic management team** uses different ratios to evaluate the aggregate performance of the firm. **Middle-level management** uses activity ratios very frequently as these ratios help them in evaluating financial performance of each segment and different assets being used in the firm. **Operating level management** uses various ratios related to the income statement and turnover ratios relating to inventory and operating items.

The facts used for ratio analysis also help all the levels of managerial staff in performing their duties.

Debenture holders' Viewpoint—Interpretation about Solvency Ratios

Solvency, in general, implies long-term solvency that translates into the capacity of a business organization in making the repayment of long-term external liabilities—repayment of long-term loan and debentures. A firm is considered to be solvent if it has sufficient coverage for the repayment of long-term loan/debentures. This coverage is provided by the sufficient amount of funding of the assets by the shareholders' funds. Analysis of solvency of a business organization is done by using the following mechanism:

Interpretation about Fixed Assets to Proprietary Fund Ratio

This ratio indicates about the financing pattern of fixed assets. A low level of ratio indicates more safety and less risk, as it implies more of the owner's funds being used in financing the fixed assets.

Interpretation about Proprietary Ratio

This shows the proportion of total tangible assets financed with the help of owner's funds. A larger ratio value indicates low level of financial leverage and high safety; at the same time, it indicates that the earning of shareholders is less volatile on account of leverage effect.

Debt-Equity Ratio

This ratio indicates about the composition of capital structure of capital structure. A high ratio indicates more leveraged capital structure and vice versa. High leverage indicates more risk and more changes of higher EPS if EBIT increases at a faster rate.

Interest Coverage Ratio

It is the relationship between interest payment and EBIT. A high ratio indicates that the company is having sufficient operating income for the repayment of interest and vice versa.

Investors and Shareholders' Viewpoint—Interpretation about Profitability Ratios

Profitability is analysed by all the stakeholders, may it be shareholders, debenture holders, employees or creditors. It is analysed as follows:

Comparison of Gross Profit and Operating Profit

The difference between these two ratios indicates proportion of operating expenses. A large difference indicates high amount of operating expenses that might be due to high operating leverage—indicating more operating risk.

Comparison of Operating Profit Ratio and Net Profit Ratio

Due to the presence of interest and tax payment, net profit ratio is less than the operating profit ratio. But in the cases where non-operating profit is of significant amount then net profit might be more than the operating profit. Such combination is not desirable as it shows that the firm is having profits from non-recurring sources.

Comparison of ROI and ROE

ROI indicates EBIT as a percentage of capital employed, whereas ROE indicates return generated for equity shareholders on the funds belonging to equity shareholders. A higher ROE as compared to ROI indicates favourable impact of financial leverage, whereas a situation in which ROE is less than the ROI then it translates into unfavourable impact of leverage.

COMMON SIZE STATEMENT—INTRA-FIRM COMPARISON

Common size statement is the presentation of income statement as well as balance sheet as a proportion of certain common base value. While preparing common size statement, each item of a particular statement is presented as a percentage of the total value of the statement. In case of income statement, each element of income statement is represented as a percentage of sales value. Similarly, in case of balance sheet each item of balance sheet is represented as a percentage of total of balance sheet.

The purpose of preparing common size statement is to identify each item either as progressing or regressing with reference to the base figure.

Example 12 Prepare common size statement from the following information:

Facts Extracted From Annual Report of L & T Ltd

L & T	2007–08		2008–09	
Balance Sheet				
Fixed Assets		5054		3554
Investments		8264		6922
Current Assets		23834		16589
Stock	5805		4306	
S. Debtors	10056		7365	
Pre-paid Expenses	386		183	
Marketable Sec.				
Cash & Bank Balance	775		964	
Loan & Advances	6791		3757	
Accrued Interest	21		14	
Intangible & Fictitious Assets		142		92
Miscellaneous Exp. Not written off				3
Total Assets		37294		27160
Equity Share Capital		117		58
Preference Share Capital				
General Reserve		12343		9497
Securities Premium				
Profit and loss Account				
Debentures		1102		308
Long-Term Loan		5454		3276
Current Liabilities		18278		14021
Sundry Creditors	14776		11742	
Bills Payables				
Outstanding Expenses				
Proposed Tax	435		244	
Provisions	3067		2035	
Total Liabilities		37294		27160
Income Statement				
Net Sales	33926		24855	
Less: COGS	26232		19154	
Gross Profit	7694		5701	
Less: Operating Expenses	4144		3099	
Operating Profit	3550		2602	
Less: Non-operating Exp.				
Add: Non-operating Income	1512		675	
EBIT	5062		3277	
Less: Interest	350		122	
EBT	4712		3155	
Less: Tax	1231		982	
EAT	3481		2173	
Less: Preference Dividend				
Earning for Equity Shareholder	3481		2173	

Solution Intra-firm comparison using common size statement for both the years

Common size statement for the financial year 2007–08 and 2008–09 (assets)

L & T	2008–09	2007–08	Common Size Statement for 2008–09 (%)	Common Size Statement for 2007–08 (%)
Assets				
Fixed Assets	5054	3554	13.55	13.09
Investments	8264	6922	22.16	25.49
Current Assets	23834	16589	63.91	61.08
Stock	5805	4306	15.57	15.85
S. Debtors	10056	7365	26.96	27.13
Pre-paid Expenses	386	183	1.04	0.67
Marketable Sec.			0.00	0.00
Cash & Bank Balance	775	964	2.08	3.55
Loan & Advances	6791	3757	18.21	13.83
Accrued Interest	21	14	0.06	0.05
Intangible & Fictitious Assets	142	92	0.38	0.34
Miscellaneous Exp. Not written off		3	0	
Total Assets	37294	27160	100	100

Interpretation

1. Percentage of fixed assets across the years have remained almost static around 13%.
2. There has been a marginal change in the ratio of current assets in the year 2007–08 it was 61% and became around 64% in the year 2008–09.
3. Percentage of loan and advance in the year 2008–09 has increase by about 5% over the year 2007–08. In the current year it is 18.21% as compared to 13.83% in the previous year.
4. An analysis for the percentages of both the years reveal that the proportion of current assets to total assets in both the years has been very high that can be interpreted as a high investment of funds in current assets as compared to fixed assets.

Common size statement for the financial year 2007–08 and 2008–09 (liabilities)

L & T Liabilities	2008–09	2007–08	Common Size Statement for 2008–09(%)	Common Size Statement for 2007–08(%)
Equity Share Capital	117	58	0.31	0.21
Preference Share Capital			0.00	0.00
General Reserve	12343	9497	33.10	34.97
Securities Premium			0.00	0.00
Profit and loss Account			0.00	0.00
Debentures	1102	308	2.95	1.13
Long-Term Loan	5454	3276	14.62	12.06
Current Liabilities	18278	14021	49.01	51.62
Sundry Creditors	14776	11742	39.62	43.23
Bills Payables			0.00	0.00
Outstanding Expenses			0.00	0.00
Proposed Tax	435	244	1.17	0.90
Provisions	3067	2035	8.22	7.49
Total Liabilities	37294	27160	100.00	100.00

Interpretation

1. Current liabilities are about 50% of the total liabilities in both the years.
2. The company has high level of general reserves in both the financial years. It is about 33–34 percentage of the total liabilities in both the financial years.
3. In the year 2008–09, the company issued bonus shares in the ratio of 1:1
4. Proportion of long-term liabilities is very low in both the financial years that shows low level of leverage.

Common size statement for the financial year 2007–08 and 2008–09 (income statement)

INCOME STATEMENT	2008–09	2007–08	Common Size Statement for 2008–09	Common Size Statement for 2007–08
Net Sales	33926	24855	100.00	100.00
Less: COGS	26232	19154	77.32	77.06
Gross Profit	7694	5701	22.68	22.94
Less: Operating Expenses	4144	3099	12.21	12.47
Operating Profit	3550	2602	10.47	10.47
Less: Non-operating Exp.			0.00	0.00
Add: Non-operating Income	1512	675	4.46	2.72
EBIT	5062	3277		
Less: Interest	350	122	1.03	0.49
EBT	4712	3155		
Less: Tax	1231	982	3.63	3.95
EAT	3481	2173	10.26	8.74

Interpretation

1. COGS to sales ratio for the year 2008–09 is 77.32% of sales and it was almost at the same level in the previous year. Revealing thereby no change in the cost of goods sold over the year.
2. The impact of about no change in the COGS has been that the gross profit margin over the previous year has not changed.
3. Operating expenses in the current year are 10.47% of sales and these were same in the previous year also.
4. Interest expenses in the current are 1.03% of the sales as compared to 0.49% (of sales of previous year) in the previous year. These shows that interest expenses have increased significantly over the previous year.
5. Ratio of non-operating income to sales in the current year is 4.46%, whereas it was 2.72% in the previous year.
6. EAT is 10.26% of sales in the current year as compared to the corresponding value of 8. 74% for the previous year the change is due to non-operating income as it has increased over the previous year.

COMPARATIVE ANALYSIS USING RATIO

Ratios are calculated for different purposes—different stakeholders use these for different purposes. A moneylender uses it to check solvency position so as to ensure about the recovery of the loan granted. An investor investing in the equity shares of the company uses the ratios to evaluate profitability of the business organization and so on. Ratios are also used to carry out comparative analysis of the financial performance the comparison may be as follows: **first**, inter-firm comparison, **second**, intra-firm comparison of the performance. **Inter-firm comparison** is the comparison of two or more firms belonging to same industry or same industrial sector, under this financial ratio of one particular year for all the firms under comparison are used to make a judgement about relative liquidity, solvency, profitability and productivity of the firms. The purpose of such comparison may be to find out the best performer from among the competing companies.

Financial performance evaluation of one single company across different financial years under consideration is **intra-firm comparison**. Financial ratios of one company for several years are used to evaluate the performance to conclude whether the firm is progressing or regressing over the period or not. Usually, intra-firm comparison may be done using common size statement or trend analysis. In case of **common size statement**, method of comparison the financial statements of two successive financial years are used. The percentage of one item of a particular year is compared against the percentage of the same item for another year to conclude whether the performance has improved or not. When financial statements of more than two financial years are used then **trend percentages** may be calculated to facilitate the comparison and performance evaluation. The result of trend percentages can be plotted in one single graph that helps in better understanding of the results.

Example 13 The following are the ratios of two companies ABC and XYZ belonging to the same industry:

Ratio	ABC	XYZ
Current ratio	3.20: 1	1.50 :1
Quick ratio	1.45:1	1:1
Gross profit margin	40%	33%
Operating profit margin	22%	21%
Net profit margin	10%	8%
Return on investment	12%	13%
Inventory turnover	6 times	8 times
Debtors turnover	8 times	8 times
Fixed asset turnover ratio	3 times	4 times
Debt: equity ratio	3 : 1	1.75 : 1
EPS	₹ 6.50	₹ 5.25
Return on shareholders' net worth	14%	10%

Compare the financial performance of both the companies and comment.

Solution

1. By comparing current ratio of both the companies we find that ABC company has better position as compared to XYZ, its liquidity position is much better. Current ratio of XYZ is even below generic standard value of 2:1, whereas for ABC it is much higher than the standard.
2. Quick ratio reveals the level of quick assets to current liabilities, although both the companies are maintaining this ratio as per the generic standard 1:1, but company ABC is having better position as compared to XYZ. This shows that it will be a sound position for ABC to pay off its' current liabilities at a short notice by converting quick assets into cash in comparison to XYZ.

3. The difference between the current ratio and quick ratio reveals the level of non-quick assets (inventory and pre-paid expenses); for ABC (3.20 – 1.45 = 1.75), this gap is very high that indicates that it has higher investment in non-quick assets as compared to XYZ (1.50 – 1.00 = 0.50)
4. ABC is having higher gross profit margin indicating thereby better management of cost of goods sold; at the same time, when we compare the operating profit margin it has a better position as compared to XYZ. However, the difference between gross profit margin and operating profit margin reveals the component of operating expenses. This gap is much larger for ABC in comparison to XYZ that shows that ABC has larger amount of operating expenses as compared to XYZ. It might be due to the high fixed cost element in the operating expenses.
5. Return on investment of XYZ is (13%) which is better than ABC (12%) indicating thereby better profitability in terms of investment. If we combine net profit margin and ROI, we can arrive at a conclusion that it might be maintaining better level of assets turnover. The result of fixed asset turnover supports it as XYZ has fixed asset turnover ratio of 4 times as compared to 3 times for ABC.
6. Both the companies are maintaining equal status with respect to receivables management as both have the same level of debtors' turnover thereby indicating same average for the debt collection period.
7. Both EPS and RONW of ABC are much higher than that of XYZ thereby revealing that finally ABC is giving much higher EPS to its equity shareholder that is ₹ 6.50 as compared to ₹ 5.25 of XYZ. At the same time, ABC is maintaining 14% RONW as compared to 10% of XYZ. When this result is combined with the debt-equity ratio, we find that the company ABC has higher level of leverage as compared to XYZ. That shows that ABC company might be having favourable impact of leverage.

TREND ANALYSIS—VERTICAL FINANCIAL PERFORMANCE EVALUATION

Trend analysis implies making an analysis of pattern of ratios across different financial years of a business firm. Under this, the result of a particular ratio for the base (first) year is taken equal to 100 and then ratio value for each of the subsequent financial year for the same ratio is represented as a percentage to base year's value for the same ratio. By doing so, increasing or decreasing trend in a particular ratio can be identified.

Therefore, trend analysis helps in carrying out vertical comparison of the financial performance of a business firm. The **vertical comparison** implies comparing the performance across different years.

EXAMPLE 14 Carry out trend analysis using the following facts:

Facts Extracted from Annual Report of SAIL

Balance Sheet (₹ in crore)

	Mar ' 09	Mar ' 08	Mar ' 07	Mar ' 06	Mar ' 05
Sources of Funds					
Owner's fund					
Equity share capital	4,130.40	4,130.40	4,130.40	4,130.40	4,130.40
Share application money	0	0	0	0	0
Preference share capital	0	0	0	0	0

Reserves & surplus	23,853.70	18,933.17	13,182.75	8,471.01	6,176.25
Loan Funds					
Secured loans	1,473.60	925.31	1,556.39	1,122.16	1,603.98
Unsecured loans	6,065.19	2,119.93	2,624.13	3,175.46	4,165.81
Total	35,522.89	26,108.81	21,493.67	16,899.03	16,076.44
Fixed assets					
Gross block	32,728.69	30,922.73	29,912.71	29,360.46	28,043.48
Less: revaluation reserve	-	-	-	-	-
Less: accumulated depreciation	20,459.86	19,351.42	18,315.00	17,198.32	15,558.41
Net block	12,268.83	11,571.31	11,597.71	12,162.14	12,485.07
Capital work-in-progress	6,544.24	2,389.55	1,236.04	757.94	366.48
Investments	652.7	538.2	513.79	292	606.71
Current assets, loans & advances	35,666.84	27,309.01	21,673.75	18,788.80	15,521.37
Less: current liabilities & provisions	19,609.72	15,758.74	13,656.77	15,317.67	13,198.12
Total net current assets	16,057.12	11,550.27	8,016.98	3,471.13	2,323.25
Miscellaneous expenses not written	0	59.48	129.15	215.82	294.93
Total	35,522.89	26,108.81	21,493.67	16,899.03	16,076.44
Profit and Loss Account					
Income					
Operating income	43,798.58	39,958.67	34,328.77	28,200.48	28,714.30
Expenses					
Material consumed	22,042.58	16,821.39	15,963.13	13,903.23	11,155.33
Manufacturing expenses	3,762.77	3,317.74	2,925.43	2,793.45	2,427.11
Gross Profit	17,993.23	19,819.54	15,440.21	11,503.80	15,131.86
Personnel expenses	8,401.73	7,919.28	5,087.76	4,156.97	3,811.75
Selling expenses	935.68	1,143.90	1,066.73	1,108.12	971.78
Administrative expenses	1,644.78	1,321.44	1,064.29	1,035.99	780.67
Expenses capitalised	-1,930.40	-1,832.22	-1,423.08	-1,352.05	-921.71
Cost of sales	34,857.14	28,691.53	24,684.26	21,645.71	18,224.93
Operating Expenses	9,051.79	8,552.40	5,795.70	4,949.03	4,642.49
Operating profit	8,941.44	11,267.14	9,644.51	6,554.77	10,489.37
Other recurring income	2,279.89	1,539.69	1,354.96	892.3	676.55
Adjusted PBDIT	11,221.33	12,806.83	10,999.47	7,447.07	11,165.92
Depreciation	1,285.12	1,235.48	1,211.48	1,207.30	1,126.95
Other write-offs	128.02	75.49	128.59	181.44	184.89
PBIT	9,808.19	11,495.86	9,659.40	6,058.33	9,854.08
Financial expenses	253.24	250.94	332.13	467.76	605.05
Adjusted PBT	9,554.95	11,244.92	9,327.27	5,590.57	9,249.03
Tax charges	3,284.28	3,934.65	3,253.80	1,694.36	2,592.37
Adjusted PAT	6,270.67	7,310.27	6,073.47	3,896.21	6,656.66
Non-recurring items	-277.12	161.9	53.75	45.64	-14.35
Other non-cash adjustments	181.26	64.61	60.57	71.12	174.66
Reported net profit	6,174.81	7,536.78	6,187.79	4,012.97	6,816.97

SOLUTION Reworking of Facts extracted from the annual reports of SAIL for last five financial years.

Particulars	Mar ' 09	Mar ' 08	Mar ' 07	Mar ' 06	Mar ' 05
Operating income	43,798.58	39,958.67	34,328.77	28,200.48	28,714.30
COSGS	25,805.35	20,139.13	18,888.56	16,696.68	13,582.44
Gross Profit	17,993.23	19,819.54	15,440.21	11,503.80	15,131.86
Total Operating Expenses	9,051.79	8,552.40	5,795.70	4,949.03	4,642.49
Operating profit	8,941.44	11,267.14	9,644.51	6,554.77	10,489.37
PBIT	9,808.19	11,495.86	9,659.40	6,058.33	9,854.08
Reported net profit	6,174.81	7,536.78	6,187.79	4,012.97	6,816.97

Trend Analysis of SAIL for last five years

Operating Income Trend Percentages	152.53	139.16	119.55	98.21	100.00
COGS Trend Percentages	189.99	148.27	139.07	122.93	100.00
Gross Profit Trend Percentages	118.91	130.98	102.04	76.02	100.00
Operating Expenses Trend Percentages	194.98	184.22	124.84	106.60	100.00
Operating Profit Trend Percentages	85.24	107.41	91.95	62.49	100.00
PBIT Trend Percentages	99.53	116.66	98.02	61.48	100.00
Reported Income Trend Percentages	90.58	110.56	90.77	58.87	100.00

Interpretation:

1. Trend percentages of operating income show that over the years, the operating income has increased significantly for the year ending March 2009. It is around 1.52 times as that of the year ending March 2005. However, for the year ending March 2006, it declined marginally.
2. An analysis of cost of goods sold (COGS) reveals that it has increased about 1.90 times over the period under analysis. Over the years, it has shown an increase in every year at a normal rate but in the year 2009, it increased significantly over the year 2008.
3. Despite a significant increase in the operating income over the years, the gross profit has not increased because of sharp increase in the COGS over the years. It is apparent from the trend percentages as for the year 2009, it is just 1.19 times as that of the base year—2005, whereas operating income has increase 1.52 times in comparison to the base year.
4. Trend of operating profit has shown a decline over the years in the year 2009. It is just 0.85 times of the base year's profit.It can be due to a steep rise in the operating expenses. The operating expenses have shown a very high rise. In the year 2009, these are 1.94 times of the base year's value.
5. Trend of reported income, i.e., profit after tax has shown a decline over the years in the year 2009 it is just 0.90 times of the base year's value.
6. For the year 2006 all the values have shown a declining trend then the values have improved in the subsequent years.

Calculation of Ratio

Current Ratio	1.82	1.73	1.59	1.23	1.18
Gross Profit Margin (%)	41.08	49.60	44.98	40.79	52.70
Operating Profit Margin (%)	20.41	28.20	28.09	23.24	36.53
Net Profit Margin (%)	14.10	18.86	18.03	14.23	23.74
ROI	61.64	111.07	123.26	383.11	342.36

ROCE ((PAT+INTEREST)/CE))*100	18.10	29.90	30.52	26.86	47.03
RONW	22.07	32.76	36.01	32.40	68.09
Return on Equity Share Capital	149.50	182.47	149.81	97.16	165.04
EPS	14.95	18.25	14.98	9.72	16.50
Fixed Asset Turnover Ratio	2.25	2.76	2.57	2.13	2.13
Total Asset Turnover Ratio	1.23	1.53	1.60	1.67	1.79

PRECAUTION WHILE USING FINANCIAL RATIOS—LIMITATION OF RATIO ANALYSIS

Financial statements are meant to reveal profitability and financial status of the business organization. **Income statement** reveals whether a firm has earned profit or incurred losses for the year; at the same time, it provides the details of different expenses incurred by the firm to generate sales revenue. The **balance sheet** is the position statement revealing the status of assets and liabilities of the business organization on the balance sheet date. These financial statements are used to calculate financial ratios, one needs to take certain precaution while calculating ratios by using the data shown in these statements, the calculation of ratios and their interpretation should be done in the light of accounting standards and accounting policies adopted while preparing these financial statements. Apart from the accounting standards and accounting policies, one needs to observe general precaution while using these statements. These are as follows:

- Effect of window dressing
- Effect of changes in accounting practices
- Impact of historical cost concept
- Impact of fully depreciated assets
- Non-projection of human assets

Effect of Window Dressing

Window dressing effect is reflected on the financial statements when some of the common accounting policies have not been adhered to while preparing these statements. Some of the organizations might not follow revenue recognition concept in totality due to which revenue might be exaggerated as compared to the real revenue. Similarly, matching concept might not have been adopted due to which expenses might be reported at a lower level and profit at a higher level. While calculating ratios, one should consider these facts and as far as possible the effect of these should be weeded out.

Effect of Changes in Accounting Practices

In certain organizations, accountants change the practices every year with respect to inventory valuation, depreciation method and reporting of foreign exchange income. If accounting policies with respect to these are changed frequently year after year without any logic or regulatory requirement then these might affect the level of profit and expenses. At the same time, reporting of assets might not be actual. This needs to be considered while calculating ratios.

Impact of Historical Cost Concept

All the organizations prepare and present books of accounts using historical cost concept. While comparing the financial performance of two companies in the same industry that have been set up at different times, one needs to consider that the comparison might not reveal the actual situation. For example, if we compare the performance of TISCO and Jindal Steels then we find that TISCO was set up around 60 years back and Jindal only 10–12 years ago. The same type and size of assets in TISCO might have been acquired at a very low cost as compared to the acquisition cost of Jindal Steels. Due to this difference, the comparison of ROI of both of these companies might not reveal better financial position. Therefore, while comparing these types of organizations, one needs to consider the impact of historical cost and as far as possible values may be converted in terms of current prices then the ratios are to be calculated then only these can help in revealing better result for the purpose of comparison.

Impact of Fully Depreciated Assets

ROI and ROTA use the values as shown in the financial statements not the physical assets. In practice certain assets might have been depreciated completely but these still might contribute in generating revenue and profit because of their physical presence and better efficiency. One needs to consider such assets while interpreting the financial ratios.

Non-projection of Human Assets

Financial statements do not reveal human resources as an asset. However, it is the human assets and investment of the business organization in this is more important as compared to the physical assets. Therefore, a separate reworking of these statements is required to reflect the human resources as an asset and accordingly ratios should be calculated.

DISTRESS ANALYSIS—DISCRIMINANT ANALYSIS

Introduction

Discriminant analysis is a statistical technique useful in classification of individual firms into two or more mutually exclusive group, on the basis of a set of predictor variables. Discriminant analysis is base on the following assumptions:

- The dependent variable (business firms) can be classified into two or more well-defined groups, such as sick or healthy companies and companies with good or poor financial performance.
- The dependent variable is related with several independent variables (financial ratios) that all happen to be continuous.

With the help of discriminant analysis, one can easily develop a discriminant equation that can help in classifying different firms as sick or non-sick, poor or good.

Financial Ratios and Discriminant Analysis—A Forewarning Lens to Predict Failure

Different financial ratios can be used as independent variables to develop a discriminant equation with the help of which prediction about the sickness of a business firm can be done much before the incidence of sickness. To develop discriminant equation, the following steps are taken:

- Classify different firms as sick firms and non-sick firms.
- Use t-test or z-test to identify discriminating ratios out of all the ratios.
- Calculation of discriminant equation with the help of discriminating ratios.
- Calculation of 'Z' score using discriminant equation.
- Use 'Z' score as benchmark to classify firms into sick and non-sick firms.

Past Studies on Discriminant Analysis

Different researchers, such as E.I. Altman, W.H. Beaver, Delton, Dr Dhanesh Khatri and others have used the discriminant analysis to carry out the research for the development of discriminant equation for the dichotomous classification of different firms. The discriminant equation developed by a few of the researchers is as follows.

Discriminant Equation Developed by Altman

$Z = 0.012R1 + 0.014R2 + 0.033R3 + 0.006R4 + 0.999R5$

Here, R1 to R5 are the critical ratios and values preceding these are the discriminant coefficient of each ratio. And Z is the overall cut-off point, i.e., index. Firms having Z score more than estimated Z value (that was 2.675 in this case) were classified as **non-bankrupt**; otherwise **bankrupt**.

*Discriminant Equation Developed by Dr Dhanesh Khatri**

Z = 0.036 Current Ratio + 0.658 Assets on Lease and Hire Purchase to Net Owned Funds + 3.112 EBIT to Assets other than given on Lease and Hire Purchase.

Dr. Khatri carried study on non-banking finance companies (NBFCs) in India and developed the above equation with benchmark 'Z' score 3.45. NBFCs having a discriminant score more than this were classified as healthy, i.e., **non-sick NBFCs** and NBFCs with discriminant score less than this benchmark were classified as **sick NBFCs.**

SOLVED EXAMPLES

Example 15 The following is the profit and loss account and balance sheet of Sach International Ltd. Redraft these for the purpose of ratio analysis.

Profit and Loss Account

For the year ending March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
To **Opening Stock**		By Sales	10,00,000
Finished Goods	1,00,000	By **Closing Stock**	
Raw Material	50,000	Finished Goods	1,50,000
To Purchase of Raw Material	5,00,000	Raw Material	1,00,000
To Direct Wages	2,00,000	By Profit on sale of shares	50,000
To Manufacturing Expenses	1,00,000		
To Administrative Expenses	30,000		
To Depreciation	20,000		
To Preliminary expenses Written off	10,000		
To Selling and Distribution Expenses	40,000		
To Loss on Sale of Plant	55,000		
To Interest on Debentures	10,000		
To Net Profit	1,85,000		
	13,00,000		13,00,000
To Provision for tax	50,000	By Balance b/f	5,000
To General Reserve	80,000		
To Preference Dividend	10,000	By Net Profit for the Year	1,85,000
To Interim Dividend	40,000		
To Balance c/f	10,000		
	1,90,000		1,90,000

*This equation was developed by the author of this book during his research for the PhD degree. [Prediction of Non-banking Finance Company's Sickness in India (2003)

Balance Sheet As on March 31, 2009

Particulars	₹	Particulars	₹
Equity Share Capital (face value ₹ 10)	2,00,000	Plant (Net)	1,00,000
		Building (Net)	80,000
10% Preference Share Capital	1,00,000	Investment	70,000
General Reserve	80,000	**Stock**	
Securities Premium	10,000	Finished Goods	1,50,000
P & L Account	10,000	Raw Material	1,00,000
Debenture	2,00,000	Sundry Debtors	80,000
Sundry Creditors	1,00,000	Bank Balance	40,000
Tax Payable	50,000	Marketable Securities	20,000
		Pre-paid Expenses	10,000
		Goodwill	30,000
		Preliminary Expenses	70,000
	7,50,000		7,50,000

Note: Equity dividend for the year ₹ 40,000.

Solution

Income Statement

For the year ending March 31, 2009

Particulars	Details	Amount (₹)
Sales		**10,00,000**
Less: **Cost of Goods Sold (COGS)**		
Raw Material Consumed		
Opening stock of R.M.	50,000	
(+) Purchase of R.M.	5,00,000	
(-) Closing stock of R.M.	1,00,000	
Raw Material Consumes	**4,50,000**	
Direct Wages	2,00,000	
Manufacturing Expenses	1,00,000	
	7,50,000	
Add: Opening stock of finished goods	1,00,000	
Less: Closing stock of finished goods	1,50,000	
Cost of Goods Sold	**7,00,000**	(7,00,000)
Gross Profit		**3,00,000**
Less: *Operating Expenses*		
Administrative expenses	30,000	
Selling and Distribution expenses	40,000	(70,000)
Cash Operating Profit (EBDAIT)		2,30,000
Less: Depreciation and Amortization		
Depreciation	20,000	
Preliminary expenses written off	10,000	(30,000)
Operating Profit		**2,00,000**
Add: Non-operating Income (profit on sale of shares)	50,000	
Less: Non-operating expenses/losses (loss on sale of plant)	55,000	(5,000)
Earning Before Interest and Tax (EBIT)		**1,95,000**
Less: Interest		10,000
Earning Before Tax (EBT)		1,85,000
Less: Tax		50,000
Earning After Tax (EAT)		**1,35,000**

Position Statement

Particulars	Details	Amount (₹)
1. Fixed Assets		1,80,000
Plant	1,00,000	
Building	80,000	
2. Investment		70,000
3. Current Assets		**4,00,000**
Liquid Assets		
Sundry Debtors	80,000	
Bank Balance	40,000	
Marketable Securities	20,000	
Non-Quick Assets		
Stock of raw material	1,00,000	
Stock of finished goods	1,50,000	
Pre-paid expenses	10,000	
Less: Current Liabilities		**1,50,000**
Sundry creditors	1,00,000	
Tax payable	50,000	
Net Current Assets		2,50,000
Net Capital Employed		**5,00,000**
4. Intangible and Fictitious Assets		**1,00,000**
Goodwill	30,000	
Preliminary expenses	70,000	
1. Shareholders' Net worth		
Equity share capital	2,00,000	
10% Preference share capital	1,00,000	
General reserve	80,000	
Securities premium	10,000	
P & L Account	10,000	
Less: Intangible and Fictitious Assets		
Goodwill	30,000	
Preliminary expenses	70,000	
Shareholders' Net Worth		**3,00,000**
2. Long-Term Debt		
Debentures		2,00,000
Net Capital Employed		**5,00,000**
Add: Current Liabilities		1,50,000
Gross Capital Employed		**6,50,000**

Liquidity Ratio

Ratio	Formulae	Values	Result
Current	Current Assets/Current Liabilities	4,00,000/1,50,000	2.67 : 1
Quick	Liquid Assets/Current Liabilities	1,40,000/1,50,000	0.93 : 1
Absolute Liquidity	(Cash & Bank Balance + Marketable Securities)/Current Liabilities	60,000/1,50,000	0.40 : 1

Solvency Ratio

Ratio	Formulae	Values	Result
Debt: Equity	Long-Term Debt/ Shareholders' Net Worth	2,00,000/3,00,000	0.66 : 1
Solvency	Total Debt/Shareholders' Net Worth	3,50,000/3,00,000	1.16 : 1
Debt Ratio	Total Debt/Total Tangible Assets	3,50,000/6,50,000	0.54, i.e., 54%
Proprietary Ratio	Shareholders' Net Worth/Total Tangible Assets	3,00,000/6,50,000	0.46, i.e., 46%
Fixed Assets Ratio	Net Fixed Assets including investment/ Net Capital Employed	2,50,000/5,00,000	0.50, i.e., 50%

Coverage Ratio

Ratio	Formulae	Values	Result
Interest Coverage	EBIT/Interest	1,95,000/10,000	19.50 times
Preference Dividend Coverage	Earning After Tax/Preference Dividend	1,35,000/10,000	13.50 times
Debt Service Coverage Ratio	$\frac{\text{(EBIT+ Depreciation \& Amortization)}}{\text{Interest + \{(Loan Repayment}^{3}/(1-t^{4})\}}$	$\frac{2{,}25{,}000}{10{,}000+ \{(35{,}000/(1-0.3)\}}$	3.75 times

Market-related Ratio

Ratio	Formulae	Values	Result
EPS (Earning Per Share)	(EAT − Preference Dividend)/Number of equity shares	(1,35,000 − 10,000)/20,000	₹ 6.25
P/E Ratio	Market price per share[5]/EPS	125/6.25	20 times
DPS (Dividend per share)	Equity dividend amount/Number of equity shares	40,000/20,000	₹ 2.00
Dividend yield or Current yield	(DPS/Market price per share) × 100	(2.00/125.00) × 100	1.60 %

Sales-based Profitability Ratio

Ratio	Formulae	Values	Result
Gross Profit Margin	(Gross Profit/Net Sales) × 100	(3,00,000/10,00,000) × 100	30%
Operating Profit	(Operating Profit/Net Sales) × 100	(2,00,000/10,00,000) × 100	20%
Operating Cost	100 − Operating Profit Ratio	100 – 20	80%
Net Profit Margin	(EAT/Net Sales) × 100	(1,35,000/10,00,000) × 100	13.50%

[3]Assumed that every year loan (debenture) repayment will be of Rs. 35,000.
[4]Tax rate assumed at 30%, i.e., 0.30.
[5]Market price assumed is Rs. 125 per share.

Investment-Based Profitability Ratio

Ratio	Formulae	Values	Result
(ROI) Return on Investment	(EBIT/Total Assets) × 100	(1,95,000/7,50,000) × 100	26%
ROCE[6] (Return on Capital Employed*)	(EBIT/Capital Employed) × 100	(1,95,000/5,00,000) × 100	39%
RONW (Return on Shareholders' Net Worth	(EAT/Shareholders' Net Worth) × 100	(1,35,000/3,00,000) × 100	45%
ROENW (Return on Equity Shareholders' Net Worth	{(EAT – Preference Dividend)/Equity Shareholders' Net Worth} × 100	{(1,35,000 – 10,000)/2,00,000} × 100	62.50%
Return on Equity Share Capital	{(EAT – Preference Dividend)/Equity Share Capital} × 100	{(1,35,000 – 10,000)/2,00,000} × 100	62.50%

* By default, it is net capital employed.

Turnover/Activity Ratio

Ratio	Formulae	Values	Result
Fixed Asset Turnover	Net Sales/Net Fixed Assets including Investment	10,00,000/2,50,000	4 times
Total Asset Turnover	Net Sales/Total Assets	10,00,000/7,50,000	1.33 times
Current Asset Turnover	Net Sales/Total Current Assets	10,00,000/4,00,000	2.5 times
Debtors Turnover/ Velocity	Net Credit Sales[7]/Closing[8] Debtors including Bills Receivables	10,00,000/80,000	12.50 times
Stock Turnover/ Velocity	COGS/Average Stock[9]	7,00,000/2,00,000	3.5 times
Creditors Turnover/ Velocity	Credit Purchase/Closing[10] Creditors including Bills Payables	5,00,000/1,00,000	5 times

Collection/Holding/Payables Ratio

Ratio	Formulae	Values	Result
Average Debt Collection Period	365[11]/Debtors' Turnover Ratio	365/12.50	29.20 days
Average Stock (Inventory) Holding Period	365/Stock Turnover Ratio	365/3.50	104.29 days
Average Payable Period	365/Creditors' Turnover Ratio	365/5	73 days

[6] Alternatively, ROCE can be calculated by using the following formulae:
ROCE = {(EAT + Interest)/Capital Employed}*100 hence
ROCE = {(1,35,000 + 10,000)/5,00,000} *100 = 29%

[7] By default, total net sales is assumed to be credit sales.

[8] If data about opening debtors is given then instead of closing debtors, average debtors should be used.

[9] If calculation of average stock is not possible then closing stock should be used.

[10] If average creditors are possible then it should be used instead of closing creditors.

[11] Instead of days, weeks (52) or months (12) can also be used.

EXAMPLE 16 Calculate ratios from the following details:

Balance Sheet of Company X and Company Y

	Company X	Company Y
Balance Sheet		
Fixed Assets	200000	250000
Investments		
Current Assets	100000	150000
Stock	40000	60000
S. Debtors	30000	40000
Pre-paid Expenses	10000	20000
Marketable Securities		
Cash & Bank Balance	20000	30000
Intangible & Fictitious Assets		
Total Assets	300000	400000
Equity Share Capital	100000	100000
Preference Share Capital		
General Reserve	50000	50000
Securities Premium		
Profit and loss Account	50000	100000
Debentures	50000	80000
Long-Term Loan		
Current Liabilities	50000	70000
Sundry Creditors	40000	50000
Bills Payables		
Outstanding Expenses		
Proposed Tax		
Proposed Dividend	10000	20000
Total Liabilities	300000	400000

Income Statement of Company X and Company Y

Income Statement		
Net Sales	100000	150000
Less: COGS	80000	100000
Gross Profit	20000	50000
Less: Operating Expenses	10000	25000
Operating Profit	10000	25000
Less: Non-operating Exp.		
Add: Non-operating Income		
EBIT	10000	25000
Less: Interest	4000	6400
EBT	6000	18600
Less: Tax		
EAT	6000	18600
Less: Preference Dividend		
Earning for Equity Shareholder	6000	18600

Solution:

Ratio Analysis

Current Ratio	2.00	2.14
Quick Ratio	1.00	1.00
Absolute Liquidity Ratio	0.40	0.43
Debt-Equity Ratio	0.25	0.32
Solvency Ratio	0.50	0.60
Debt Ratio	0.333	0.375
Proprietary Ratio	0.667	0.625
Fixed Asset Ratio	0.800	0.758
Gross Profit Ratio (%)	20.00	33.33
Operating Profit Ratio (%)	10.00	16.67
Operating Ratio (%)	90.00	83.33
Net Profit Margin (%)	6.00	12.40
Return on Investment (%)	3.33	6.25
ROCE {(EAT +Interest)/CE} (%)	4.00	7.58
Return on Net Worth (%)	3.00	7.44
Return on Equity Capital (%)	6.00	18.60
EPS (₹)	0.60	1.86
Fixed Asset Turnover Ratio	0.5	0.6
Current Asset Turnover Ratio	1	1
Total Asset Turnover Ratio	0.33	0.38
Inventory Turnover Ratio	2.00	1.67
Inventory Holding Period (Days)	182.50	219.00
Debtors Turnover Ratio	3.33	3.75
Average Debt Collection Period (Days)	109.50	97.33

Example 17 Calculate ratios from the following details:

Balance Sheet as on March 31, 2008 and 2009

Liabilities	2009	2008	Assets	2009	2008
Equity Share Capital	80,000	80,000	Fixed Assets	1,90,000	1,50,000
Preference share capital	20,000	20,000	Investments	18,000	48,000
General Reserve	10,000	20,000			
P & L Account	14,000	2,000	Stock	30,000	60,000
Debentures	75,000	55,000	S. Debtors	40,000	80,000
Long-Term Loan	35,000	25,000	Marketable Securities	18,000	500
Sundry Creditors	30,000	90,000	Cash & Bank Balance	12,000	1,500
Bank Overdraft		20,000			
Proposed Tax	34,000	13,000			
Proposed Dividend	10,000	15,000			
	3,08,000	3,40,000		3,08,000	3,40,000

SOLUTION

Redrafting of Balance in Vertical Form

	Current Year	Previous Year
Balance Sheet		
Fixed Assets	190000	150000
Investments	18000	48000
Current Assets	100000	142000
Stock	30000	60000
S. Debtors	40000	80000
Marketable Securities	18000	500
Cash & Bank Balance	12000	1500
Total Assets	308000	340000
Equity Share Capital	80000	80000
Preference Share Capital	20000	20000
General Reserve	10000	20000
Profit and loss Account	14000	2000
Debentures	75000	55000
Long-Term Loan	35000	25000
Current Liabilities	74000	138000
Sundry Creditors	30000	90000
Bank Overdraft		20000
Proposed Tax	34000	13000
Proposed Dividend	10000	15000
Total Liabilities	308000	340000

Calculation of Financial Ratio

Ratios	Current Year	Previous Year
Current Ratio	1.35	1.03
Quick Ratio	0.95	0.59
Absolute Liquidity Ratio	0.41	0.01
Debt-Equity Ratio	0.89	0.66
Solvency Ratio	1.48	1.79
Debt Ratio	0.634	0.747
Proprietary Ratio	0.366	0.253
Fixed Asset Ratio	0.889	0.980

EXAMPLE 18 Calculate ratios from the following details:

Facts Extracted from Annual Report of L & T Ltd
(₹ in crore)

L & T	2008–09	2007–08
Balance Sheet		
Fixed Assets	5054	3554
Investments	8264	6922
Current Assets	23834	16589
Stock	5805	4306
S. Debtors	10056	7365
Pre-paid Expenses	386	183
Marketable Sec.		
Cash & Bank Balance	775	964
Loan & Advances	6791	3757
Accrued Interest	21	14
Intangible & Fictitious Assets	142	92
Miscellaneous Exp. not written off		3
Total Assets	37294	27160
Equity Share Capital	117	58
Preference Share Capital		
General Reserve	12343	9497
Securities Premium		
Profit and loss Account		
Debentures	1102	308
Long-Term Loan	5454	3276
Current Liabilities	18278	14021
Sundry Creditors	14776	11742
Bills Payables		
Outstanding Expenses		
Proposed Tax	435	244
Provisions	3067	2035
Total Liabilities	37294	27160
Income Statement		
Net Sales	33926	24855
Less: COGS	26232	19154
Gross Profit	7694	5701
Less: Operating Expenses	4144	3099
Operating Profit	3550	2602
Less: Non-operating Exp.		
Add: Non-operating Income	1512	675

EBIT	5062	3277
Less: Interest	350	122
EBT	4712	3155
Less: Tax	1231	982
EAT	3481	2173
Less: Preference Dividend		
Earning for Equity Shareholder	3481	2173

Solution

Calculation of Ratio for L & T Ltd

Ratios	2008–09	2007–08
Current Ratio	1.30	1.18
Quick Ratio	0.97	0.86
Absolute Liquidity Ratio	0.04	0.07
Debt-Equity Ratio	0.53	0.38
Solvency Ratio	2.02	1.86
Debt Ratio	0.668	0.650
Proprietary Ratio	0.332	0.350
Fixed Asset Ratio	0.706	0.803
Gross Profit Ratio (%)	22.68	22.94
Operating Profit Ratio (%)	10.46	10.47
Operating Ratio (%)	89.54	89.53
Net Profit Margin (%)	10.26	8.74
Return on Investment (%)	13.57	12.07
ROCE {(EAT +Interest)/CE} (%)	20.30	17.59
Return on Net Worth (%)	28.26	22.97
EPS (₹)	59.50	74.93
Fixed Asset Turnover Ratio	2.55	2.37
Current Asset Turnover Ratio	1.42	1.50
Total Asset Turnover Ratio	0.91	0.92
Inventory Turnover Ratio	4.52	4.45
Inventory Holding Period (Days)	80.77	82.06
Debtors Turnover Ratio	3.37	3.37
Average Debt Collection Period (Days)	108.19	108.16

Example 19 The following are the actual ratios of Gypsy Ltd and the corresponding standards:

Ratio	Actual	Industry Average
Current ratio	6:1	4:1
Liquid ratio	2:1	1.50:1
Gross profit margin	22%	22%
Operating profit margin	16%	14%
Net profit margin	8%	10%
Creditor payment period	30 days	40 days
Inventory turnover	8 times	10 times
Debtors collection period	45 days	56 days
Fixed asset turnover ratio	3 times	4 times
Debt: equity ratio	2.50 :1	1.75:1
Return on shareholders' net worth	6%	10%

Compare the financial performance and comment.

Solution

1. Gypsy Ltd is having better level of current assets as compared to the prescribed standard, undoubtedly it indicates better liquidity position, but at the same time it reveals that it is having higher investment in the current assets in contrast to the prescribed standard that might have an adverse impact on the return on assets.
2. The gap between current ratio and liquid ratio is much higher, i.e., it is 4:1 for the company as compared to standard gap of 2.50, this leads to the interpretation that company is having higher level of non-quick assets (inventory and pre-paid expenses) as compared to the prescribed standards.
3. Gross profit margin of company is 22% that is equal to industry average of 22%.
4. Despite of equal gross profit margin operating profit margin of the company is much better than the industry average, it is 16% for the company as compared to 14% for the whole industry. This leads to the interpretation that the operating expenses of the company are much lower as compared to the industry average.
5. Net profit margin of company is 8% as compared to the industry average of 10% that means that interest and tax burden of the company is much higher as compared to industry average.
6. The company has average payables period of 30 days as compared to 40 days for the industry that reveals that the company is maintain goods position with regards to the industry average. It can also mean that company is not provided the credit for a longer time as compared to the credit period available for other companies.
7. Inventory turnover ratio and fixed asset turnover ratio 8 times and 3 times by the company and for industry the corresponding values for industry are 10 times and 4 times, respectively that leads to the interpretation that company is not using its' inventory and fixed assets efficiently as compared to the industry average.
8. Company is having high leverage (2.50:1) as compared to the industry average (1.75:1) that means high level of financial risk as compared to the industry average.
9. Return on shareholders' net worth maintained by the company is 6% as compared to industry average of 10% that leads to the conclusion that company is generating poor profitability for its' shareholders as compared to the industry average.
10. Low profitability of the company can be accounted to either adverse impact of financial leverage that is very high for the company or due to poor use of assets. The poor use can be assessed from the poor turnover ratio.

Key Terms

Quality of earning
Financial leverage
Operating assets
Earning management
Decomposing of ratios
Discriminant analysis
Operating leverage
Non-operating assets

Final Recap

- An **accounting ratio** is the mathematical relationship between two inter-related accounting figures.
- **Quality of earning** implies having consistent pattern of reporting earning across the years.
- **Earning management** implies managing earning of the business firm by adopting certain presentation skills and manipulations in the accounts so as to have desired amount and quality of earning.
- **Degree of financial leverage** is a sensitivity measurement representing percentage change in EPS or ROE corresponding to every one percent change in EBIT from the given level of EBIT. DFL is unique for every level of EBIT.
- **Degree of operating leverage** is a sensitivity measurement representing percentage change in EBIT corresponding to every one percent change in sales from the given level of sales.
- Gross Gearing = Invested Capital/Equity Net Worth
- Spread Ratio = Net PAT/NOPAT
- ROIC = (NOPAT/IC) $\times$ 100
- **ROIC** is a measurement indicating effective earning available for the contributors of capital invested in a business firm. It is shown as effective profit as a percentage of invested capital.
- **Net operating profit after tax** represents the amount of profit available with adjustment for tax benefit on interest. It represents the amount of profit and reward available for the contributors of invested capital.
- **Operating assets** are the assets that held for performing routine business activities—production and sales.
- **Non-operating assets,** also called **non-trading assets,** are the assets that do not relate to the routine operating activities but held by the business firm for the purpose of investment.

Review Questions

Multiple Choice Questions

1. A firm sold its stocks in cash in order to meet its liquidity needs. Which of the following ratio would be affected by this?
   (a) Debt-equity ratio
   (b) Current ratio
   (c) Debt service coverage ratio
   (d) Quick ratio
2. A company is found to be carrying a high debt-equity ratio. To improve this, a bank may suggest the company to
   (a) Raise long-term interest free loans from friends and relatives
   (b) Raise long-term loans from Institutions
   (c) Increase the equity by way of bonus issue
   (d) Issue rights share to existing shareholders
3. Which of the following is not a fictitious asset?
   (a) Goodwill
   (b) Preliminary expenses
   (c) Pre-operative expenses
   (d) Book debts that have become doubtful of recovery

4. Under which of the following methods of depreciation on fixed assets, the annual amount of depreciation decreases?
   (a) Written-down value method
   (b) Straight line method
   (c) Annuity method
   (d) Insurance policy method
5. Which of the following is not considered a quick asset?
   (a) Cash and bank balances
   (b) Bank fixed deposits
   (c) Current book debts
   (d) Loans and advances

Descriptive Questions

1. Financial statements are subject to certain limitations one should take sufficient precaution while using these for the purpose of financial analysis. Explain.
2. Explain the term 'financial performance analysis'. What are the different ways in which it can be carried out?
3. Differentiate between common size statement and trend analysis.

Numerical Problems

1. Profit to sales is 1% and amount of profit is say ₹ 15 lakh. Then what is the amount of sales?
2. A company has net worth of ₹ 25 lakh, Long-term liabilities of ₹12 lakh. Fixed assets is worth ₹ 16 lakh and current assets are ₹25 lakh. There are no intangible assets or other non-current assets. Calculate its net working capital.
3. Current ratio of a concern is 1:1. What will be the net working capital?
4. Suppose current ratio is 5:1 and NWC is ₹ 30,000, Then what is the amount of current assets?
5. The amount of term loan (TL) installment is ₹10,00,000/ per month, monthly average interest on TL is ₹ 50,000. If tax rate is 50% and PAT is ₹ 2,70,000 per month, what would be the interest coverage ratio?
6. Total liabilities of a firm is ₹ 100 lakh and current ratio is 1.5:1. If fixed assets and other non-current assets are to the tune of ₹ 70 lakh and debt-equity ratio being 4:1. What would be the long-term liabilities?
7. Current ratio is say 1.5: 1, total of balance sheet being ₹ 22 lakh. The amount of Fixed assets + Non-current Assets is ₹ 10 lakh. What would be the current liabilities?
8. From the following financial statement, calculate
   (i) Current ratio
   (ii) Acid test ratio
   (iii) Inventory turnover
   (iv) Average debt collection period
   (v) Average creditors' payment period

		Current Assets	
Sales	1500	Inventories	125
Cost of sales	1000	Debtors	250
Gross profit	500	Cash	225
		Current Liabilities	
		Trade Creditors	200

9. Calculate financial ratio from the following income statement and balance sheet:

Profit and Loss Account

For the year ending March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
To **Opening Stock**		By Sales	35,00,000
Raw Material	1,50,000	By **Closing Stock**	
To Purchase of Raw Material	13,40,000	Raw Material	1,00,000
To Direct Wages	7,20,000	By Profit on sale of Assets	40,000
To Manufacturing Expenses	1,90,000		
To Administrative Expenses	90,000		
To Depreciation	30,000		
To Preliminary expenses Written off	30,000		
To Selling and Distribution Expenses	35,000		
To Loss on Sale of Plant	5,000		
To Interest on Debentures	70,000		
To Net Profit	9,80,000		
	36,40,000		36,40,000
To Provision for tax	2,25,000	By Balance b/f	1,20,000
To General Reserve	1,75,000		
To Preference Dividend	80,000	By Net Profit for the Year	9,80,000
To Final Dividend	2,40,000		
To Balance c/f	3,80,000		
	11,00,000		11,00,000

Balance Sheet as on March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
Equity Share Capital (face value ₹ 100)	12,00,000	Plant (Net)	20,00,000
		Building (Net)	6,80,000
10% Preference Share Capital	8,00,000	Land	4,00,000
General Reserve	6,20,000	Investment	2,00,000
Securities Premium	1,30,000	**Stock**	
P & L Account	3,80,000	Raw Material	1,00,000
10% Debenture	7,00,000	Sundry Debtors	75,000
Sundry Creditors	1,50,000	Bank Balance	85,000
Outstanding Expenses	30,000	Marketable Securities	1,50,000
Tax Payable	50,000	Pre-paid Expenses	40,000
Dividend Payable	2,40,000	Patents	3,90,000
		Preliminary Expenses	1,80,000
	43,00,000		43,00,000

10. Compare the financial ratios of the following companies and comment:

Ratios	A	B	C
Current ratio	2.75	2.65	2.70
Liquid ratio	2.00	1.90	1.50
Gross profit margin	17%	20%	19%
Operating profit margin	9%	12%	16%
Net profit margin	10%	11%	8%
Return on investment	14%	16%	12%
Fixed assets turnover ratio	7 times	5 times	8 times
Debt: equity ratio	3.50	3.00	4.00
Interest coverage ratio	4 times	5 times	4 times
Inventory turnover ratio	2.5 times	4 times	5 times

11. Calculate as many ratios as many possible from the following details:

Balance Sheet as on March 31, 2009

Particulars	Amount (₹)	Particulars		Amount (₹)
Equity Share Capital		Plant (Net)		2,00,000
(face value ₹ 100)	1,50,000	Land & Building (Gross)	5,00,000	
18% Preference Share Capital	1,00,000	Less Acc. Dep.	1,20,000	3,80,000
General Reserve	2,50,000	Investment		1,70,000
Securities Premium	30,000	Stock		90,000
P & L Account	70,000	Sundry Debtors		60,000
12.5% Debenture	4,00,000	Bills Receivables		50,000
Sundry Creditors	1,18,000	Short-term investment		95,000
Tax Payable	51,000	Pre-paid Expenses		35,000
Proposed Dividend	31,000	Trade Mark		40,000
		Preliminary Expenses		80,000
	12,00,000			12,00,000

Sales for the year was ₹ 10,00,000, gross profit for the year ₹ 2,50,000, operating expenses ₹ 70,000, non-operating expenses ₹ 30,000, non-operating income ₹ 70,000. Tax rate applicable for company is 30%.

Answers

Multiple Choice Questions

1 (d) 2 (d) 3 (d) 4 (a) 5 (d)

Numerical Problems

1. ₹ 1,500 lakh
2. NWC ₹ 21lakh
3. nil
4. Current assets ₹ 37,500
5. 11.80 times
6. ₹ 64 lakh
7. ₹ 8 lakh

(For answers to Numerical Problems 8 to 11, refer to the companion website as these problems require detailed answers.)

CASE 1

Ratio Analysis: Decomposing

The following is the profit and loss account and balance sheet of Sach International Ltd. You may redraft these for the purpose of ratio analysis.

Profit and Loss Account

For the year ending March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
To **Opening Stock**		By Sales	10,00,000
Finished Goods	1,00,000	By **Closing Stock**	
Raw Material	50,000	Finished Goods	1,50,000
To Purchase of Raw Material	5,00,000	Raw Material	1,00,000
To Direct Wages	2,00,000	By Profit on non-operating investment	50,000
To Manufacturing Expenses	1,00,000		
To Administrative Expenses	30,000		
To Depreciation	20,000		
To Preliminary expenses	10,000		
Written off	40,000		
To Selling and Distribution Expenses	47,000		
To Loss on Sale of Plant			
To Interest on Debentures	10,000		
To Interest on Short-term loan	8,000		
To Net Profit	1,85,000		
	13,00,000		13,00,000
To Provision for tax	50,000	By Balance b/f	5,000
To General Reserve	80,000		
To Preference Dividend	10,000	By Net Profit for the Year	1,85,000
To Interim Dividend	40,000		
To Balance c/f	10,000		
	1,90,000		1,90,000

Balance Sheet as on March 31, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
Equity Share Capital (face value ₹ 10)	2,00,000	Plant (Net)	1,00,000
10% Debentures	1,00,000	Building (Net)	80,000
General Reserve	80,000	Investment (Non-Trading)	1,70,000
Securities Premium	10,000	**Stock**	
P & L Account	1,10,000	Finished Goods	50,000
Short-term interest bearing loan @ 8%	1,00,000	Raw Material	1,00,000
Sundry Creditors	1,00,000	Sundry Debtors	80,000
Tax Payable	50,000	Bank Balance	40,000
		Marketable Securities	20,000
		Pre-paid Expenses	10,000
		Goodwill	30,000
		Preliminary Expenses	70,000
	7,50,000		7,50,000

The management of the company has approached a bank to obtain short-term working capital loan as well as long-term loan. Mean time management has also invited its internal auditors to carry out decomposition test for having an improvement in ROIC, ROCE and ROE.

Discussion Question

1. Assist bank in evaluate financial performance from the perspective of short-term loan as well as long-term loan.
2. Carry out decomposition analysis. Suggest how ROIC, ROCE and ROE can be improve.

CASE 2

Decomposing Analysis Of Tata Motors Ltd

Some facts extracted from annual report of Tata Motors Ltd are presented below:

(₹ in crore)

Particulars	2009–10	2008–09
A. Financial Results		
(i) Gross Revenue	38,364.10	28,568.21
(ii) Net Revenue (excluding exercise duty)	35593.05	25,629.73
(iiii) Total expenditure	31414.77	23,877.29
(iv) Operating profit	4,178.28	1,752.44
(v) Other income	1,853.45	925.97
(vi) Profit before interest, depreciation and tax	6,031.73	2,678.41
(vii) Interest and finance charges	1,103.84	673.68
(viii) Cash Profit	4,927.89	2,004.73
(ix) Depreciation and amortization	1,177.90	925.71
(x) Profit before tax and exceptional items	3,749.99	1,079.02
(xi) Exceptional items	920.45	65.26
(xii) Profit before tax	2,829.54	1,013.76
(xiii) Tax expenses	589.46	12.50
(xiv) Profit after tax	2,240.08	1,001.26
B. Appropriations		
Debenture redemption reserve	500.00	267.80
General reserve	500.00	100.13
(c) Other reserves	--	--
(d) Dividend	991.94	345.70
Total Assets	50,472.61	37,102.56
Total Liabilities including current liabilities and owner's equity	50472.61	37,102.56
Miscellaneous Assets	--	2.02
Shareholders' Net worth	14,965.47	12,230.15
Current Liabilities	17,372.59	10,676.92

The management of the company would like to calculate the ratios and carry out decomposing analysis.

Discussion Question

1. Using above data, calculate ratios relevant for the evaluation by shareholders and managerial team.
2. Carry out decomposing analysis of ROIC, ROCE and ROE and comment on the changes in the performance across the years.

CHAPTER

8

Fund Flow Analysis

Learning Objectives

After reading this chapter, you will be able to

- Understand the concept of fund—net working capital
- Gain insight into the concept of fund flow statement
- Define mechanism of preparing fund flow statement
- Identify mechanism to analyse fund flow statement

Spontaneous Source for Working Capital Finance

Sam Junior started a new business of manufacturing customized packaging material. Infrastructure facilities were established by taking a loan from state-level finance agency. To assess working capital requirement, he analysed the balance sheet of Flex Industries that is of similar operating level as that of his company. Accordingly, he arranged ₹ 500 crore as working capital which was also the sum total of current assets engaged by Flex Industries. At the end of the year, he compared his financial results with that of Flex Industries and he was surprised to notice that Flex had shown a higher return on invested capital as compared to similar returns reported by his financial statements.

Subsequently, he consulted a financial analyst to analyse his financial statements and it was identified that Sam's company had employed excess funds as compared to the requirement. It was identified that while assessing working capital requirement, he should have considered net current assets and not the gross current assets. He should have considered **spontaneous financing** of ₹ 400 crore that was not considered. Had Mr. Sam considered it then he would have arranged only ₹ 100 crore for working capital.

INTRODUCTION

Every business enterprise has the onus to present annual accounts so as to apprise different stakeholders about the financial position and financial results of the activities undertaken during the accounting year. The **annual accounts**—income statement and balance sheet precisely convey the financial health of the business enterprises but these do not depict the **flow of funds,** i.e., movement of financial resources in and out of the business enterprises. The flow of funds during accounting period helps in strategic decision as well as in execution of decisions. The major **limitation of balance sheet** is that it provides static information about sources and application of funds and not the flow concept. Therefore, preparation of funds flow statement becomes more important.

Once a business enterprise has set up its infrastructure facilities, it needs more capital to utilize the production capacity generated by the infrastructure facilities. This additional requirement of funds is called working capital. **Working capital** is the requirement of funds for day-to-day activities, such as payment of different recurring expenses. In practice, total working capital, i.e., **total of current assets** held by a business enterprise is also called **gross funds requirement** for uninterrupted flow of production and sales activities. Out of this, certain amount of funds are mobilized without much of specific efforts, i.e., with the help of spontaneous financing. **Spontaneous financing** means arrangement of financial resources as a matter of routine business practice, such as financing through trade credit—credit extended by suppliers, delayed payments—outstanding expenses, etc. The amount of finance procured through spontaneous financing is collectively called **current liabilities**.

> **Total current assets** are called gross working capital, whereas difference between total current assets and total current liabilities is net working capital.

The main task of a finance officer/manager is to arrange the funds for **working capital gap** that is the difference between total current assets and total current liabilities. This is also called **net working capital**. Practically, the net working capital represents the amount of funds required to manage routine business activities so as to keep the operating cycle moving without and bottlenecks. The permanent requirement of funds is to be financed with the help of long-term sources of finance, whereas temporary requirement of funds is to be financed through short-term sources of finance. This approach of financing is called **hedging** or **maturity matching approach** of financing working capital gap.

DEFINITION

Fund is defined as working capital precisely net working capital, i.e., the gap between total current assets and total current liabilities. **Fund flow statement** is such a statement that explains about the movement of funds between two balance sheet dates, i.e., a period of twelve months. It is prepared by using balance sheets of two accounting years falling in a series. The prime objective of preparing fund flow statement is to identify the sources of fund and applications of fund that might have taken place during the period under analysis. As balance sheets of past are used to prepare fund flow statement, therefore it is historical in nature but very much helpful in predicting about the flow of fund likely to take place in future, i.e., next accounting year.

> Net working capital is called **funds** required for routine functioning of business activities.

> **Funds flow statement** discusses about sources of funds and applications of funds for relating to reporting period.

Fund flow statement helps in identifying the movement of fund in and out of the business enterprises that took place during the reporting period. Although the matching concept is to be adopted to finance the requirement of fund—net working capital but in practice, it is not feasible. There are the incidences when proper matching between the duration of source and the duration of application is not possible that leads to liquidity crisis in a business enterprise. The preparation and presentation of fund flow statement helps in identifying type of sources that contributed the fund and also helps in identifying the type of applications to which funds were applied.

While preparing fund flow statement, the net working capital is considered as a **pool** or **tank of funds** and fund flow statement depicts movement in an out of the fund from this 'pool or tank'. The fund flow statement can be visualized as a dynamic statement depicting movement of funds. The common heads for such movement of funds are as follows:

Time period between two balance sheet dates is called **reporting period**.

Flow of Funds from Operation

Movement of funds relating to operating activities of the business enterprises. Operating activities are the core and incidental activities related to production and sales function. **Tax paid** is also considered in this segment.

Flow of Funds from Investment Activities

Movement of funds relating to non-current assets, such as purchase and sale of these non-current assets. **Interest** and **dividend received** is also considered in this segment.

Flow of Funds from Financing Activities

Movement of funds relating to non-current liabilities and equity resources, such as raising funds from long-term sources, redemption of share/debentures and repayment of loan. **Interest** and **dividend paid** are also considered in this segment.

CONCEPTUAL BACKGROUND

Preparation and presentation of fund flow statement for the reporting period is a tool for critical appraisal of the financing activities as well as a benchmark for the estimation of future funds requirement. Fund flow statement helps in identifying how the sources have been supported by non-current liabilities and equity sources in financing the working capital requirement—requirement of fund. At the same time, it helps in identifying about the use of working capital resources—spontaneous financing to finance non-current assets. Although one-to-one matching of sources of funds and applications of funds is not feasible but pattern of funding can be assessed by analysing fund flow statement. Fund flow statement can be considered as a **health barometer** indicating health of financing activities leading to the sources and application of funds during the reporting period. If majority of the funds are generated through operating activities then it indicates best status of **corporate financial health** with regard to funding of net working capital.

Fund flow statement is a dynamic statement and not a static statement like balance sheet but it traces its origin form the financial statements.

SOURCES AND APPLICATION OF FUNDS

Every transaction does not affect working capital but majority of the business transactions either affect source side or application of the funds. These are as follows:

Sources of funds:

- Funds from operating activities.

- Issue of share/debentures for cash or current assets, such as inventory/stock.
- Sales of non-current assets—fixed assets, investment, intangible and fictitious assets for cash or resulting into an increase in other current assets.
- Interest and dividend received in cash or short-term investment instruments.

Applications of funds:

- Redemption/conversion of share/debentures in cash or in current liabilities, such as bills/accounts payables.
- Purchase of non-current assets—fixed assets, investment, intangible and fictitious assets for cash or resulting into a decrease in current assets or increase in current liabilities.
- Interest and dividend paid in cash including corporate dividend tax thereon.
- Tax paid including surcharge, if any.

COMPREHENSIVE ITEMS—WHETHER THESE LEAD TO FLOW OF FUNDS OR NOT

There are certain transaction about non-current assets and non-current liabilities that do not affect net working capital during the reporting period. These are as follows:

- Issue of shares/debentures or raising of loan for consideration received in the form of non-current assets.
- Issue of bonus share by the conversion of reserves or profits.
- Conversion of preference shares/debentures into equity share capital.
- Redemption of shares/debentures for which claim is settled in non-current assets.
- Transaction of current items having equal effect on current assets and current liabilities, such as payment to creditors in cash and sale of stock for cash.

The justification is that these items do not have any effect on the net working capital for the reporting period. Therefore, these should *not be considered* while preparing fund flow statement.

EXAMPLE 1 The following transaction has been extracted from the annual accounts of a retail chain store. Identify these as items of fund flow and cast their effect also.

(i) Purchased machinery for cash ₹ 2,50,000.
(ii) Purchased furniture of ₹ 80,000 on two month-credit.
(iii) Long-term debenture of ₹ 5,00,000 are due for redemption during next year.
(iv) Issue of equity shares of face value ₹ 1,00,000 at 20% premium in cash.
(v) Issue of bonus shares by capitalization of reserves ₹ 2,00,000
(vi) Issued debentures of ₹ 3,00,000 to the vendors of building.
(vii) Dividend paid for the year ₹ 20,000.
(viii) Paid ₹ 75,000 cash to sundry creditors.
(ix) Tax paid for the year ₹ 25,000.

SOLUTION The solution to this problem can be depicted by showing the effect of each of the item on the net working capital of the business for the reporting period. It is as follows:

Item no.	Effect on Current Items	Effect on Non-current Items	An Appropriation	Is It An Item of Fund Flow?
(i)	Decrease in cash ₹ 2,50,000	Increase in machinery ₹ 2,50,000	No	Yes will reduce NWC ₹ 2,50,000

(*Contd*)

(*Contd*)

(ii)	Increase in creditors ₹ 80,000	Increase in furniture ₹ 80,000	No	Yes will decrease NWC ₹ 80,000
(iii)	Increase in accounts payables ₹ 5,00,000	Decrease in debentures ₹ 5,00,000	No	Yes will decrease NWC ₹ 5,00,000
(iv)	Increase in cash ₹ 1,20,000	Increase in equity shareholder net worth ₹ 1,20,000	No	Yes will increase NWC ₹ 1,20,000
(v)	No effect	Increase in equity ₹ 2,00,000. Corresponding decrease in reserves.	No	No
(vi)	No effect	Increase in building ₹ 3,00,000. Corresponding increase in debentures.	No	No
(vii)	Decrease in cash ₹ 20,000	No effect	Yes	Yes will reduce NWC ₹ 20,000
(viii)	Decrease in creditors ₹ 75,000. Corresponding decrease in cash.	No effect	No	No
(ix)	Decrease in cash ₹ 25,000	No effect	Yes	Yes will reduce NWC ₹ 25,000

Recap 1

So far, we have discussed the following topics:

Introduction to Funds Flow Statement
Definition
Flow of Funds from Operation
Flow of Funds from Investment Activities
Flow of Funds from Financing Activities
Sources and Application of Funds:
- Sources of Funds
- Applications of Funds

Comprehensive Items

Self-assessment 1

1. Explain the concept of gross working capital and net working capital.
2. Explain how different stakeholders should analyse a funds flow statement.

The following topics will be delved into next:

Mechanism for Preparing Fund Flow Statement:
Preparation of Schedule of Changes in Net Working Capital:
- Is Provision for Tax a Current Liability or Appropriation of Profits?
- Is Dividend Payable a Current Liability or Appropriation of Profits?

Estimation of Fund Flow from Operations—Operating Activities:
- Direct Method
- Indirect Method

Preparation of Fund Flow Statement:
- Current Items vs Non-Current Items

Stakeholders and Fund Flow Statement
Modus Operandi to Carry Out Interpretation from Fund Flow Statement
Case

MECHANISM FOR PREPARING FUND FLOW STATEMENT

Fund flow statement is prepared by preparing certain accounts for non-current items as well as accounts for the appropriation of tax and dividend. The following are the logical steps for preparing fund flow statement:

Step One—Preparation of Schedule of Changes in Net Working Capital

Step Two—Estimation of Fund Flow from Operations—Funds from Operations

Step Three—Preparation of Fund Flow Statement

Accounts of fixed assets and provisions are prepared as **working notes** to work certain relevant information required to complete the above mentioned steps.

Step One—Preparation of Schedule of Changes in Net Working Capital

Net working capital is considered as funds for the reporting period. Net working capital is the difference between total current assets and total current liabilities.

CURRENT ITEMS VS NON-CURRENT ITEMS

Current items are such items that are either represented in cash or likely to be dealt in cash within a period of twelve month from the date of balance sheet. These are represented by current assets and current liabilities. **Current assets** are such assets that are held either in cash or likely to be converted into cash or cash equivalent within one year from the date of balance sheet. These include cash, bank, marketable securities, sundry debtors/accounts receivables, inventory/stock, prepaid expenses, accrued income, short-term advances. **Current liabilities** are such liabilities that need to be paid within one year from the date of balance sheet. These include sundry creditors/accounts payables, bank overdraft, short-term loan, outstanding expenses, tax and dividend payable, unearned income, etc.

Non-current items are such asset and liability items that are not the current ones. Fixed, intangible and fictitious assets and long-term investment are classified as **non-current assets;** whereas long-term liabilities—loan, debentures, preference capital and equity resources are classified as **non-current liabilities.**

To find out the net change in the net working capital for the reporting period, the following statement is prepared (Table 8.1):

TABLE 8.1 **Schedule of Changes in Net Working Capital (NWC)**

Particulars	Amount
Increase in current assets	Change in amount with '+' sign.
Decrease in current assets	Change in amount with '−' or in (..)
Increase in current liabilities	Change in amount with '−' or in (..)
Decrease in current liabilities	Change in amount with '+' sign.
Net change (increase/decrease) in working	… (….)

Interpretation: Net change in net working capital is interpreted as follows:

(i) Net increase in net working capital is considered application of funds.

(ii) Net decrease in net working capital is considered a source of funds.

Is Provision for Tax a Current Liability or Appropriation of Profits?

Provision for tax appearing on the liability side of the balance sheet can either be considered as current liability or as an appropriation of profits. If additional information about this is not given then it can be taken as current liability. And as soon as additional information about it is given then it should be considered as an appropriation of profits. The projection in the fund flow statement will differ in each of the case.

Provision for Tax as Current Liability

When it is considered as current liability then it is projected in the fund flow statement as follows:

- Amount provided for tax from the current year's profits is not shown while calculating fund flow from operating activities.
- Amount paid for tax during the year is not shown while ascertaining fund flow from operating activities.
- Changes in the provision for tax as given in the comparative balance sheet are shown in the working capital items.

Provision for Tax as an Appropriation of Profits

In this case, the following projection is made in the fund flow statement:

- Provision for tax made during the year is shown while calculating fund flow from operating activities.
- Tax paid during the year is shown while calculating fund flow from operating activities.
- Changes in the tax provision as shown in the comparative balance sheet are not shown in the working capital items.

Example 2 Prepare schedule of changes in net working capital.

Comparative Balance Sheet

Particulars	2010 (₹)	2011 (₹)
A. Sources of Funds		
Share capital	4,50,000	9,50,000
Proposed dividend	3,00,000	2,10,000
Bank overdraft	56,000	1,68,000
Sundry creditors	1,68,000	3,34,000
Provision for tax	75,000	1,10,000
Short-term loan	---------	2,70,000
B. Application of Funds		
Fixed assets	4,00,000	6,20,000
Investments (short-term)	50,000	5,60,000
Stock	2,40,000	2,10,000
Sundry Debtors	2,10,000	4,55,000
Bank	1,49,000	1,97,000

Additional Information:

(i) Dividend paid during the year was ₹ 2,90,000 and tax paid during the year was ₹ 85,000.
(ii) Depreciation provided on fixed assets was ₹ 70,000.

SOLUTION:

Schedule of Changes in Net Working Capital (NWC)

Particulars	Changes in NWC (₹)
Decrease in proposed dividend	90,000
Increase in bank overdraft	(1,12,000)
Increase in sundry creditors	(1,66,000)
Increase in provision for tax	(35,000)
Increase in short-term loan	(2,70,000)
Increase in short-term investment	5,10,000
Decrease in stock	(30,000)
Increase in sundry debtors	2,45,000
Increase in bank	48,000
Net Increase in NWC	2,80,000

Note: Proposed dividend and provision for tax have been taken as current items.

IS DIVIDEND PAYABLE A CURRENT LIABILITY OR APPROPRIATION OF PROFITS?

Dividend payable appearing on the liability side of the balance sheet can either be considered as current liability or as an appropriation of profits. If additional information about this is not given then it can be taken as current liability, and as soon as additional information about it is given then it should be considered as an appropriation of profits. The projection in the fund flow statement will differ in each of the case.

Dividend Payable as Current Liability

When it is considered as current liability then it is projected in the fund flow statement as follows:

- Amount provided for dividend from the current year's profits is not shown while calculating fund flow from operating activities.
- Amount of dividend paid during the year is not shown while ascertaining fund flow from financing activities.
- Changes in the dividend payable as given in the comparative balance sheet are shown in the working capital items.

Dividend Payable as an Appropriation of Profits

In this case, the following projection is made in the fund flow statement:

- Provision for dividend payable made during the year is shown while calculating fund flow from operating activities.
- Dividend paid during the year is shown while calculating fund flow from financing activities.
- Changes in the dividend payable as shown in the comparative balance sheet are not shown in the working capital items.

EXAMPLE 3 Prepare schedule of changes in NWC by taking the data of Example 2 by considering proposed dividend and provision for tax as an appropriation of profits.

SOLUTION:

Schedule of Changes in Net Working Capital (NWC)

Particulars	Changes in NWC (₹)
Increase in bank overdraft	(1,12,000)
Increase in sundry creditors	(1,66,000)

(*Contd*)

(*Contd*)

Increase in short-term loan	(2,70,000)
Increase in short-term investment	5,10,000
Decrease in stock	(30,000)
Increase in sundry debtors	2,45,000
Increase in bank	48,000
Net Increase in NWC	2,25,000

Step Two—Estimation of Fund Flow from Operations—Funds from Operations

Profit and loss account of an enterprise reflects the amount of profit earned during a particular financial year. The profit includes operating as well as non-operating profit. As income statement is prepared by following matching concept, therefore, there are certain non-cash and appropriation items due to which net profit as reported by the income statement cannot be taken as fund from operations. To arrive at the amount of fund flow from operating activities, one needs to carry out reworking of profit as disclosed by profit and loss account. Then only the accurate amount of fund flow from operating activities can be ascertained.

This reworking is practically the adjustment of non-cash items and items relating to appropriation of profits. In carrying out the reworking transactions relating to non-current items are also given due consideration.

When additional information about provision for tax is given then it should be considered as an **appropriation** and not as current liability.

Fund flow from operating activities is ascertained by using any one of the following two methods. To estimate fund flow from operating activities Profit and Loss Adjustment Account is prepared. The proforma of this account is as follows:

Direct Method

Under this method of estimating fund flow from operations only cash expenses are deducted from sales revenue. **Cash expenses** are such expenses that are paid in cash the incidence of payment is immaterial. Under direct method, **non-cash expenses**, such as depreciation, amortization and appropriation are not considered (Table 8.2).

TABLE 8.2 Computation of Fund from Operations—Direct Method

Particulars	Amount
Sale of goods and services Add: Cash receipts from royalty, commission, fee and other revenue from core business activities, i.e., operating activities (excluding interest, dividend and other non-trading income) Less: (i) Cash Cost of Goods Sold (ii) Cash Operating Expenses (excluding depreciation, amortization, interest, dividend, tax and other non-trading expenses)	
Fund Flow from Operating Activities	

Indirect Method

Under indirect method net profit for the year is adjusted for non-cash, non-trading expenses and appropriation items (Table 8.3).

When additional information about final/proposed dividend is given then it should be considered as an **appropriation** and not as current liability.

When current year profit after provision for tax and dividend is used.

TABLE 8.3 Computation of Fund from Operations—Indirect Method

Profit and Loss Adjustment A/c

Particulars	Amount	Particulars	Amount
To Net profit after provision for tax and dividend		By Transfer from reserves	
To Depreciation for the year		By Profit on sale of non-current assets	
To Intangible and fictitious assets written off		By Dividend received (gross)	
To Interest paid		By Interest received	
To Provision for tax		By Insurance claim received	
To Interim dividend paid		By Tax refund	
To Provision for final dividend			
To Transfer to reserves retained earning		By Funds from Operations (Balancing Figure)	
To Loss on sale of non-current assets			
To Bonus to shareholders			
To Premium on redemption of shares/ debentures			

When balance of profit and loss/general reserve/retained, earning is used (Table 8.4).

TABLE 8.4 Computation of Fund from Operations—Indirect Method

Dr. **Profit and Loss Adjustment A/c** **Cr.**

Particulars	Amount	Particulars	Amount
To Depreciation for the year		By Opening Balance of P & L Account (as given in the opening balance sheet)	
To Intangible and fictitious assets written off		By Transfer from reserves	
To Interest paid		By Profit on sale of non-current assets	
To Provision for tax		By Dividend received (gross)	
To Interim dividend paid		By Interest received	
To Provision for final dividend		By Insurance claim received	
To Transfer to reserves/retained earning		By Tax refund	
To Loss on sale of non-current assets			
To Bonus to shareholders		By Funds from Operations (Balancing Figure)	
To Premium on redemption of shares/ debentures			
By Closing Balance of P & L Account (as given in the Closing balance sheet)			

Notes:

(i) If opening and closing balance of profit and loss is not given, then the corresponding balances of general reserve/retained earning should be used. In such case, transfer to these is not shown in the above account.

(ii) If balancing figure arises on debit side, then it is **funds to operations**.

Fund From Operations

Particulars	Details	Amount
Net Profit before Tax and Extra-ordinary Items or change in profit and loss account balance.	....	
(a) Adjustment for non-cash/non-operating items debited to P & L account	....	
■ Depreciation on fixed asset for the period	....	
■ Amortization of intangible and fictitious assets	....	
■ Transfer to reserves and provisions	....	
■ Interest on loan (both long-term and short-term)	....	
■ Loss on sale of assets	....	
■ Loss on account of conversion of foreign exchange transactions	....	
■ Loss on revaluation of assets	....	
■ Loss of capital nature	....	
(b) Adjustment for non-cash/non-operating items credited to P & L account	....	
■ Interest and dividend income on non-trading investment	(...)	
■ Gain from non-trading derivative transactions	(...)	
■ Profit from the sale of assets other than current assets	(...)	
■ Profit on revaluation of assets	(...)	
Fund Flow from Operations		

EXAMPLE 4 From the following details, prepare statement showing funds from operating activities using direct method and indirect method.

Profit and Loss Account

For the year ended March 31, 2010

Particulars	Amount	Particulars	Amount
To Opening stock	40,000	By Sales of goods	
To Purchase of goods		■ In cash	3,00,000
■ In cash	90,000	■ On credit	1,00,000
■ On credit	2,50,000	By Purchase return	6,000
To Direct Expenses	4,000		
To Sales return	14,000	By Closing Stock	68,000
To Gross Profit c/d	76,000		
	4,74,000		4,74,000
To Depreciation	52,000	By Gross Profit b/d	76,000
To Preliminary Expenses written off	15,000	By Investment Income	90,000
		By Profit on sale of Investment	18,000
To Goodwill written off	2,000	By Discount from Creditors	12,000
To Salaries and Wages			
Paid 18,000			
Add: Outstanding 1,000	19,000		
To Rent paid 16,000			
Less: Pre paid 600	15,400		
To Stationery and postage	1,000		
To Director's Fees	3,500		
To Managerial Remuneration	4,500		
To Bad Debts	1,200		
To Provision for Doubtful Debts	3,000		

(*Contd*)

(*Contd*)

To Provision for Discount on Debtors	1,000		
To Bill Discounting Charges	300		
To Selling Expenses	3,000		
To Interest on Loan	3,600		
To Provision for tax	4,500		
To Net Profit c/d	67,000		
	1,96,000		1,96,000
To Transfer to General Reserve	10,000	By Balance b/d	35,300
To Interim Dividend	18,000	By Net Profit for the year	67,000
To Proposed Final Dividend	7,200		
To Balance c/d	67,100		
	1,02,300		1,02,300

Calculation of Funds from Operations Using Direct Method

Particulars	Amount
Sale of goods and services	4,00,000
Add: Discount from creditors	12,000
Less:	
Cash Cost of Goods Sold	(3,24,000)
Salary and wages	(19,000)
Rent	(15,400)
Stationery and postage	(1,000)
Director's fees	(3,500)
Manager's Remuneration	(4,500)
Bill Discounting Charges	(300)
Bad Debts	(1,200)
Selling Expenses	(3,000)
Fund from Operations	40,100

Calculation of Funds from Operations Using Indirect Method

Profit and Loss Adjustment A/c

Particulars	Amount	Particulars	Amount
To Net profit after provision for tax and dividend but before transfer to reserves (67,000 – 18,000 – 7,200)	41,800	By Investment Income	90,000
		By Profit on sale of Investment	18,000
To Depreciation for the year	52,000		
To Goodwill written off	2,000		
To Preliminary Expenses written off	15,000	By Funds from Operations (Balancing Figure)	40,100
To Provision for Doubtful Debts	3,000		
To Provision for Discount	1,000		
To Interest paid	3,600		
To Interim dividend	7,200		
To Final Dividend	18,000		
To Provision for Tax	4,500		
	1,48,100		1,48,100

Step Three—Preparation of Fund Flow Statement

Final result of fund flow statement is presented by showing different sources and applications that contributed towards the changes in the net working capital during the reporting period. The **reporting period** is the time duration between two balance sheet dates. Usually, it is twelve month-period. If two balance sheets of past are used then it is retrospective analysis, when one current balance sheet and one projected balance sheet is used then it is the projection about flow of funds for the coming year.

In this step, funds generated from non-current items are also considered.

Funds Flow From Non-Current Assets

Non-current assets are the assets that are maintained with the objective to use these assets and not to sell these in the routine course of business activities. However, these assets affect the flow of funds that is as follows:

Depreciation/Amortization—A Mechanism to Conserve Resources

Charging depreciation or amortization of assets cannot be considered as a direct source of funds but it helps in reducing the tax liability at the same time being non-cash taxable expense it does not result into outflow of funds despite of being considered as an expense while arriving at pre-tax profits. Therefore, depreciation results into the accumulation of cash resources sometimes called **hidden cash resources**.

Buying and Selling of Non-Current Assets for Cash

Purchase or sale of non-current assets for cash directly affects the flow of funds. On account of purchase cash resources get utilized, whereas sale of these assets is a source of funds. While recording sales of these assets sales value is compared with the written down value (WDV) of the asset being sold to recognize the profit or loss. Such profit or loss should be adjusted while calculating funds from operations to avoid double counting.

Buying and Selling of Non-Current Assets for Consideration Other Than Cash

Sometimes non-current assets are exchanged for certain non-current liabilities, such as consideration for the purchase of these assets is discharged by the issue of shares or debentures of the company. Such transaction does not affect the flow of funds at all. Therefore, it is not to be included while preparing funds flow statement. Buying of non-current asserts like this is considered as **comprehensive item** as discussed earlier. **Increase in non-current liability** on account of such purchase of non-current asset should not be considered as a source because this does not affect net working capital position—fund position.

Flow of funds from non-current items is considered while summing up sources and applications of funds.

Table 8.5 illustrates T-form, i.e., the horizontal form of fund flow statement.

TABLE 8.5 T-Form of Fund Flow Statement

Sources of Funds	Amount	Applications of Funds	Amount
Fund from operations Issue of shares/debentures for cash/ current assets Loan raised in cash/current items Sale of non-current asset realizing cash/ current items Interest/dividend received		Fund to operations Redemption of shares/debentures for cash/current items Loan repaid in cash or converted in current liabilities Purchase on non-current assets for cash/ current items	

(*Contd*)

(*Contd*)

Insurance claim received Tax refund received		Tax and final dividend paid Interim dividend paid	
Total Sources Decrease in NWC		**Total Applications** Increase in NWC	

Note: (i) It can be either funds from operations or funds to operations. (ii) Similarly, it can be either increase in NWC or decrease in NWC.

Vertical Form of Fund Flow Statement

In this form sources and applications of funds are shown one after another in a vertical sequence (Table 8.6).

TABLE 8.6 **Vertical Sequence of Fund Flow Statement**

Particulars	Amount
Sources of Funds	
■ Fund from operations	
■ Issue of shares/debentures for cash/current assets	
■ Loan raised in cash/current items	
■ Sale of non-current asset realizing cash/current items	
■ Interest/dividend received	
■ Insurance claim received	
■ Tax refund received	
Total (A)	
Applications of Funds	
■ Fund to operations	
■ Redemption of shares/debentures for cash/current items	
■ Loan repaid in cash or converted in current liabilities	
■ Purchase on non-current assets for cash/current items	
■ Tax and final dividend paid	
■ Interim dividend paid	
Total (B)	
Change in NWC (A–B) {Positive difference signifies increase in NWC and negative difference signifies decrease in NWC}	

STAKEHOLDERS AND FUND FLOW STATEMENT

Fund flow statement helps almost all the stakeholders in evaluating liquidity and solvency position of the business enterprises. Different stakeholders are business executives, bank and lending agencies, employees and others.

Business Executives and Analysis of Fund Flow Statement

Analysis of fund flow statement helps in taking a timely decision about buying in bulk to avail discount offer. If operating activities generate sufficient funds at the right time then an organization cannot only avail discount offer but can ovoid the situation of default in making repayment of loan. It is the flow of funds from operating activities that helps the executives in taking investment decision and dividend decision.

Bank and Analysis of Fund Flow Statement

A bank always runs the risk of recovery of loan whether a short-term loan or long-term loan. The risk might be market risk or business risk. The **market risk** refers to the fluctuation in the interest earning. The loaning decision by a bank is based on the "Three Cs of Credit Granting Decision": (a) Collateral (b) Capacity and (c) Character. Out of these three, the **capacity to pay** the interest and repayment of principle amount is analysed with the help of fund flow statement. In general, sufficient availability of funds from operating activities reflects a sound position and a positive signal about the payment and repayment capacity of a business organization. There are the organizations that earn good amount of profit but hardly generate sufficient funds from operating activities such organization might face difficulty in servicing the debt whether short-term or long-term, more particularly the short-term.

A bank also analyses synchronization between flow of funds from financing activities and flow of funds from investment activities. A positive correlation between these two indicates high safety of long-term loan granted to the business organization. Otherwise, it indicates towards risk in the recovery of long-term loan. The micro-level analysis of fund flow from investing activities helps in ensuring proper collateral value that can be used in case of delinquency by the borrower.

Trade Creditors/Suppliers and Analysis of Fund Flow Statement

Supplier of goods who supplies the goods on credit is interested to know about the circulation and flow of funds in and out of a business organization. The level of credit completely depends upon the quantum of funds generated from the operating activities. In general, a business organization is considered to be less risky from the viewpoint of trade creditor/supplier if it has sufficient resources from the operating activities. Regular flow of funds from operating activities as well as a situation in which cash profits are more than the book profits is like a safety net for trade creditors.

Debenture Holders and Analysis of Fund Flow Statement

A debenture holder is interested in receiving interest income in time at the same time he is more worried about the use of funds by a business organization. Generally, the funds mobilized through long-term debt should be used in building fixed asset such combination ensures sound collateral value for debenture holders. Therefore, a debenture holder looks for a perfect synchronization between funds flow from financing activities and flow of funds from investing activities. A positive significant amount of cash profit from operating activities ensures about the payment of interest on debentures without any delay and default.

Employees and Analysis of Fund Flow Statement

Recruiting good employees is not a big deal but retaining good employees is one of the challenging tasks for HR Manager. Timely payment of dues of employees, implementation of bonus scheme and timely disbursement of cash benefits for employees is a task that cannot be performed by HR Manager in isolation, he has to maintain a proper co-ordination with finance department. Few people consider the finance department as **cash generating machine** but it is not so. Finance manager can only make an estimation about the flow of cash likely to be generated from different activities. If an organization has sufficient funds from operating activities then the HR Manager can design employee-friendly compensation package cash-fringe benefit involving cash payment. However, poor funds from operating activities are likely to work as a restriction on such schemes.

MODUS OPERANDI TO CARRY OUT INTERPRETATION FROM FUND FLOW STATEMENT

With the help of fund flow statement, the following generic conclusions can be derived.

Symptoms of Best Fund Flow Statement

A best fund flow statement is the one that depicts the following symptoms:

1. Majority of the funds should be generated from operating activities. This shows better management of routine activities in realizing cash.
2. Funds generated from operating activities as well as from financing activities should find an application of funds in the investing activities. Such combination shows better application of funds generated and best reinvestment strategy of managerial staff.
3. A significantly higher amount of funds flow from operating activities as compared to the cash operating profit signifies better management of working capital items.

Symptoms of Average Fund Flow Statement

1. Funds flow from operating activities is reasonable and it finds a corresponding application in the payment of tax and dividend.
2. Funds generated from the sale of non-current assets find a corresponding application in the purchase of new non-current assets.
3. Funds mobilized from financing activities either find a corresponding application in the investing activities or find an application in the working capital items.

Symptoms of Poor Fund Flow Statement

1. Only limited amount of fund is generated form operating activities. In certain cases, there might be negative flow of fund from operating activities.
2. Funds generated from investment activities find a corresponding application of funds in the financing activities. This indicates use of fixed assets for the repayment of long-term liabilities. This show poor financial planning and lack of long-term solvency for firm.
3. A significantly less amount of fund flow form operating activities as compared to cash operating profit indicates poor management of working capital items.
4. Despite of very low or negative flow of funds from operating activities a large amount of fund finds an application in the financing activities in the form of tax and dividend payment.

SOLVED EXAMPLES

EXAMPLE 5: From the following balance sheets of WWW Ltd, prepare fund flow statement:

Comparative Balance Sheet (Rupees in crore)

Particulars	31-3-10	31-3-09	Particulars	31-3-10	31-3-09
Share capital	260	225	Building	100	100
Reserve and surplus	146	80	Plant	198	101
15% debentures	200	180	Investment	55	55
Accounts payables	44	65	Marketable securities	47	8
Unearned income	4	2	Sundry debtors	220	250

(*Contd*)

(*Contd*)

Income tax payable	40	45	Stock	140	130
Provision for depreciation			Pre-paid rent	10	7
On Plant	91	84	Cash at bank	30	50
On Building	55	50	Cash in hand	40	30
	840	731		840	731

Additional information:

Income Statement for the period ending March 31, 2010

Particulars	Amount (₹ in crore)
Sales	4,530
Less: Cost of sales	(3,900)
Less: Depreciation	(54)
Selling and Administrative expenses	(296)
Interest paid	(30)
Add: Dividend income (gross)	9
Interest income	7
Net profit before extra-ordinary items	**266**
Add: Insurance claim received	1
Less: Provision for tax	(55)
Net profit after tax	212

Additional Information:

(i) 15% debentures of ₹ 30 crore were redeemed during the year 2009–10.

(ii) An old plant costing ₹ 50 crore was sold for ₹ 8 crore at no profit no loss during the year 2009–10.

(iii) During the year 2009–10, an interim dividend of ₹ 70 crore and final dividend of ₹ 86 crore including corporate dividend tax were paid.

(iv) Tax of ₹ 1 crore deducted at source from dividend received is included in provision for tax.

You are required to prepare funds flow statement.

(University of Rajasthan, MBA, 2005, adapted)

Solution

Schedule of Changes in Net Working Capital (NWC)

Particulars	Increase in NWC (₹ in crore)	Decrease in NWC (₹ in crore)
Increase in Marketable Securities	39	
Decrease in Debtors		30
Increase in Inventories stock	10	
Increase in Pre-paid Rent	3	
Decrease in Bank Balance		20
Increase in Cash Balance	10	
Decrease in Creditors	21	
Increase in Outstanding Expenses		2
	83	52
Net Increase in NWC		31

To calculate funds from operation, we need to prepare Profit and Loss Adjustment Account.

Profit and Loss Adjustment A/c (₹ in crore)

Particulars	Amount	Particulars	Amount
To Depreciation for the year	54	By Opening balance of Retained earnings	80
To Interest paid	30		
To Provision for tax	55		
To Interim dividend paid	70	By Dividend received (gross)	9
To Final dividend paid	86	By Interest received	7
		By Insurance claim received	1
To Closing balance of Retained earnings	146	By Funds from Operations (Balancing Figure)	344
	441		441

Fund Flow Statement (₹ in crore)

Sources of Funds	Amount	Applications of Funds	Amount
Funds from operation	344	Purchase of plant	147
Sales of plant	8	Interest paid	30
Issue of shares	35	Interim dividend paid	70
Issue of Debentures	50	Final dividend paid	86
Dividend received (gross)	9	Redemption of debentures	30
Insurance claim received	1	Tax paid	59
Interest Red.	7	TDS on dividend received	1
Total Sources	454	Total Applications	423
		Increase in Net Working Capital	31
	454		454

Working Notes:

(i) To calculate purchase or sale of fixed asset we need to prepare fixed asset account.

Plant A/c (at net value ₹ in crore)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	17	By Depreciation	49
To Bank—Purchase (balancing figure)	147	By Bank—Sales	8
		By Balance c/f (closing balance)	107
	164		164

(ii) To find out depreciation for current year

Provision for Depreciation (on Plant) A/c (₹ in crore)

Particulars	Amount	Particulars	Amount
To Accumulated depreciation of asset sold	42	By Balance b/f (opening balance)	84
		By Current year depreciation (balancing figure)	49
To Balance c/f (closing balance)	91		
	133		133

(iii) To find out tax paid

Provision for Tax A/c (₹ in crore)

Particulars	Amount	Particulars	Amount
To Bank—Tax paid (balancing figure)	59	By Balance b/f (opening balance)	45
		By Current year provision	54
To Balance c/f (closing balance)	40		
	99		99

(iv) Current year provision for tax has been adjusted for TDS ₹ 1 crore.
(v) Both the dividends paid have been shown as an appropriation.

Example 6 The following is the comparative balance sheet of X Ltd:

Particulars	Previous Year	Current Year
(A) Sources of Funds		
Equity Share Capital	3,00,000	4,00,000
8% Preference Share Capital	4,50,000	1,00,000
General Reserve	40,000	70,000
P & L Appropriation a/c	30,000	48,000
Creditors	97,000	1,33,000
Bank Overdraft	20,000	36,000
Outstanding Expenses	40,000	50,000
(B) Application of Funds		
Goodwill	1,15,000	1,10,000
Land and Building	2,00,000	1,70,000
Plant	80,000	2,00,000
Debtors	1,60,000	2,00,000
Stock	2,77,000	1,09,000
Bills Receivable	20,000	30,000
Cash in hand	95,000	10,000
Cash at bank	30,000	8,000

Additional Information:
(i) Depreciation of ₹ 10,000 and ₹ 20,000 has been provided on plant and land and building, respectively. (ii) An interim dividend of ₹ 5,000 was paid during the year and the final dividend for the year was ₹ 15,000. (iii) Tax paid during the year was 35,000. (iv) During the year preference shares were redeemed at 5% premium.
Prepare fund flow statement.

Solution

Schedule of Changes in Net Working Capital (NWC)

Particulars	Increase in NWC (₹)	Decrease in NWC (₹)
Increase in Debtors	40,000	
Decrease in Stock		1,68,000
Increase in Bills Receivables	10,000	
Decrease in Cash in hand		85,000
Decrease in Bank balance		22,000
Increase in Creditors		36,000
Increase in Bank Over Draft		16,000
Increase in Outstanding Expenses		10,000
	50,000	3,37,000
Net Decrease in NWC	2,87,000	

To calculate funds from operation, we need to prepare Profit and Loss Adjustment Account.

Profit and Loss Adjustment A/c

Particulars	Amount	Particulars	Amount
To Depreciation for the year		By Balance b/f (Opening balance of P & L Appropriation a/c)	30,000
Plant & Machinery	10,000		
Land & Building	20,000		
To Provision for tax	35,000		
To Interim dividend paid	5,000	By Funds from Operations (Balancing Figure)	1,55,500
To Final dividend paid	15,000		
To Transfer to General Reserve	30,000		
To Premium on redemption of preference shares	17,500		
To Good will written off	5,000		
To Balance c/f (closing balance of P & L Appropriation a/c)	48,000		
	1,85,500		1,85,500

Funds Flow Statement

Sources of Funds	Amount	Applications of Funds	Amount
Funds from operation	1,55,500	Purchase of plant	1,30,000
Sales of Land and Building	10,000	Interim dividend paid	5,000
Issue of shares	1,00,000	Final dividend paid	15,000
		Redemption of Preference Shares including premium	3,67,500
		Tax paid	35,000
Total Sources	2,65,500	Total Applications	5,52,500
Decrease in Net Working Capital	2,87,000		
	5,52,500		5,52,500

Working Notes:

(i) To calculate purchase or sale of fixed asset we need to prepare fixed asset account.

Plant A/c (at net value ₹ in crore)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	80,000	By Depreciation	10,000
To Bank—Purchase (balancing figure)	1,30,000	By Balance c/f (closing balance)	2,00,000
	2,10,000		2,10,000

(ii) Since tax provision is not given in the balance sheet, therefore it has been assumed that the amount of tax paid has been charged to profit and loss account. Similarly, proposed dividend has not been given in the balance sheet the amount of dividend paid considered to be charged to profit and loss account. The amount paid for both of these has been shown as an **application** and amount charged to profit and loss account **debited to profit and loss** adjustment account.

(iii) Interim dividend paid is an application and the same has been charged to profit and loss account.

(iv) Decrease in Land and Building other than depreciation has been taken as sales.

EXAMPLE 7 From the following details, prepare fund flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Assets		
Fixed Assets (net)	90,000	87,000
Debtors	43,000	40,000
Inventory	49,000	58,000
Prepaid rent	3,000	5,000
Cash Balance	75,000	97,000
Total Assets	**2,60,000**	**2,87,000**
(B) Liabilities		
Equity Share Capital	1,30,000	1,40,000
Reserves and Surplus	84,000	1,05,000
Creditors	20,000	15,000
Debentures	12,000	20,000
Outstanding Operating Expenses	11,000	3,000
Unpaid Wages	3,000	4,000
Total Liabilities	**2,60,000**	**2,87,000**

Additional Information:

Balance of accumulated depreciation account as on previous year was ₹ 16,000 and as at the end of current year was ₹ 19,000.

SOLUTION

Schedule of Changes in Net Working Capital (NWC)

Particulars	Changes in NWC (₹)
Decrease in Debtors	(3,000)
Increase in Stock	9,000
Increase in Prepaid Rent	2,000
Increase in Cash	22,000
Decrease in Creditors	5,000
Decrease in Outstanding Operating Expenses	8,000
Increase in Unpaid Wages	(1,000)
Net Increase in NWC	42,000

Statement Showing Fund From Operations

Particulars	Amount
Change in Reserve and Surplus Balance	21,000
Adjustment for non-cash/non-operating items shown in to P & L account	
■ Depreciation on fixed asset for the period	3,000
Funds from Operations	24,000

Fund Flow Statement

Particulars	Amount
Sources of Funds	
■ Funds from operations	24,000
■ Issue of shares for cash	10,000
■ Issue of debentures for cash	8,000
Total Sources	42,000
Applications of Funds	Nil
Increase in NWC	42,000

Working Notes:

(i) Increase in equity shares and debentures has been considered as issued of these for cash.

(ii) Fixed assets have decreased by the amount of depreciation only. Therefore, it signifies no purchase or sale of fixed assets during the year.

EXAMPLE 8 The following additional information and balance sheet are of Sigma Ltd:

Additional Information

(i) During the current year dividend paid was ₹ 52,000 tax paid was ₹ 24,000.

(ii) During the current year one machine having original cost ₹ 20,000 and accumulated depreciation ₹ 17,000 was sold for ₹ 11,000. (iii) During the year machine was purchase for which part payment made by issuing shares of ₹ 70,000 and remaining was paid in cash. Prepare fund flow statement.

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Sources of Funds		
Capital	2,80,000	3,80,000
Reserves	16,000	18,000
Loan from Bank	60,000	5,000
Loan from Associated company	nil	40,000
Current liabilities	72,000	82,000
Accumulated depreciation on Machine	54,000	72,000
(B) Application of Funds		
Bank Balance	8,000	7,200
Debtors	70,000	76,800
Stock	50,000	44,000
Land	40,000	60,000
Building	1,00,000	1,10,000
Machine at cost	2,14,000	2,99,000

SOLUTION

Schedule of Changes in Net Working Capital (NWC)

Particulars	Changes in NWC (₹)
Decrease in Bank Balance	(800)
Increase in Debtors	6,800
Decrease in Stock	(6,000)
Increase in Current Liabilities	(10,000)
Net Change (Decrease) in NWC	(10,000)

Statement Showing fund From Operations

Particulars	Amount
Change in Reserve and Surplus Balance	2,000
Adjustment for non-cash/non-operating items shown in to P & L account	
■ Depreciation on machinery for the period	35,000
■ Profit on sale of machinery	(8,000)
■ Dividend paid	52,000
■ Tax paid	24,000
Funds from Operations	1,05,000

Fund Flow Statement

Particulars	Amount
Sources of Funds	
■ Funds from operations	1,05,000
■ Issue of shares for cash	30,000
■ Sale of machinery	11,000
■ Loan raised from associate company	40,000
Total Sources of Funds	1,86,000
Applications of Funds	
■ Purchase of machine for cash	35,000
■ Loan repaid to bank	55,000
■ Purchase of land	20,000
■ Purchase of building	10,000
■ Dividend paid	52,000
■ Tax paid	24,000
Total Applications of Funds	1,96,000
Net change (decrease) in NWC	10,000

Working Notes:

(i) Issue of equity shares for machine is not an item for fund flow statement because it does not realizes cash.

(ii) Machine purchased against the issue of shares for 70,000 is not an application of funds because it does not affect NWC.

(iii) Tax and dividend have been considered as an appropriation.

(iv) To calculate purchase of machinery we need to prepare machinery account.

Plant A/c (at net value)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	1,60,000	By Depreciation	35,000
To Equity Shares – purchase	70,000	By Bank—sales	11,000
To P & L a/c (profit on sale)	8,000		
To Bank – Purchase (balancing figure)	35,000	By Balance c/f (closing balance)	2,27,000
	2,73,000		2,73,000

(v) Current year's depreciation has been calculated by preparing the following account.

Accumulated Depreciation on Machine A/c

Particulars	Amount	Particulars	Amount
To Accumulated depreciation on machine sold	17,000	By Balance b/f (opening balance)	54,000
		By Depreciation (balancing figure)	35,000
By Balance c/f (closing balance)	72,000		
	89,000		89,000

EXAMPLE 9 The following is the summary of balance sheet of Deepak Plastics Ltd for the year ending March 31, 2009. Prepare fund flow statement. Also draw inferences.

Comparative Balance Sheets

Particulars	31-03-08	31-03-09	Particulars	31-03-08	31-03-09
Equity share capital	3,00,000	4,00,000	Goodwill	1,15,000	90,000
8% Preference Shares	1,50,000	1,00,000	Land and building	2,00,000	1,70,000
General Reserve	40,000	70,000	Plant and machinery	80,000	2,00,000
Profit and Loss Account	30,000	48,000	Debtors	1,60,000	2,00,000
Proposed dividend	42,000	50,000	Stock	77,000	1,09,000
Provision for corporate dividend tax	5,500	8,300	Bills Receivables	20,000	30,000
			Cash in hand	15,000	10,000
Creditors	49,500	74,700	Cash at bank	10,000	8,000
Bills Payables	20,000	16,000			
Provision for tax	40,000	50,000			
	6,77,000	8,17,000		6,77,000	8,17,000

Additional Information:

(i) ₹ 35,000 has been provided as provision for income tax during the year 2008-09.

(ii) Depreciation of ₹ 50,000 and ₹ 10,000 have been charged on plant and machinery and on land and building, respectively for the year 2008–09.

(iii) A portion of land was sold at book value.

(iv) An interim dividend of ₹ 20,000 has been paid in the year 2008–09 along with ₹ 3,000 for corporate dividend tax thereon.

(Rajasthan University, MBA, Part II, 2006)

SOLUTION

Schedule of Changes in Net Working Capital (NWC)

Particulars	Increase in NWC (₹)	Decrease in NWC (₹)
Increase in Debtors	40,000	
Increase in Stock	32,000	
Increase in Bills Receivables	10,000	
Decrease in Cash in hand		5,000
Decrease in Bank balance		2,000
Increase in Creditors		25,200
Increase in Proposed Dividend		8,000
Increase in Corporate Dividend Tax		2,800
Decrease in Bills Payables	4,000	
	86,000	43,000
Net Increase in NWC		43,000

Note: Proposed dividend and corporate tax on dividend have been taken as current liabilities. To calculate funds from operation we need to prepare Profit and Loss Adjustment Account.

Profit and Loss Adjustment A/c

Particulars	Amount	Particulars	Amount
To Depreciation for the year		By Balance b/f (Opening balance of	30,000
Plant & Machinery	50,000	P & L Appropriation a/c)	
Land & Building	10,000		
To Provision for tax	35,000		
To Interim dividend paid	20,000	By Funds from Operations	1,91,000
To Corporate dividend tax	3,000	(Balancing Figure)	
To Transfer to General Reserve	30,000		
To Good will written off	25,000		
To Balance c/f (closing balance of	48,000		
P & L Appropriation a/c)			
	2,21,000		2,21,000

Fund Flow Statement

Sources of Funds	Amount	Applications of Funds	Amount
Funds from operation	1,91,000	Purchase of plant & machinery	1,70,000
Sales of Land and Building	20,000	Redemption of Preference Shares	50,000
Issue of shares	1,00,000	Interim dividend paid	20,000
		Tax on corporate dividend	3,000
		Tax paid	25,000
Total Sources	3,11,000	Total Applications	2,68,000
		Increase in Net Working Capital	43,000
	3,11,000		3,11,000

Working Notes:

(i) To calculate purchase or sale of fixed asset we need to prepare fixed asset account.

Plant & Machinery A/c (at net value)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	80,000	By Depreciation	50,000
To Bank – Purchase (balancing figure)	1,70,000	By Balance c/f (closing balance)	2,00,000
	2,50,000		2,50,000

(ii) Interim dividend paid and corporate dividend tax thereon is an application and the same has been charged to profit and loss account.

Inferences:

1. Profit after appropriation for tax and dividend is ₹ 48,000 (18,000 change in profit and loss balance and 30,000 transferred to general reserve); whereas funds from operations is ₹ 1,91,000. It indicates **healthy flow of funds from operations**.
2. Funds from operations find an application in dividend, tax and purchase of fixed assets. This indicates use of funds for **reinvestment purpose**.
3. Purchase of fixed assets has been financed by issue of shares, and funds from operations that depicts **appropriate matching between resources and their application**.

Example 10 Prepare fund flow statement and carry out inferences.

Comparative Balance Sheet

Particulars	2009 (₹)	2010 (₹)
(A) Sources of Funds		
Share capital	4,50,000	5,50,000
General reserve	3,56,000	3,78,000
Sundry creditors	1,68,000	1,34,000
Provision for tax	75,000	10,000
Mortgage loan	---------	1,70,000
(B) Application of Funds		
Fixed assets	4,00,000	3,20,000
Investments	50,000	60,000
Stock	2,40,000	2,10,000
Sundry Debtors	2,10,000	4,55,000
Bank	1,49,000	1,97,000

Additional information:

(i) Investments costing ₹ 8,000 were sold during the year 2009–10 for ₹ 8,500.
(ii) Provision for tax made during the year 2009–10 was ₹ 9,000.
(iii) During the year part of the fixed asset costing (book value) 10,000 was sold for ₹ 12,000 and profit included in the profit and loss account.
(iv) Dividend paid during the year 2009–10 was ₹ 40,000.
(v) During the year company issued bonus shares of ₹ 40,000 by capitalizing reserves.

(CS (Final), June 1999 and 2004, adapted)

Solution

Schedule of Changes in Net Working Capital (NWC)

Particulars	Increase in NWC (Rs)	Decrease in NWC (₹)
Increase in Debtors	2,45,000	
Decrease in Stock		30,000
Increase in Bank balance	48,000	
Increase in Creditors	34,000	
Increase in Mortgage Loan		1,70,000
	3,27,000	2,00,000
Net Increase in NWC		1,27,000

Note: Mortgage loan has been taken as current liabilities.
To calculate funds from operation we need to prepare Profit and Loss Adjustment Account.

Profit and Loss Adjustment A/c

Particulars	Amount	Particulars	Amount
To Depreciation on fixed assets for the year	70,000	By Balance b/f (Opening balance of General Reserve	3,56,000
To Provision for tax	9,000	By Profit on sale of investment	500
To Bonus Shares	40,000	By Profit on sale of fixed assets	2,000
To Dividend paid	40,000	By Funds from Operations (Balancing Figure)	1,78,500
To Balance c/f (closing balance of General Reserve)	3,78,000		
	5,37,000		5,37,000

Funds Flow Statement

Sources of Funds	Amount	Applications of Funds	Amount
Funds from operation	1,78,500	Purchase of Investment	18,000
Sales of Fixed Assets	12,000	Dividend paid	40,000
Issue of shares for cash	60,000	Tax paid	74,000
Sale of Investment	8,500		
Total Sources	2,59,000	Total Applications	1,32,000
		Increase in Net Working Capital	1,27,000
	2,59,000		2,59,000

Working Notes:

(i) To calculate **depreciation** for the year we need to make fixed asset account.

Fixed Asset A/c (at net value)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	4,00,000	By Depreciation (balancing figure)	70,000
To Profit and Loss a/c (profit)	2,000	By Bank	12,000
		By Balance c/f (closing balance)	3,20,000
	4,0,200		4,02,000

(ii) Tax paid has been calculated as 75,000 + 9,000 – 10,000 = 74,000

Inferences:

1. Profit for the year after providing appropriation is ₹ 22,000 (derived from change in general reserve).
2. Funds generated from operations is ₹ 1,78,500 most of which has been used in paying dividend and tax for the year.
3. Issue of shares ₹ 60,000 for cash does not find any corresponding application in non-current assets that implies that it has been utilised in financing the working capital requirement for the year.
4. Sales of fixed assets and investments find approximately matching application in the purchase of investment.

Conclusion*:* In totality, it can be evaluated as below average funds flow position because working capital has been financed by the issue of shares and majority of the operating funds have been utilized in paying tax and dividend that shows lack of reinvestment plan with the company.

EXAMPLE 11 Prepare fund flow statement.

Comparative Balance Sheet (₹ in '000)

Particulars	2010	2011
(A) Sources of Funds		
Paid up capital	50	90
Retained earnings	350	375
Long-term debt	500	550
Accounts payable	80	100
Bills payables	80	90
	1,060	1,205

(*Contd*)

(*Contd*)

(B) Application of Funds		
Gross fixed assets	1,000	1,125
Less: Accumulated depreciation	(100)	(175)
Stock in trade	100	110
Sundry debtors	50	60
Bank	10	85
	1,060	1,205

(ICWA (Final), June 1998, adapted)

Additional Information:

(i) During the year assets of another company were purchased for which consideration was discharged by issue of equity shares of 40,000. The assets purchased included Stock 5,000, fixed assets 35,000.

(ii) Depreciation for the year was 75,000.

Solution

Schedule of Changes in Net Working Capital (₹ in '000)

Particulars	Changes in NWC
Increase in Accounts Payable	(20)
Increase in Bills Payable	(10)
Increase in Stock	10
Increase in Debtors	10
Increase in Bank	75
Net Increase in NWC	65

Statement Showing Fund from Operations (₹ in '000)

Particulars	Amount
Change in Reserve and Surplus Balance	25
Adjustment for non-cash/non-operating items shown in to P & L account	
▪ Depreciation on fixed asset for the period	75
Funds from Operations	100

Fund Flow Statement (₹ in '000)

Particulars	Amount
Sources of Funds	
▪ Funds from operations	100
▪ Issue of shares for current item (stock)	5
▪ Issue of long-term debt for cash	50
Total Sources (a)	155
Applications of Funds	
Purchase of fixed asset for cash	90
Total Applications (b)	90
Increase in NWC	65

Working Notes:

(i) Issue of equity shares for fixed assets in not the item of funds flow statement but issue of shares to acquire stock of 5,000 is an item of funds flow.

(ii)

Fixed Asset A/c (at net value ₹ in '000)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	900	By Depreciation	75
To By Equity shares – Purchase	35		
To Bank –Purchase (balancing figure)	90	By Balance c/f (closing balance)	950
	1,025		1,025

(iii)

Accumulated Depreciation a/c (₹ in '000)

Particulars	Amount	Particulars	Amount
		By Balance c/f (opening balance)	100
		By Depreciation for Current Year (balancing figure)	75
To Balance b/f (Closing balance)	175		
	175		175

FUND FLOW ANALYSIS OF L&T LTD: A CASE

Facts extracted from the annual report of Larsen & Toubro (L & T) for the financial years 2007–08 and 2008–09 are presented below.

Comparative Balance Sheet of L & T Ltd

Particulars	2006–07 (₹ in crore)	2007–08 (₹ in crore)
Sources		
Share Capital	56.65	58.47
Reserve and Surplus	5,660.28	9,382.22
Employee Stock Option Plan	51.50	114.39
Loan	2,077.75	3,583.99
Deferred Tax Liability	204.88	244.33
Applications		
Fixed Assets	1,705.26	2,854.43
Capital Work-in-Process	438.78	699.00
Intangible Assets	80.65	92.01
Investment	3,104.44	6,922.26
Deferred Tax Assets	164.69	182.96
Current Assets	11,903.83	16,313.52
Less: Current Liabilities	(8,176.30)	(11,648.42)
Provisions	(1,180.13)	(2,035.42)
Net Current Assets	2,547.40	2,629.68
Preliminary Expenses	9.84	3.06

Relevant information extracted from the annual report: (₹ in crore)
(i) Interest paid ₹ 122.66, (ii) Depreciation ₹ 197.97, (iii) Amortization of intangible and fictitious assets ₹ 22.44, (iv) Provision for tax and dividend ₹ 982.05, (v) Transfer from revaluation reserve is ₹ 2.03, (vii) Interim dividend paid ₹ 56.83 (viii) Other income ₹ 675.10

SOLUTION

Schedule of Changes in Net Working Capital (₹ crore)

Particulars	Changes in NWC
Increase in Current Assets	4,409.69
Increase in Current Liabilities	(3,472.12)
Net Increase in NWC	937.57

Statement Showing Fund from Operations (₹ in '000)

Particulars	Amount
Change in Reserve and Surplus Balance	3,721.94
Adjustment for non-cash/non-operating items shown into P & L account	
■ Depreciation on fixed asset for the period	197.97
■ Interest paid	122.66
■ Amortization of intangible and fictitious assets	22.44
■ Provision for tax and dividend	982.05
■ Interim Dividend	56.83
■ Transfer to ESOP	62.89
■ Other Income	(675.10)
Funds from Operations	4,491.68

Fund Flow Statement (₹ in crore)

Particulars	Amount
Sources of Funds	
■ Funds from operations	4,491.68
■ Issue of shares cash	1.82
■ Issue of long-term debt for cash	1,506.24
■ Other Income	675.10
Total Sources (a)	6,674.84
Applications of Funds	
Purchase of fixed asset for cash	1,607.36
Purchase of Intangible assets	27.02
Interim dividend paid	56.83
Tax and dividend paid	105.58
Interest paid	122.66
Purchase of Investment	3,817.82
Total Applications (b)	5,737.27
Increase in NWC	937.57

Working Notes:

Fixed Asset Including Capital WIP A/c (at net value ₹ in crore)

Particulars	Amount	Particulars	Amount
To Balance b/f (opening balance)	2,144,04	By Depreciation	197.97
To Bank –Purchase (balancing figure)	1,607.36	By Balance c/f (closing balance)	3,553.43
	3,751.40		3,751.40

Provision A/c (₹ in crore)

Particulars	Amount	Particulars	Amount
To Tax and dividend paid (balancing figure)	105.58	By Balance b/f (opening balance)	1,220.32
To Balance b/f (closing balance)	2,096.79	By Provision made during the year	982.05
	2,202.37		2,202.37

Note: Including deferred tax assets and deferred tax liabilities (assumed to be of tax and dividend)

KEY TERMS

Gross working capital
Current vs non-current items
Net working capital
Appropriation of profits
Spontaneous financing

FINAL RECAP

- **Current items** are such items that are either represented in cash or likely to be dealt in cash within one a period of twelve month from the date of balance sheet.
- **Non-current items** are such asset and liability items that are not the current ones. Fixed, intangible and fictitious assets and long-term investment are classified as **non-current assets;** whereas long-term liabilities—loan, debentures, preference capital and equity resources are classified as **non-current liabilities.**
- **Working capital** is the requirement of funds for day-to-day activities, such as payment of different recurring expenses.
- **Spontaneous financing** means arrangement of financial resources as a matter of routine business practice, such as financing through trade credit—credit extended by suppliers, delayed payments—outstanding expenses.
- **Working capital gap** is the difference between total current assets and total current liabilities. This is also called **net working capital**.
- **Fund flow statement** is such statement that explains about the movement of funds between two balance sheet dates, i.e., a period of twelve months.
- **Flow of funds from operation**– Movement of funds relating to operating activities of the business enterprises. Tax paid is considered in this segment.
- **Flow of funds from investment activities**– Movement of funds relating to non-current assets, such as purchase and sale of these non-current assets. Interest and dividend received is also considered in this segment.
- **Flow of funds from financing activities**– Movement of funds relating to non-current liabilities and equity resources, such as raising funds from long-term sources, redemption of share/debentures and repayment of loan.
- **Sources of Funds**
  - Funds from operating activities.
  - Issue of share/debentures for cash or current assets, such as inventory/stock.
  - Sales of non-current assets—fixed assets, investment, intangible and fictitious assets for cash or resulting into an increase in other current assets.
  - Interest and dividend received in cash or short-term investment instruments.
- **Applications of Funds**
  - Redemption/conversion of share/debentures in cash or in current liabilities, such as bills/accounts payables.
  - Purchase of non-current assets—fixed assets, investment, intangible and fictitious assets for cash or resulting into a decrease in current assets or current liabilities.

- Interest and dividend paid in cash including corporate dividend tax thereon.
- Tax paid including surcharge, if any.

- **Items not included in funds flow statement**
  - Issue of shares/debentures or raising of loan for consideration received in the form of non-current assets.
  - Issue of bonus share by the conversion of reserves or profits.
  - Conversion of preference shares/debentures into equity share capital.
  - Redemption of shares/debentures for which claim is settled in non-current assets.
  - Transaction of current items having equal effect on current assets and current liabilities, such as payment to creditors in cash and sale of stock for cash.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Which one of the following is not applicable when provision for tax is considered an appropriation?
   (a) It is shown in schedule for change in net working capital.
   (b) Provision for tax made during the year is adjusted while calculating funds from operations.
   (c) Payment of tax is shown as an application.
   (d) None of these.
2. Which one of the following is applicable when proposed dividend is considered current liability?
   (a) Payment of dividend is shown as an application.
   (b) Provision for dividend made during the year is adjusted while calculating funds from operations
   (c) It is shown in schedule for change in net working capital.
   (d) None of these.
3. Which of the following is not a spontaneous source of finance?
   (a) Trade creditors
   (b) Outstanding expenses
   (c) Tax refund
   (d) Lag in payment
4. Purchase of machinery settled by the issue of debentures is
   (a) Current item
   (b) Non-current item
   (c) Non-current item not considered in funds flow statement
   (d) Current item but not considered in funds flow statement
5. Which of the following is an effect of the payment of outstanding expenses in cash?
   (a) Only current liabilities are decreased.
   (b) Only current assets are decreased.
   (c) Current liabilities as well as current assets are reduced.
   (d) None of these.
6. Long-term debentures issued five years ago with a maturity of six year from the date of issue should be considered as
   (a) Current item in the latest balance sheet
   (b) Appropriation of funds
   (c) Non-current item in the latest balance sheet
   (d) None of these

Descriptive Questions

1. 'Majority of funds generated from operations should be utilized for financing non-current assets and not for current assets.' Do you agree? Explain.
2. 'Fund flow statement indicates broad liquidity, whereas cash flow statement indicates narrow liquidity.' Explain.

Numerical Problems

1. Prepare fund flow statement from the following details:

Comparative Balance Sheet

Particulars	2009 (₹)	2010 (₹)
(A) Sources of Funds		
Share capital	3,50,000	4,50,000
General reserve	3,00,000	2,10,000
Profit and loss account	56,000	1,68,000
Sundry creditors	1,68,000	1,34,000
Provision for tax	75,000	10,000
Proposed Dividend	1,00,000	2,70,000
(B) Application of Funds		
Fixed assets	4,40,000	3,20,000
Investments	10,000	60,000
Stock	2,40,000	2,10,000
Sundry Debtors	2,10,000	4,55,000
Bank	1,49,000	1,97,000

Additional information:

(i) Investments costing ₹ 18,000 were sold during the year 2009–10 for ₹ 18,500.
(ii) Provision for tax made during the year 2009–10 was ₹ 90,000.
(iii) During the year part of the fixed asset costing (book value) ₹ 1,00,000 was sold for ₹ 1,12,000 and profit included in the profit and loss account.
(iv) Dividend paid during the year 2009–10 was ₹ 90,000.

(Adopted C.S. Final June 1999 and 2004)

2. From the following balance sheets of WWF Ltd, prepare fund flow statement and draw inferences.

Particulars	31-03-08	31-03-09	Particulars	31-03-08	31-03-09
Equity share capital	5,00,000	4,00,000	Goodwill	2,15,000	90,000
8% Preference Shares	1,50,000	1,00,000	Land and building	3,00,000	1,70,000
General Reserve	40,000	70,000	Plant and machinery	80,000	2,00,000
Profit and Loss Account	30,000	48,000	Debtors	1,60,000	2,00,000
Proposed dividend	42,000	60,000	Stock	77,000	1,09,000
Provision for corporate dividend tax	5,500	8,300	Bills Receivables	20,000	30,000
			Cash in hand	15,000	10,000
Creditors	49,500	64,700	Cash at bank	10,000	8,000
Bills Payables	20,000	16,000			
Provision for tax	40,000	50,000			
	8,77,000	8,17,000		8,77,000	8,17,000

Additional Information:

(i) ₹ 30,000 income tax was paid during the year 2008–09.

(ii) Depreciation of ₹ 10,000 and ₹ 1,20,000 have been charged on plant and machinery and on land and building, respectively for the year 2008–09.

(iii) A portion of building was sold at book value.

(iv) An interim dividend of ₹ 25,000 has been paid in the year 2008–09 along with ₹ 3,000 for corporate dividend tax thereon.

(Rajasthan University, MBA, Part II, 2006)

3. From the following details, prepare fund flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Sources of Funds		
Capital	1,25,000	1,63,000
Creditors	40,000	34,000
Loan from B	30,000	nil
Loan from PNB	35,000	50,000
(B) Application of Funds		
Cash	11,000	8,000
Debtors	29,000	49,000
Inventory	30,000	20,000
Plant and Machinery	85,000	60,000
Premises	35,000	60,000
Land	40,000	50,000

During the year, a machine costing ₹ 20,000 accumulated depreciation on it ₹ 13,000 was sold for ₹ 15,000. The opening and closing balance, respectively of provision for depreciation was ₹ 35,000 and ₹ 50,000. Net profit for the year was ₹ 80,000. **(RTU, Kota, MBA, Sem-I, Feb. 2009, adapted)**

4. From the following details, prepare a statement showing funds from operating activities for the year ending March 2010:

(i)	Preliminary expenses written off	₹ 15,000
(ii)	Loss on sale of plant	₹ 1,250
(iii)	Provision for bad debts	₹ 2,750
(iv)	Provision for tax	₹ 1,50,000
(v)	Depreciation on fixed assets	₹ 17,500
(vi)	Profit on sale of investment	₹ 7,500
(vii)	Transfer to dividend equalization reserve	₹ 17,500
(viii)	Net profit for the year (before provision for tax)	₹ 10,00,000

(IABM, RAU, MBA, Part-I, 2007, adapted)

5. From the following balance sheets and additional information, prepare fund flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Sources of Funds		
Equity Share Capital	5,00,000	6,00,000
Debentures	3,70,000	3,50,000
Tax Payable	80,000	43,000
Accounts Payable	96,000	1,92,000
Dividend Payable	57,000	35,000
Bank Overdraft	27,000	45,000

(*Contd*)

(*Contd*)

(B) Application of Funds		
Fixed Assets	5,50,000	7,00,000
Investment	2,50,000	1,00,000
Stock in Trade	2,30,000	3,15,000
Accounts Receivables	70,000	1,40,000
Cash in Hand	30,000	10,000

Additional Information:

(i) During the year depreciation charged to Profit and Loss Account was ₹ 1,00,000.

(ii) Tax paid during the year was ₹ 87,000 (iii) Interest paid on debentures ₹ 38,500.

(iv) During the year ₹ 22,000 was received as dividend on investment and credited to profit and loss account.

6. From the following balance sheets and additional information, prepare fund flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Sources of Funds		
Equity Share Capital	4,00,000	4,00,000
8% Preference Share Capital	50,000	1,00,000
General Reserve	60,000	70,000
P & L Appropriation a/c	50,000	48,000
Creditors	77,000	1,33,000
Proposed Dividend	40,000	16,000
Outstanding Expenses	40,000	50,000
(B) Application of Funds		
Goodwill	1,15,000	95,000
Land and Building	2,00,000	1,70,000
Plant	80,000	2,00,000
Debtors	1,60,000	2,00,000
Stock	77,000	1,04,000
Bills Receivable	20,000	20,000
Cash in hand	15,000	10,000
Cash at bank	50,000	18,000

Additional Information:

(i) Depreciation of ₹ 10,000 and ₹ 30,000 has been provided on plant and land and building, respectively.

(ii) An interim dividend of ₹ 15,000 was paid during the year and the final dividend for the year was ₹ 35,000.

(iii) Tax paid during the year was ₹ 45,000.

(iv) During the year preference shares were issued at 5% discount that was written off to profit and loss account.

Answers

Multiple Choice Questions

1. (a), 2. (c), 3. (c), 4. (c), 5. (c), 6. (a)

Numerical Problems

Problem No.	Fund from Operation	NWC	Total Sources	Total Applications
1	3,79,500	+ 2,97,000	6,10,000	3,13,000
2	3,71,000	+ 43,000	4,91,000	4,48,000
3	1,00,000	+13,000	1,30,000	1,17,000
4	10,43,750	na	na	na
5	1,66,500	43,000	4,38,500	3,95,500
6	1,41,500	(36,000)	1,89,000	2,25,000

CASE

Drawing Inferences from Funds Flow Statement

Sigma International Ltd (SIL) provides the following balance sheet for the year ending March 31, 2009:

Balance Sheet as on March 31, 2009

Particulars	Previous Year
(A) Sources of Funds	
Equity Share Capital	4,00,000
8% Preference Share Capital	50,000
General Reserve	60,000
P & L Appropriation a/c	50,000
Creditors	77,000
Proposed Dividend	40,000
Outstanding Expenses	40,000
(B) Application of Funds	
Goodwill	1,15,000
Land and Building	2,00,000
Plant	80,000
Debtors	1,60,000
Stock	77,000
Bills Receivable	20,000
Cash in hand	15,000
Cash at bank	50,000

During the year 2009–10, the following transactions took place:

(i) Cash sales ₹ 5,00,000 and credit sales ₹ 2,56,000.

(ii) Bad debts written off during the year were ₹ 2,300 and discount allowed to customers was ₹ 700. Customers paid ₹ 75,000 during the year.

(iii) During the year cash purchase was ₹ 90,000 and credit purchase was ₹ 1,34,000; ₹ 67,000 was paid to suppliers.

(vi) 23,000; 45,000; 56,000; and 20,000 was paid as manufacturing, administrative, selling and interest on loan for the year.

(v) During the year company paid interim dividend of ₹ 45,000 and final dividend of ₹ 25,000. The company also paid tax of ₹ 67,000.

(vi) ₹ 45,000 was transferred to general reserve during the year.

(vii) Depreciation on land and building was provided ₹ 24,000.

(viii) Goodwill written off ₹ 15,000.

(ix) During the year equity shares of face value ₹ 1,50,000 were issued at 10% premium, whereas preference shares were redeemed at par.

(x) Dividend on preference shares was also paid.

Discussion Questions

1. Prepare a balance sheet for the year ending March 31, 2010 and prepare a fund flow statement.
2. Carry out inferences from fund flow statement.

CHAPTER

9

Cash Flow Analysis

Learning Objectives

After reading this chapter, you will be able to

- Identify the provisions of accounting standard and cash flow statement
- Understand the mechanism of preparing cash flow statement
- Gain insight into the modus operandi for analysing cash flow statement

Liquidity vs Profitability

Books of accounts of Aaditya International Limited (AIL) disclosed sufficient cash and cash equivalents for the year 2009–10. While looking at such a huge surplus cash and with a hope of having extra-ordinary profits from commodity market and stock market, the CEO of the company, Aaditya siphoned the funds for investment in these markets. By the end of the year, the markets had shown a southward movement but the CEO was hopeful of compensating the loss of market activities from the core business activities and he expected a surplus cash in the business. With this view, he undertook a decision to give cash bonus and to invest the funds for the acquisition of a new business empire.

All these decisions created liquidity crunch in the business and by the end of January 2011, the company found it difficult to pay for even routine expenses. The CFO of the company analysed the sources and applications of cash for the previous year and reported that the company was having ample surplus cash because of the fact that it had raised a loan from bank for modernization and sold off a piece of land at a good market value. But due to operating loss, the operating activities had shown outflow of cash. The CFO explained to BOD about the inflow and outflow of cash and cash equivalents with the help of cash flow statement. And further he illustrated "liquidity does not mean profitability" as interpreted by the CEO.

CASH FLOW STATEMENT

Introduction

A **cash flow statement** explains the changes in the cash balance, including cash equivalent between two consecutive financial years. It depicts sources of cash and application of cash during 12 months that were covered between two financial years. **Cash balance** including cash equivalent (herein after both referred as cash balance) including cash held in office, bank balance, bank overdraft and balance in cash credit account of the business firm. As balance sheet is a statement of affairs reporting the static position of assets and liabilities on the reporting date, therefore, the balance of cash and its equivalents shown in the balance sheet is the position on the balance sheet date and it does not reflect the flow of cash between two balance sheet dates. Therefore, the main **objective** of preparing and presenting cash flow statement is to have a detailed overview of the flow of cash, i.e., sources of cash and applications of cash, a **cash flow statement** is prepared.

Cash flow statement explains change in cash and cash equiva-lents between two consecutive financial years.

Definition

Cash flow statement explains the changes in the cash balance that might have taken place during the previous 12 month-period. Cash balance includes cash and cash equivalents also. It clearly depicts sources of cash and applications of cash.

Although cash flow statement is based on historical data and its preparation and interpretation is not more than an investigation of the past records and activities affecting the flow of cash and its equivalents, the history is the best source to predict about the future. Cash flow statement can be prepared using balance sheets of two previous financial years or it can be prepared using latest balance sheet and projected balance sheet to reflect the expected sources and application of cash during the coming financial year. In the later case, it works as a tool to predict about the future sources and applications of cash and in the earlier case, it is just the investigation of the past records.

Presentation of Cash Flow Statement and Accounting Standard, AS-3

This accounting standard has been enforced from April 2001. It is mandatory for all the companies whose securities are listed on a recognized stock exchange. The provisions of AS-3 require that a business enterprise must disclose the flow of cash that took place between the recent financial year and the financial year immediately preceding it. The modus operandi as discussed in AS-3 (now to be replaced by Ind AS 07) is similar to the modus operandi provided in International Accounting Standard, IAS-7. Accordingly, the cash flow statement should disclose the following:

Cash Flow from Operating Activities

Cash flow from operating activities refers to the quantum of cash generated/used in the core activities—manufacturing, sales and service proving by a business enterprise. While arriving at this, the revenue items (income as well as expenses) that are considered for calculating net income are considered. **Interest and dividend** paid and received both are not included in it; rather these are included in the rest of the activities.

However, for a finance company, bank payment and receipt of interest and dividend are the part of cash flow from operating activities.

Cash flow from operating activities depicts cash generated or used in the core business activities.

Cash Flow from Investing Activities

Investment activities refer to the deployment of cash resources for the acquisition and disposal of assets other than current assets. These include the flow of cash for capacity building to generate future income for the business enterprises. This primarily includes the cash transaction (both buying and selling) about fixed assets, intangible assets and investments, etc. **Interest and dividend received** on investment are considered in this segment.

Cash flow from investment activities depicts flow of cash relating to non-current assets—purchase and sale of these assets.

Cash Flow from Financing Activities

Financing activities are represented by long-term liabilities that are employed to generate finance for the business enterprises. These include the flow of cash relating to the non-current liabilities, i.e., long-term liabilities—owner's capital and borrowed capital. Inflow as well as outflow of cash on account of these activities is considered here. **Interest and dividend paid** are included in this segment.

The analysis of these three segments helps in carrying the interpretation about not only short-term liquidity position but also about investment wisdom of the business manager. This also helps in evaluating financial planning of the organization.

Cash flow from financing activities depicts flow of cash relating to non-current liabilities—issue of shares and repayment of loan/share or debentures.

Structure of Cash Flow Statement as Per AS-3

A well-structured and properly presented cash flow statement helps not only in the proper interpretation but at the same time facilitates easy decision-making by different stakeholders. The modus operandi used in the preparation of cash flow statement has been prescribed in AS-3 stipulated by ICAI. However, its proper presentation by segmenting the flow of cash in different activity areas enhances the usefulness of the statement. The provisions of AS-3 provide for two methods for preparing the statement: (a) direct method and (b) indirect method. The core difference between these two methods lies in the calculation of flow of cash from operating activities.

Extra-ordinary Items and AS–3

Accounting Standard AS-3 specifies that in each cash flow statement, the inflow and outflow of cash resulting from extraordinary items should be shown separately so that a clear interpretation of these items can be analysed while interpreting the results of cash flow statement. The extraordinary items relating to operating, financing and investing activities should be shown separately for each activity. However, IAS-7 does specify such disclosure.

Non-cash Financing and Investing Transactions and AS-3

While preparing cash flow statement, non-cash financing items, such as conversion of debentures into equity or issue of bonus shares should not be considered. Similarly, non-cash investing items, such as purchase of assets for consideration other than cash, should not be considered. However, accounting standard specifies that these items should be disclosed elsewhere in the final/annual accounts.

Issue of securities for consideration other than cash is not included in the cash flow statement.

Foreign Currency Cash Flows and AS-3

A business enterprise having inflow and outflow of foreign currency on account of business transactions should report the effect of such transaction separately in the cash flow statement. The provisions of accounting standard provide that foreign currency transaction should be converted into reporting currency in which financial statement of the business enterprises are presented by considering the following facts:

(i) The exchange rate to be applied for converting foreign currency transaction into reporting currency should be the rate as on the date of inflow/outflow of cash.

(ii) If a rate different than the rate suggested in (i) above is used then the effect of such rate on cash and cash equivalent should be disclosed separately.

(iii) Effect of exchange rate change on the cash and cash equivalent should be adjusted while preparing the cash flow statement. The effect of this difference is to be shown in the reconciliation statement.

(iv) Unrealized gain or loss related to operating, investing and financing activities should be shown separately under appropriate heading.

While calculating cash flow from operating activities, unrealized gain on account of exchange rate difference is to be deducted from the net profit and unrealized loss on account of exchange rate is to be added to net profit.

Unrealized gain or loss on account of foreign currency cash flow is a notional gain or loss. Hence, its effect is eliminated while preparing the cash flow statement.

ESTIMATION OF CASH FLOW FROM OPERATING ACTIVITIES

Profit and loss account of an enterprise reflects the amount of profit earned during a particular financial year. The profit includes operating as well as non-operating profit. As income statement is prepared on accrual basis, it does not reflect the inflow and outflow of cash during this financial period. The amount of profit does not cast any reflection on the liquidity of the business enterprises—the amount of cash generated from operating activities. To arrive at the amount of cash flow from operating activities, one needs to carry out reworking on profit and loss statement/account. Then only the accurate amount of cash flow from operating activities can be ascertained. *This reworking is practically the translation of books of account from accrual basis to cash basis.* Cash flow from operating activities is ascertained by using any one of the following two methods.

Direct Method

Under this method, cash flow from operating activities is reported in the form of receipts and payments resulting from operating activities by taking the relevant transactions from cash book. Here sales, cash cost (excluding non-cash costs, such as depreciation and amortization) of sales, changes in inventory, cash collection from debtors and cash payment to creditors are considered while arriving at the cash from operating activities.

Ascertaining Cash Collected from Sales

In this, buyers market every business enterprises, sells goods on credit so as to maximize profits by achieving higher level of sales volume. This phenomenon of selling on credit creates a difference between the amount of sales and the cash realized from sales. Practically, out of the total credit sales, certain amount remains due for collection at the end of the financial year that is collected from debtors in the next financial year. At the same time, certain amount does not get recovered on account of bad debts, discount and allowances. To ascertain the amount of cash collected from sales, receivables account is prepared.

Accounts Receivables (Debtors + Bills receivables) A/C

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening Balance To Sales a/c (credit sales)		By Bank/Cash a/c By Sales return (credit customers only) By Discount and Allowance By Bad Debts By Closing Balance	

When all the other details are available except the amount collected cash from debtors then it is worked out as missing figure on memorandum basis. The total cash collected from sales includes both the amount of cash sales and cash collected from accounts receivables.

Ascertaining Cash Paid for Purchase

Buying goods on credit is like a trade practice that facilitates smooth working of business activities. At the same time, it is a spontaneous source of working capital finance. Due to the trade credit facility provided by the suppliers, the amount of purchase reflected in the income statement does not necessarily mean the amount of cash paid as certain amount remains unpaid at the end of the year that becomes trade creditor and to be paid in the next financial year. The amount of cash paid for purchase includes cash purchase and the net payment made to credit suppliers. The amount paid to the credit suppliers is ascertained by making memorandum creditors account, if the actual account is not available.

Accounts Payable (Creditors + Bills payable) a/c

Particulars	Amount (₹)	Particulars	Amount (₹)
To Bank/Cash a/c To Purchase return (credit customers only) To Discount and Allowance To Closing Balance		To Opening Balance To Purchase a/c (credit sales)	

Ascertaining Cash Operating Expenses

Operating expenses include conversion cost, administrative, selling and distribution expenses incurred during a period in executing operating activities. The operating expenses are broadly classified into two categories, i.e., (a) cash-operating expenses and (b) non-cash operating expenses. The latter includes such expenses that are not paid in cash at all. These are merely the result of accounting entry to have accurate profit by following matching concept. Expenses, such as depreciation, amortization of intangible and fictitious assets and other losses written off—all these are shown in the income statement to have a clear view about the profit but do not result into an outflow of cash. The earlier includes all those expenses that are paid in cash and do not result from merely passing a journal entry. These have either paid in cash or due but not paid so far. The amount of cash-operating expenses is ascertained as shown in Table 9.1.

TABLE 9.1 Calculation of Cash-Operating Expenses

Particulars	Amount (₹)
Total Operating Expenses (including direct expenses) as shown in the profit and loss account **Add:** ■ Decrease in outstanding expenses ■ Increase in pre-paid expenses	

(*Contd*)

(*Contd*)

Less: ■ Increase in outstanding expenses ■ Decrease in pre-paid expenses ■ Non-cash operating expenses ■ Depreciation written off ■ Intangible/fictitious assets written off	
Cash-Operating Expenses	

Table 9.2 illustrates the *computation of cash from operating activities, using direct method.*

TABLE 9.2 Computation of Cash from Operating Activities—Direct Method

Particulars	Amount (₹)
Cash collection from the sale of goods and services **Add:** Cash receipts from royalty, commission, fee and other revenue from core business activities, i.e., operating activities **Less**: ■ Cash payment to the suppliers of goods and services ■ Payment of cash to employees either as salary, bonus, remuneration or payment for fringe benefits provided to employees ■ Payment of cash on behalf of employees, such as insurance premium for the policies of employees or loan repayment for the loan taken by employees ■ Payment of operating expenses in cash ■ Cash payment/refund of taxes, unless related to financing and investing activities ■ Cash receipts and payment related to futures, forward and option contracts, unless these are correlated to financing or investing activities ■ Other cash receipts and payment if these cannot be linked to financing or investing activities.	
Cash Flow from Operating Activities	

EXAMPLE 1 From the following information, prepare cash from operating activities using the direct method.

Profit and Loss Account

For the year ended March 31, 2009

Particulars		Amount (₹)	Particulars	Amount (₹)
To Opening stock		60,000	By Sales of goods	
To Purchase of goods			■ In cash	2,00,000
■ In cash		30,000	■ On credit	1,20,000
■ On credit		1,50,000	By Purchase return	6,000
To Direct Expenses		4,000		
To Sales return		14,000	By Closing Stock	48,000
To Gross Profit c/d		1,16,000		
		3,74,000		3,74,000
To Depreciation		32,000	By Gross Profit b/d	1,16,000
To Preliminary Expenses written off		5,000	By Investment Income	40,000
To Goodwill written off		12,000	By Profit on sale of Investment	8,000
To Salaries and Wages Paid	8,000		By Discount from Creditors	2,000
Add: Outstanding	1,000	9,000		
To Rent paid	6,000			
Less: Pre-paid	600	5,400		

(*Contd*)

(*Contd*)

To Stationery and postage	1,000		
To Director's Fees	3,500		
To Managerial Remuneration	4,500		
To Bad Debts	1,200		
To Provision for Doubtful Debts	3,000		
To Provision for Discount on Debtors	1,000		
To Discount	300		
To Selling Expenses	3,000		
To Interest on Loan	3,600		
To Provision for tax	4,500		
To Net Profit c/d	77,000		
	1,66,000		1,66,000
To Transfer to General Reserve	10,000	By Balance b/d	25,300
To Interim Dividend	8,000	By Net Profit for the year	77,000
To Proposed Final Dividend	27,200		
To Balance c/d	57,100		
	1,02,300		1,02,300

Other Information

Particulars	Balance on 31-03-08	Balance on 31-03-09
Sundry Debtors	23,000	22,000
Sundry Creditors	8,500	11,100
Provision for Tax	3,000	3,800

Solution

Computation of Cash Flow from Operating Activities—Direct Method

Particulars	Details	Amount (₹)
(a) Cash from sale of goods		
■ Cash sales	2,00,000	
■ Collection from debtors[1]	1,05,500	3,05,500
(b) Cash purchase of goods		
■ Cash purchase	(30,000)	
■ Payment to creditors[2]	(1,39,400)	(1,69,400)
(c) Payment of Operating Expenses		
■ Direct expenses	(4,000)	
■ Rent	(6,000)	
■ Stationery and postage	(1,000)	
■ Selling expenses	(3,000)	(14,000)
(d) Payment to Employees		
■ Salaries and wages	(8,000)	
■ Director's fees	(3,500)	
■ Managerial remuneration	(4,500)	(16,000)
Cash Flow from Operating Activities before Tax and Extraordinary Items		1,06,100
Less: Tax Paid (3000 + 4500 – 3800)		3,700
Cash Flow from Operating Activities after Tax and Extra-ordinary Items		1,02,400

[1] = 23,000 + 1,20,000 – 14,000 – 1,200 – 300 – 22,000
[2] = 8,500 + 1,50,000 – 6,000 – 2,000 – 11,100

Indirect Method

Under this method of cash flow from operating activities, the net profit for the year is adjusted for non-cash items and working capital items, such as changes in inventory, receivable and payables including outstanding expenses. The enterprises preparing this statement using direct method are required to make a **reconciliation statement** to reconcile the net profit and the cash generated from the operating activities. Table 9.3 illustrates the *computation of cash from operating activities, using indirect method.*

TABLE 9.3 Computation of Cash from Operating Activities—Indirect Method

Particulars	Amount (₹)
Net Profit before Tax and Extraordinary Items	....
(a) Adjustment for non-cash/non-operating items debited to P & L account	....
■ Depreciation on fixed asset for the period	....
■ Amortization of intangible and fictitious assets	....
■ Transfer to reserves and provisions	....
■ Interest on loan (both long-term and short-term)	....
■ Loss on sale of assets	....
■ Loss on account of conversion of foreign exchange transactions	....
■ Loss on revaluation of assets	....
■ Loss of capital nature	....
(b) Adjustment for non-cash/non-operating items credited to P & L account	....
■ Interest and dividend income on non-trading investment	(...)
■ Gain from non-trading derivative transactions	(...)
■ Profit from the sale of assets other than current assets	(...)
■ Profit on revaluation of assets	(...)
Cash Flow from Operating Activities before adjustment for working capital items	(...)
(c) Adjustment for working capital items (other than cash and cash equivalents)	
■ Increase in current assets	(...)
■ Decrease in current assets	....
■ Increase in current liabilities and provisions (considered current liabilities)	....
■ Decrease in current liabilities and provisions (considered current liabilities)	(...)
Cash flow from operating activities before tax and extraordinary items	(...)
Income tax paid	(...)
Income tax refund	....
Net Cash flow from operating activities	... (...)

Example 2 Taking the data of Example 1, compute cash flow from operating activities using the indirect method.

Solution

Computation of Cash Flow from Operating Activities—Indirect Method

Particulars	Details	Amount (₹)
Net Profit for the year		77,000
(a) Adjustment for non-cash and non-operating items debited to Profit and Loss Account		
■ Depreciation	32,000	
■ Preliminary expenses written off	5,000	
■ Goodwill written off	12,000	
■ Interest on loan	3,600	
■ Provision for tax	4,500	57,100

(*Contd*)

(*Contd*)

(b) Adjustment for non-cash and non-operating items credited to Profit and Loss Account		
■ Investment Income	(40,000)	
■ Profit on sale of investment	(8,000)	(48,000)
Cash Flow from Operating Activities before Adjustment for Working Capital Items		86,100
Adjustment for working capital items		
■ Decrease in Stock	12,000	
■ Decrease in Debtors	1,000	
■ Increase in Pre-paid Expenses	(600)	
■ Increase in Creditors	2,600	
■ Increase in Outstanding Expenses	1,000	
■ Increase in Provision for Doubtful Debts	3,000	
■ Increase in provision for Discount on Debtors	1,000	20,000
Gross Cash Flow from Operating Activities after Adjustment for Working Capital Items		1,06,100
Less: Tax Paid		3,700
Net Cash Flow from Operating Activities		**1,02,400**

Note: Bad debts is covered under change in debtors.

ESTIMATION OF CASH FLOW FROM INVESTING ACTIVITIES

Investing activities include purchase and sale of fixed assets, intangible assets, short-term and long-term investments of non-trading nature. Flow of cash on account of investing activities includes both the inflow and outflow of cash on account of sale and purchase, respectively of these assets. For this, the convenient mechanism is to prepare an asset account depicted as follows.

Fixed Asset Account (at net value)

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening Balance To Bank/Cash—Cash Purchase of asset To Vendor's a/c—Credit purchase of asset To Profit & Loss a/c (Profit on sale of asset) To General/ Revaluation Reserve a/c (actual or revaluation profit transferred to reserve a/c)		By Depreciation for the year By Bank/Cash—Cash Sale of Asset By Purchaser's a/c—Credit sale of asset By Profit & Loss a/c (loss on sale of asset) By General Reserve a/c (loss on sale of asset or asset written off) By Closing Balance	

The fixed asset account can be prepared at the gross value also. In such cases, one needs to prepare accumulated depreciation account as well.

Fixed Asset Account (at gross value)

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening Balance To Bank/Cash—Cash Purchase of asset To Vendor's a/c—Credit purchase of asset To Profit & Loss a/c (Profit on sale of asset) To General/ Revaluation Reserve a/c (actual or revaluation profit transferred to reserve a/c)		By Accumulated Depreciation a/c—Accumulated depreciation of the asset sold. By Bank/Cash—Cash Sale of Asset By Purchaser's a/c—Credit sale of asset By Profit & Loss a/c (loss on sale of asset) By General Reserve a/c (loss on sale of asset or asset written off) By Closing Balance	

Accumulated Depreciation/ Provision for Depreciation A/C

Particulars	Amount (₹)	Particulars	Amount (₹)
To Asset/Asset Disposal a/c (Accumulated depreciation of asset sold) To Closing Balance		By Opening Balance By Profit & Loss a/c—Current year's depreciation	

On the same pattern, the account for intangible and fictitious assets is prepared. The account for investment is also prepared to ascertain the flow of cash from non-trading investment activities. In this account depreciation is not shown; however, capitalized amount of dividend or interest is shown to the credit of this account. Apart from this **interest and dividend received** from non-trading investment is shown as inflow of cash.

ESTIMATION OF CASH FLOW FROM FINANCING ACTIVITIES

Financing activities involve the dealing about long-term liabilities, i.e., inflow and outflow of cash on account of raising loan or issuing securities and repayment of loan as well as redemption of securities. This includes issue of securities in lieu of cash only. If securities are issued for a consideration other than cash then it does not form the part of cash flow statement. The issue of securities might be at par, at premium or at a discount. At the same time, the company has to incur certain floatation expenses. One needs to consider net cash inflow after adjusting discount, premium and floatation expenses. Similarly, outflow of cash should include net payment for the redemption of securities or repayment of loan.

The important item in the financing activities is the outflow of cash on account of **interest and dividend payment**. It is important as it has greater impact on the liquidity of the business enterprises. Payment of dividend and interest is shown as outflow of cash resources.

Rrecap 1

So far, we have discussed the following topics:

Cash Flow Statement:

- Introduction
- Definition
- Presentation Of Cash Flow Statement and Accounting Standard AS-3 and IAS-7
- Structure Of Cash Flow Statement As Per AS-3
- Foreign Currency Cash Flows and AS-3
- Estimation of Cash Flow from Operating Activities
- Direct Method
- Indirect Method
- Estimation of Cash Flow from Investing Activities
- Estimation of Cash Flow from Financing Activities

Self-assessment 1

1. Discuss the provisions of AS-3 regarding estimation of cash from operating activities.
2. How is the effect of foreign current cash flow given as per AS-3?
3. Explain direct and indirect methods of calculating cash from operating activities.

The following topics will be delved into next:

- Final Reporting of Cash Flow Statement
- Stakeholders and Cash Flow Statement
- Business Executives and Analysis of Cash Flow Statement
- Bank and Analysis of Cash Flow Statement
- Trade Creditors/Suppliers and Analysis of Cash Flow Statement
- Debenture Holders and Analysis of Cash Flow Statement
- Employees and Analysis of Cash Flow Statement
- Modus Operandi to Carry Out Interpretation from Cash Flow Statement
- Symptoms of Best Cash Flow Statement
- Symptoms of Average Cash Flow Statement
- Symptoms of Poor Cash Flow Statement
- Case Study

FINAL REPORTING OF CASH FLOW STATEMENT

The end result of the marathon exercise of preparing cash flow statement is the assembly of three segments of flow of cash discussed in the previous section. The final presentation of cash flow statement is done as follows:

Cash Flow Statement

Particulars	Details	Amount (₹)
A. Cash Flow from Operating Activities	….	
Net Profit before Tax and Extraordinary Items (change in surplus or P & L Appropriation A/c)	….	
	….	
(a) Adjustment for non-cash/non-operating items debited to P & L account	….	
■ Depreciation on fixed asset for the period	….	
■ Amortization of intangible and fictitious assets		

(*Contd*)

(*Contd*)

■ Transfer to reserves and provisions	....	
■ Interest on loan (both long-term and short-term)	....	
■ Loss on sale of assets	....	
■ Loss on account of conversion of foreign exchange transactions	....	
■ Loss on revaluation of assets	....	
■ Loss of capital nature	....	
(b) Adjustment for non-cash/non-operating items credited to P & L account		
■ Interest and dividend income on non-trading investment	(...)	
■ Gain from non-trading derivative transactions	(...)	
■ Profit from the sale of assets other than current assets	(...)	
■ Profit on revaluation of assets	(...)	
Cash Flow from Operating Activities before adjustment for working capital items		
(c) Adjustment for working capital items (other than cash and cash equivalents)	(...)	
■ Increase in current assets	(...)	
■ Decrease in current assets	....	
■ Increase in current liabilities and provisions (considered current liabilities)	....	
■ Decrease in current liabilities and provisions (considered current liabilities)	(...)	
Cash flow from operating activities before tax and extraordinary items	(...)	
Income tax paid	(...)	
Income tax refund	....	
Net Cash Flow from Operating Activities	... (...)	... (...)
B. Cash Flow from Investing Activities		
■ Net sale of non-current assets for cash and cash equivalents	...	
■ Net purchase of non-current assets for cash and cash equivalents	(...)	
■ Interest/dividend income from non-trading investment	...	
Net Cash Flow from Investing Activities	... (...)	... (...)
C. Cash Flow from Financing Activities		
■ Net issue proceeds from the issue of securities for cash and cash equivalents	...	
■ Redemption of securities for cash and cash equivalent	(...)	
■ Repayment of loan in cash and cash equivalent	(...)	
■ Payment of dividend and interest including tax thereon	(...)	
Net Cash Flow from Financing Activities	... (...)	... (...)
Total flow (change) of cash from all the activities during the year		...(...)
Add: Opening Balance of Cash and Cash Equivalent		
■ Cash Balance	...	
■ Bank Balance	...	
■ Bank Overdraft	(...)	...(...)
Closing Balance of Cash and Cash Equivalent		...(...)

EXAMPLE 3 From the following details, prepare cash flow statement.

Comparative Balance Sheet

Particulars	Previous Year	Current Year
A. Assets		
Fixed Assets (net)	90,000	87,000
Debtors	43,000	40,000
Inventory	49,000	58,000
Pre-paid rent	3,000	5,000
Cash Balance	75,000	97,000
Total Assets	**2,60,000**	**2,87,000**

(*Contd*)

(*Contd*)

B. Liabilities		
Equity Share Capital	1,30,000	1,40,000
Reserves and Surplus	84,000	1,05,000
Creditors	20,000	15,000
Debentures	12,000	20,000
Outstanding Operating Expenses	11,000	3,000
Unpaid Wages	3,000	4,000
Total Liabilities	**2,60,000**	**2,87,000**

Additional Information:

Balance of accumulated depreciation account as on previous year was ₹ 16,000 and as at the end of current year was ₹ 19,000.

SOLUTION Here only the balance sheet has been provided. Therefore, the change in the reserve and surplus reflects profit for the year.

Cash Flow Statement

Particulars	Details	Amount (₹)
A. Cash Flow from Operating Activities		
Change in Reserve and Surplus Balance		**21,000**
(a) Adjustment for non-cash/non-operating items debited to P & L account		
■ Depreciation on fixed asset for the period	3,000	
(b) Adjustment for non-cash/non-operating items credited to P & L account	Nil	3,000
Cash Flow from Operating Activities before adjustment for working capital items		24,000
(c) Adjustment for working capital items (other than cash and cash equivalents)		
■ Increase in inventory	(9,000)	
■ Decrease in debtors	3,000	
■ Increase in pre-paid rent	(2,000)	
■ Decrease in creditors	(5,000)	
■ Decrease in outstanding operating expenses	(8,000)	
■ Increase in unpaid wages	1,000	(20,000)
Cash flow from operating activities before tax and extraordinary items		4,000
Less: Income tax paid	Nil	Nil
Net Cash Flow from Operating Activities		**4,000**
B. Cash Flow from Investing Activities		
■ Net sale of non-current assets for cash and cash equivalents		
■ Net purchase of non-current assets for cash and cash equivalents		
■ Interest/dividend income from non-trading investment		Nil
Net Cash Flow from Investing Activities		
C. Cash Flow from Financing Activities		
■ Net issue proceeds from the issue of shares for cash	10,000	
■ Net issue proceeds from the issue of debentures for cash	8,000	
Net Cash Flow from Financing Activities		**18,000**
Total flow (change) of cash from all the activities during the year		**22,000**
Add: Opening Balance of Cash and Cash Equivalent		
■ Cash Balance	75,000	75,000
Closing Balance of Cash and Cash Equivalent		**97,000**

Working Notes:

Accumulated Depreciation A/C

Particulars	Amount (₹)	Particulars	Amount (₹)
To Asset/Asset Disposal a/c (Accumulated depreciation of asset sold)	Nil	By Opening Balance	16,000
To Closing Balance	19,000	By Profit & Loss a/c—Current year's depreciation (Balancing figure)	3,000
	19,000		19,000

EXAMPLE 4 The following additional information and balance sheet are of Sigma Ltd.

Additional Information:

(a) During the current year, dividend paid was ₹ 52,000 tax paid was ₹ 24,000.

(b) During the current year, one machine having original cost ₹ 20,000 and accumulated depreciation ₹ 7,000 was sold for ₹ 11,000. Prepare cash flow statement.

Comparative Balance Sheet

Particulars	Previous Year	Current Year
A. Sources of Funds		
Capital	2,80,000	2,80,000
Reserves	16,000	18,000
Loan from Bank	60,000	50,000
Loan from Associated company	Nil	40,000
Current liabilities	72,000	82,000
Accumulated depreciation on Machine	54,000	72,000
B. Application of Funds		
Bank Balance	8,000	7,200
Debtors	70,000	76,800
Stock	50,000	44,000
Land	40,000	60,000
Building	1,00,000	1,10,000
Machine at cost	2,14,000	2,44,000

SOLUTION Here only the balance sheet has been provided. Therefore, the change in the reserve and surplus reflects profit for the year.

Cash Flow Statement

Particulars	Details	Amount (₹)
A. Cash Flow from Operating Activities		
Change in Reserve and Surplus Balance		**2,000**
(a) Adjustment for non-cash/non-operating items debited to P & L account		
■ Depreciation on fixed asset for the period	25,000	
■ Loss on sale of machine	2,000	
■ Dividend paid	52,000	
■ Tax Provision for the year	24,000	
(b) Adjustment for non-cash/non-operating items credited to P & L account	Nil	1,03,000

(*Contd*)

(*Contd*)

Cash Flow from Operating Activities before adjustment for working capital items		1,05,000
(c) Adjustment for working capital items (other than cash and cash equivalents)		
■ Increase in debtors	(6,800)	
■ Decrease in stock	6,000	
■ Increase in current liabilities	10,000	9,200
Cash flow from operating activities before tax and extraordinary items		1,14,200
Less: Income tax paid		24,000
Net Cash Flow from Operating Activities		**90,200**
B. Cash Flow from Investing Activities		
■ Net sales proceeds of Machine	11,000	
■ Purchase of Machine	(50,000)	
■ Net purchase of Land	(20,000)	
■ Net purchase of Building	(10,000)	
Net Cash Flow from Investing Activities	(69,000)	**(69,000)**
C. Cash Flow from Financing Activities		
■ Repayment of Loan from Bank	(10,000)	
■ Loan raised from associated company	40,000	
■ Dividend paid	(52,000)	
Net Cash Flow from Financing Activities	(22,000)	**(22,000)**
Total flow (change) of cash from all the activities during the year		**(800)**
Add: Opening Balance of Cash and Cash Equivalent		
■ Bank Balance	8,000	8,000
Closing Balance of Cash and Cash Equivalent		**7,200**

Working Notes:

1. Accumulated Depreciation A/C

Particulars	Amount (₹)	Particulars	Amount (₹)
To Machine a/c (Accumulated depreciation of asset sold)	7,000	By Opening Balance	54,000
		By Profit & Loss a/c—Current year's depreciation	25,000
To Closing Balance	72,000	(Balancing figure)	
	79,000		79,000

2. Machine A/C (at gross value)

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening Balance	2,14,000	By Accumulated depreciation a/c	7,000
To Bank—Purchase (Balancing figure)	50,000	By Profit & Loss a/c —(loss)	2,000
		By Bank a/c (sale of machine)	11,000
		By Closing Balance	2,44,000
	2,64,000		2,64,000

3. Since the balance of tax provision and dividend do not appear in the balance, hence, the amount paid on account of these items is equal to the amount charged to P & L account during the year.
4. There is no information about depreciation on building. Hence, the net increase in the balance of building has been taken as purchase.

EXAMPLE 5 From the following balance sheets and additional information, prepare cash flow statement.

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Sources of Funds		
Equity Share Capital	3,00,000	4,00,000
8% Preference Share Capital	1,50,000	1,00,000
General Reserve	40,000	70,000
P & L Appropriation a/c	30,000	48,000
Creditors	97,000	1,33,000
Bank Overdraft	20,000	16,000
Outstanding Expenses	40,000	50,000
(B) Application of Funds		
Goodwill	1,15,000	90,000
Land and Building	2,00,000	1,70,000
Plant	80,000	2,00,000
Debtors	1,60,000	2,00,000
Stock	77,000	1,09,000
Bills Receivable	20,000	30,000
Cash in hand	15,000	10,000
Cash at bank	10,000	8,000

Additional Information:

(i) Depreciation of ₹ 10,000 and ₹ 20,000 has been provided on plant and land and building, respectively.

(ii) An interim dividend of ₹ 5,000 was paid during the year and the final dividend for the year was ₹ 15,000.

(iii) Tax paid during the year was ₹ 35,000.

SOLUTION Here only the balance sheet has been provided. Therefore, the change in the balance of P & L account has been considered as profit for the year.

Cash Flow Statement

Particulars	Details	Amount (₹)
A. Cash Flow from Operating Activities		
Change in P & L Account Balance		**18,000**
(a) Adjustment for non-cash/non-operating items debited to P & L account		
■ Depreciation on fixed asset for the period	30,000	
■ Goodwill written off	25,000	
■ Interim dividend paid	5,000	
■ Final dividend paid	15,000	
■ Preference dividend paid	12,000	
■ Tax Provision for the year	35,000	
■ Transfer to General Reserve	30,000	
(b) Adjustment for non-cash/non-operating items credited to P & L account	Nil	
		1,52,000

(*Contd*)

(*Contd*)

Cash Flow from Operating Activities before adjustment for working capital items		1,70,000
(c) Adjustment for working capital items (other than cash and cash equivalents)		
■ Increase in Debtors	(40,000)	
■ Increase in Stock	(32,000)	
■ Increase in Bills Receivables	(10,000)	
■ Increase in Creditors	36,000	
■ Increase in Outstanding Expenses	10,000	(36,000)
Cash flow from operating activities before tax		1,34,000
Less: Income tax paid		35,000
Net Cash Flow from Operating Activities		**99,000**
B. Cash Flow from Investing Activities		
■ Purchase of Plant	(1,30,000)	
■ Sale of Land and Building	10,000	
Net Cash Flow from Investing Activities	(1,20,000)	**(1,20,000)**
C. Cash Flow from Financing Activities		
■ Redemption of Preference Shares	(50,000)	
■ Issue of Equity Shares	1,00,000	
■ Dividend on equity paid (interim + final)	(20,000)	
■ Preference dividend paid	(12,000)	
Net Cash Flow from Financing Activities	18,000	**18,000**
Total flow (change) of cash from all the activities during the year		**(3,000)**
Add: Opening Balance of Cash and Cash Equivalent		
■ Cash Balance	15,000	
■ Bank Balance	10,000	
■ Bank Overdraft	(20,000)	5,000
Closing Balance of Cash and Cash Equivalent (10,000 + 8,000 − 16,000)		**2,000**

Working Notes:

1. Plant A/C (at net value)

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening Balance	80,000	By P & L a/c (depreciation)	10,000
To Bank – Purchase (Balancing figure)	1,30,000	By Closing Balance	2,00,000
	2,10,000		2,10,000

2. Land and Building A/C (at net value)

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening Balance	2,00,000	By P & L a/c (depreciation)	20,000
		By Bank – Sales (Balancing figure)	10,000
		By Closing Balance	1,70,000
	2,00,000		2,00,000

3. Since equity dividend has been paid, therefore, it is implied that the firm has paid preference dividend that has been calculated on the opening balance for the year.

Is Provision for Tax a Current Liability or Appropriation of Profits?

Provision for tax appearing on the liability side of the balance sheet can either be considered as current liability or as an appropriation of profits. If additional information about this is not given then it can be taken as current liability; and as soon as additional information about it is given then it should be considered as an appropriation of profits. The projection in the cash flow statement will differ in each of the case.

Provision for Tax as Current Liability

When it is considered as current liability then it is projected in the cash flow statement as follows:

- Amount provided for tax from the current year's profits is not shown while calculating cash flow from operating activities.
- Amount paid for tax during the year is not shown while ascertaining cash flow from operating activities.
- Changes in the provision for tax as given in the comparative balance sheet is shown in the working capital items.

Provision for tax can be considered either as current liability or as an appropriation of profits.

Provision for Tax as an Appropriation of Profits

In this case, the following projection is made in the cash flow statement:

- Provision for tax made during the year is shown while calculating cash flow from operating activities.
- Tax paid during the year is shown while calculating cash flow from operating activities.
- Changes in the tax provision as shown in the comparative balance sheet are not shown in the working capital items.

Is Dividend Payable as Current Liability or Appropriation of Profits?

Dividend payable appearing on the liability side of the balance sheet can either be considered as current liability or as an appropriation of profits. If additional information about this is not given then it can be taken as current liability; and as soon as additional information about it is given then it should be considered as an appropriation of profits. The projection in the cash flow statement will differ in each of the case.

Provision for dividend can be considered either as current liability or as an appropriation of profits.

Dividend Payable as Current Liability

When it is considered as current liability then it is projected in the cash flow statement as follows:

- Amount provided for dividend from the current year's profits is not shown while calculating cash flow from operating activities.
- Amount of dividend paid during the year is not shown while ascertaining cash flow from financing activities.
- Changes in the dividend payable as given in the comparative balance sheet are shown in the working capital items.

Dividend Payable as an Appropriation of Profits

In this case, the following projection is made in the cash flow statement:

- Provision for dividend payable made during the year is shown while calculating cash flow from operating activities.
- Dividend paid during the year is shown while calculating cash flow from financing activities.
- Changes in the dividend payable as shown in the comparative balance sheet are not shown in the working capital items.

EXAMPLE 6 From the following balance sheets and additional information, prepare cash flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
A. Sources of Funds		
Equity Share Capital	5,00,000	5,00,000
Debentures	3,70,000	4,50,000
Tax Payable	77,000	43,000
Accounts Payable	96,000	1,92,000
Dividend Payable	50,000	35,000
Bank Overdraft	37,000	45,000
B. Application of Funds		
Fixed Assets	6,00,000	7,00,000
Investment	2,00,000	1,00,000
Stock in Trade	2,30,000	3,15,000
Accounts Receivables	70,000	1,40,000
Cash in Hand	30,000	10,000

Additional Information:

(i) During the year depreciation charged to Profit and Loss account was ₹ 50,000.

(ii) Tax paid during the year was ₹ 80,000.

(iii) Interest paid on debentures ₹ 48,500.

(iv) During the year, ₹ 12,000 was received as dividend on investment and credited to profit and loss account.

SOLUTION

Cash Flow Statement

Particulars	Details	Amount (₹)
A. Cash Flow from Operating Activities		
Change in P & L Account Balance		-----
(a) Adjustment for non-cash/non-operating items debited to P & L account		
■ Depreciation on fixed asset for the period	50,000	
■ Provision for Final dividend[3]	35,000	
■ Tax Provision for the year[4]	46,000	
■ Interest on debentures	48,500	
(b) Adjustment for non-cash/non-operating items credited to P & L account		
■ Dividend on investment	(12,000)	1,67,500

(*Contd*)

3 **Dividend Payable A/C**

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Bank—Dividend paid	50,000	By Opening Balance	50,000
(Assumed to be paid)		By P & L A/C (Balancing figure)	35,000
To Closing Balance	35,000		
	85,000		85,000

4 **Provision for Tax A/C**

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Bank—Dividend Paid	80,000	By Opening Balance	77,000
To Closing Balance	43,000	By P & L A/C (Balancing figure)	46,000
	1,23,000		1,23,000

(*Contd*)

Cash Flow from Operating Activities before adjustment for working capital items		1,67,500
(c) Adjustment for working capital items (other than cash and cash equivalents)		
■ Increase in Accounts Receivables	(70,000)	
■ Increase in Stock	(85,000)	
■ Increase in Accounts Payables	96,000	(59,000)
Cash flow from operating activities before tax		1,08,500
Less: Income tax paid		80,000
Net Cash Flow from Operating Activities		**28,500**
(B) Cash Flow from Investing Activities		
■ Purchase of Fixed Assets[5]	(1,50,000)	
■ Sale of Investment	1,00,000	
■ Dividend on Investment	12,000	
Net Cash Flow from Investing Activities	(38,000)	**(38,000)**
(C) Cash Flow from Financing Activities		
■ Issue of Debentures	80,000	
■ Dividend on equity paid	(50,000)	
■ Interest Paid on debentures	(48,500)	**(18,500)**
Net Cash Flow from Financing Activities	(18,500)	
Total flow (change) of cash from all the activities during the year		**(28,000)**
Add: Opening Balance of Cash and Cash Equivalent		
■ Cash Balance	30,000	
■ Bank Overdraft	(37,000)	(7,000)
Closing Balance of Cash and Cash Equivalent (10,000 – 45,000)		**(35,000)**

STAKEHOLDERS AND CASH FLOW STATEMENT

- Is not it surprising to know that a bank can predict well in advance about the expected sources and application of cash by its borrowers?
- Would you like to know how Reliance Industries Limited arranged cash resources to finance its recent acquisition?
- Do you know how a supplier of goods estimates the probability about the recovery of dues from its debtors?
- Do you know the majority of the business organizations use the cash in investing activities that is generated from other than the operating activities?
- Are not you interested to know how a rapidly growing business organization generates cash for application in the expansion activities?

5

Fixed Asset A/C (at net value)

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Balance b/f	6,00,000	By P & L a/c (depreciation)	50,000
To Bank—Purchase (Balancing figure)	1,50,000	By Balance c/f	7,00,000
	7,50,000		7,50,000

The answer for all these lies in the preparation and analysis of cash flow statement. No doubt a cash flow statement helps the managers in making an assessment of cash position of the business organization but at the same time, different stakeholders also get a feedback about the liquidity position and financial planning of the business organization.

Business Executives and Analysis of Cash Flow Statement

- At times, business executives fail to avail good discount offer. Why?
- Do you know that liquidity does not mean profitability and profitability does not mean liquidity?
- Do you know many of the business organizations run a risk of default in making payment for their credit purchase or timely payment of loan installment?

The answer for these lies in the analysis of cash flow statement. It is difficult to resist a good discount offer given by the supplier but one has to resist it due to the poor flow of cash from operating activities or due to the liquidity crunch. Analysis of cash flow statement helps in taking a timely decision about buying in bulk to avail discount offer. If operating activities generate sufficient resources at the right time then an organization can not only avail discount offer but can also avoid the situation of default in making repayment of the loan. It is the flow of cash from operating activities that helps the executives in taking decisions regarding investment and dividend.

Profitability Does not Mean Liquidity

Profitability means generating good return on invested capital that might be due to the positive impact of both the types of leverages—operating and financial leverage; whereas liquidity means having sufficient cash resources to meet regular cash requirement. At times, a business enterprise might have remarkable profitability record but its liquidity might be very poor. Why is it so? It needs an in-depth analysis. Such situation might arise due to the following:

- Sale of goods at a profit but majority of the sale is on credit and dues are yet to be collected from customers and at the same time, procurement is done in cash. Despite profitability, the liquidity is hampered.
- Sale of goods at a good profit and sufficient cash generated from the operating activities but simultaneously there is a heavy outflow of cash in the investing activities, resulting into poor liquidity despite the profitability.
- Profits generated from operating activities have been used for repayment of loan or payment of dividend. This leads to a situation of liquidity crunch even when a business entity has profits and profitability.

Liquidity Does not Mean Profitability!

Liquidity means sufficient and timely availability of cash resources, whereas profitability means generating profits from operating activities with good return on invested capital. At times, an organization might have ample liquidity but might not have sufficient profitability. The view needs considerable deliberation. This might happen due to the following reasons:

- Goods sold at a marginal profit or at a discount that generates cash resulting into liquidity but not the profitability.
- Flow of funds from financing activities awaiting the flow into investing activities. This adds to liquidity but not profitability.
- Goods sold at a marginal profit in cash but at the same time there is a considerable increase in the current liabilities, adding to liquidity only without profitability.

Bank and Analysis of Cash Flow Statement

- Sometimes a bank manager might be interested to grant a long-term loan to a business organization as compared to granting a short loan or vice versa. Why and how does it happen?
- Isn't it interesting that the decision parameters for granting short-term loan and long-term loan a totally different but still interconnected?

A bank always runs the risk of recovery of loan whether a short-term loan or long-term loan. The risk might be a **market risk** or even a **business risk**. The market risk refers to the fluctuation in the interest earning. The loaning decision by a bank is based on the "Three Cs of Credit Granting Decision": (a) Collateral (b) Capacity and (c) Character. Out of these three, the capacity to pay the interest and repayment of the principle amount is analysed with the help of cash flow statement. In general, sufficient availability of cash resources from operating activities reflects a sound position and a positive signal about the payment and repayment capacity of a business organization. There are organizations that earn good amount of profit but hardly generate sufficient cash from operating activities. Such organizations might face difficulty in servicing the debt whether short-term or long-term, more particularly, the short-term.

A bank also analyses synchronization between flow of cash from financing activities and flow of cash from investment activities. A positive correlation between these two indicates high safety of long-term loan granted to the business organization. Otherwise, it indicates towards a risk in the recovery of long-term loan. The micro-level analysis of cash flow from investing activities helps in ensuring proper collateral value that can be used in case of delinquency by the borrower.

Trade Creditors/Suppliers and Analysis of Cash Flow Statement

Supplier of goods who supplies the goods on credit is interested to know about the circulation and flow of cash resources in and out of a business organization. The level of credit completely depends upon the quantum of cash resources generated from the operating activities. In general, a business organization is considered to be less risky from the viewpoint of trade creditor/supplier if it has sufficient resources from the operating activities. Regular flow of cash from operating activities as well as a situation in which cash profits are more than the book profits is like a safety net for trade creditors.

Debenture Holders and Analysis of Cash Flow Statement

A debenture holder is interested in receiving interest income in time; at the same time, he/she is more worried about the use of cash resources by a business organization. Generally, the cash mobilized through long-term debt should be used in building fixed asset. Such combination ensures sound collateral value for debenture holders. Therefore, a debenture holder looks for a perfect synchronization between cash flow from financing activities and flow of cash from investing activities. A positive significant amount of cash profit from operating activities ensures about the payment of interest on debentures without any delay and default.

> Suppliers evaluate **short-term liquidity**, whereas long-term funds providers evaluate **long-term solvency**.

Employees and Analysis of Cash Flow Statement

Recruiting good employees is not a big deal but retaining good employees is one of the challenging tasks for HR Manager. Timely payment of dues to the employees, implementation of bonus scheme and timely disbursement of cash benefits for employees is a task that cannot be performed by HR Manager in isolation. He/she has to maintain a proper co-ordination with finance department. Few people consider the finance department as a cash generating machine but it is not so. Finance manager can only make an estimation about the flow of cash likely to be generated from different activities. If an organization has sufficient cash resources from operating activities then the HR Manager can design employee-friendly compensation package and cash-fringe benefit involving cash payment; however, poor cash resources from operating activities are likely to work as a restriction on certain business development schemes as follows:

- Cash payment for the acquisition of fixed assets including the expenses on research and development for acquiring these assets.
- Cash payment for the creation of patents and copyrights.
- Payment of royalty that is of capital nature.
- Cash payment for acquiring share, debentures or derivative instruments in other business entities that are purely of investment nature and not for dealing or trading purpose.
- Cash receipts from the sale of fixed assets and intangible assets including the sale of patents unless it can be associated to operating activities.
- Cash receipts from the sale of investments that are held for investment purpose and not for trading or dealing purpose.
- Cash payment of expenses related to the acquisition or sale of assets other than current assets.
- Cash receipts, such as interest and dividend from the investment held for the purpose of investment and not for trading or dealing.
- Cash proceeds from the issue of securities, such as shares, debentures and bonds.
- Cash receipts from a long-term loan.
- Flow of cash on account of non-current liabilities whether short-term or long-term liabilities.
- Repayment of loan or redemption of debentures and shares in cash.

MODUS OPERANDI TO CARRY OUT INTERPRETATION FROM CASH FLOW STATEMENT

- Do you know how one can analyse the liquidity position of a business enterprise?
- Is not it meaningful to know source and application of cash during a financial year?
- Can a manager predict about the expected source and application of cash and its equivalents?

These questions can best be answered by analysing a cash flow statement. The analysis of cash flow statement not only helps in finding out the sources and application of cash but also making a correlation between the type of sources and application of cash. One should look for the following in a cash flow statement:

- Net profit for the year should be positive.
- Operating profit before the adjustment for working capital items signifies cash-operating profit. In general, it should be more than the net profit for the year.
- In certain cases, cash-operating profit might be less than the net profit for the year it indicates the presence of non-operating income to a significant extent.
- A high proportion of non-operating income raises an eye brow on the regularity of profits for the business enterprises. At the same time, it indicates low level of profitability from operating activities.
- Cash flow from operating activities is to be compared against the cash-operating profit. A significant difference between both of these indicates about the quality of working capital management.
- If cash flow from operating activities is less than the cash-operating profit, then it signifies investment of funds in working capital items.

- A comparison between changes in current asset (debtors and stock) and changes in current liabilities (creditors) helps in identifying synchronization between current assets and current liabilities.
- Cash flow from investment activities is to be compared against the flow of cash from operating activities. As far as possible, both of these items must have a matching amount.
- A perfect match between flow of funds from operating activities and flow of funds to investing activities signifies better management of not only cash resources but better financial planning.
- A negative net change in the cash balance signifies financing of the routine activities/fixed assets through bank overdraft, such combination indicates poor financial planning.

Symptoms of Best Cash Flow Statement

A best cash flow statement is the one that depicts the following symptoms:

- Majority of the cash should be generated from operating activities. This shows a better management of routine activities in realizing cash.
- Cash generated from operating activities as well as from financing activities should find an application of cash in the investing activities. Such combination shows better application of cash resources and best reinvestment strategy of managerial staff.
- A significantly higher amount of cash flow from operating activities as compared to the cash-operating profit signifies better management of working capital items.

Symptoms of Average Cash Flow Statement

- Cash flow from operating activities is reasonable and it finds a corresponding application in the payment of tax and dividend.
- Cash generated from the sale of non-current assets finds a corresponding application in the purchase of new non-current assets.
- Funds mobilized from financing activities either find a corresponding application in the investing activities or find an application in the working capital items.

Symptoms of Poor Cash Flow Statement

- Only limited amount of cash is generated from operating activities. In certain cases, there might be a negative flow of cash from operating activities.
- Cash generated from investment activities finds a corresponding application of cash in the financing activities. This indicates the use of fixed assets for the repayment of long-term liabilities. This show poor financial planning and lack of long-term solvency for firm.
- A significantly less amount of cash flow from operating activities as compared to cash-operating profit indicates poor management of working capital items.
- Despite very low or negative flow of cash from operating activities, a large amount of cash finds an application in the financing activities in the form of tax and dividend payment.

SOLVED EXAMPLES

Example 7 Analyse the following cash flow statement and comment on the liquidity position and financial planning of the company:

Cash Flow Statement

Particulars	Details	Amount (₹)
(A) Cash Flow from Operating Activities		
Change in P & L Account Balance		**88,000**
(a) Adjustment for non-cash/non-operating items debited to P & L account		
■ Depreciation on fixed asset for the period	30,000	
■ Goodwill written off	25,000	
■ Interim dividend paid	5,000	
■ Final dividend paid	15,000	
■ Preference Dividend paid	12,000	
■ Tax Provision for the year	35,000	
■ Transfer to General Reserve	30,000	
(b) Adjustment for non-cash/non-operating items credited to P & L account	Nil	1,52,000
Cash Flow from Operating Activities before adjustment for working capital items (cash-operating profit)		2,40,000
(c) Adjustment for working capital items (other than cash and cash equivalents)		
■ Decrease in Debtors	40,000	
■ Increase in Stock	(32,000)	
■ Increase in Bills Receivables	(10,000)	
■ Increase in Creditors	1,36,000	
■ Increase in Outstanding Expenses	10,000	1,44,000
Cash flow from operating activities before tax		3,84,000
Less: Income tax paid		34,000
Net Cash Flow from Operating Activities		**3,50,000**
(B) Cash Flow from Investing Activities		
■ Purchase of Plant	(4,10,000)	
■ Sale of Land and Building	10,000	
Net Cash Flow from Investing Activities	(4,00,000)	**(4,00,000)**
(C) Cash Flow from Financing Activities		
■ Issue of Equity Shares	1,00,000	
■ Dividend on equity paid (interim + final)	(20,000)	
■ Preference dividend paid	(12,000)	
Net Cash Flow from Financing Activities	68,000	**68,000**
Total flow (change) of cash from all the activities during the year		**18,000**
Add: Opening Balance of Cash and Cash Equivalent		
■ Cash Balance	15,000	
■ Bank Balance	10,000	
■ Bank Overdraft	(20,000)	5,000
Closing Balance of Cash and Cash Equivalent (20,000 + 8,000 – 5,000)		**23,000**

SOLUTION The study of the given cash flow statement depicts the following about the liquidity position and financial planning:

- Cash-operating profit of the firm is significantly more than the net profit for the year.
- Net cash flow from operating activities is significantly higher than the cash-operating profits. It is higher by ₹ 1,10,000 as compared to cash-operating profit. This shows a **better management of working capital** items.

- The detailed study of working capital items reveals that company has used spontaneous financing to a great extent.
- The collective amount of cash from operating activities and cash from financing activities have been used properly in the investing activities that shows the availability of good re-investment opportunities.
- Re-investment of profits shows better opportunities for future earning.
- Net change in the cash position from all the three activities put together is ₹ 18,000 that have efficiently been used by the company in reducing bank overdraft. This combination shows efficient managerial skills in using short-term sources of finance.

In entirety, the liquidity position as well as financial planning of the firm can be considered as the best and professionally managed.

Example 8 Analyse the following cash flow statement and comment on the liquidity position and financial planning of the company.

Cash Flow Statement

Particulars	Details	Amount (₹)
(A) Cash Flow from Operating Activities		
Change in P & L Account Balance		**28,000**
(a) Adjustment for non-cash/non-operating items debited to P & L account		
■ Depreciation on fixed asset for the period	30,000	
■ Goodwill written off	25,000	
■ Interim dividend paid	5,000	
■ Final dividend paid	15,000	
■ Preference dividend paid	12,000	
■ Tax Provision for the year	35,000	
■ Transfer to General Reserve	30,000	
(b) Adjustment for non-cash/non-operating items credited to P & L account	Nil	1,52,000
Cash Flow from Operating Activities before adjustment for working capital items (cash-operating profit)		1,80,000
(c) Adjustment for working capital items (other than cash and cash equivalents)		
■ Increase in Debtors	(40,000)	
■ Increase in Stock	(32,000)	
■ Increase in Bills Receivables	(10,000)	
■ Decrease in Creditors	(1,36,000)	
■ Increase in Outstanding Expenses	10,000	(2,08,000)
Cash flow from operating activities before tax		(28,000)
Less: Income tax paid		34,000
Net Cash Flow from Operating Activities		**(62,000)**
(B) Cash Flow from Investing Activities		
■ Sale of Plant	1,80,000	
■ Sale of Land and Building	10,000	
Net Cash Flow from Investing Activities	1,90,000	**1,90,000**

(*Contd*)

(*Contd*)

(C) Cash Flow from Financing Activities		
■ Redemption of Preference Shares	(2,00,000)	
■ Dividend on equity paid (interim + final)	(40,000)	
■ Preference dividend paid	(12,000)	
Net Cash Flow from Financing Activities	(2,52,000)	**(2,52,000)**
Total flow (change) of cash from all the activities during the year		**(1,24,000)**
Add: Opening Balance of Cash and Cash Equivalent		
■ Cash Balance	1,15,000	
■ Bank Balance	15,000	
■ Bank Overdraft	(20,000)	1,10,000
Closing Balance of Cash and Cash Equivalent (10,000 + 6,000 − 30,000)		**(14,000)**

Solution A careful analysis of the given cash flow statement reveals the following dimensions of managerial skills in managing liquidity and skill about financial planning:

- Net profit for the year is very low as compared to cash-operating profit of the firm. This shown poor profitability of the firm.
- Cash flow from operating activities before the payment of tax is negative as compared to the positive cash-operating profit. This show poorly managed working capital of the firm.
- In totality, there is a cash outflow of ₹ 2,08,000 on account of working capital items that shows poor liquidity management of the firm.
- The positive flow of cash from investing activities finds a corresponding application in the redemption of preference shares. This shows poor financial planning.
- The combined effect of all the three activities is negative to the tune of ₹ 1,24,000 that again reflects on the liquidity management and on financial planning, the net impact presents a poor show in managing finances.
- The company has not been able to repay its bank overdraft; rather it has increased as compared to the previous year's overdraft level.

Example 9 From the following details, prepare a statement showing cash flow from operating activities for the year ending March 2010.

(i)	Preliminary expenses written off	₹ 15,000
(ii)	Loss on sale of plant	₹ 1,250
(iii)	Provision for bad debts	₹ 2,750
(iv)	Provision for tax	₹ 1,50,000
(v)	Depreciation on fixed assets	₹ 17,500
(vi)	Profit on sale of investment	₹ 7,500
(vii)	Transfer to dividend equalisation reserve	₹ 17,500
(viii)	Net profit for the year	₹ 10,00,000

The following were the opening and closing balances of current items:

Item	**2009 (₹)**	**2010 (₹)**
Debtors	30,000	37,500
Bills receivables	25,000	21,250
Pre-paid expenses	500	750
Creditors	25,000	37,500
Bills payables	20,000	15,000
Outstanding expenses	12,500	10,000

(Rajasthan Agricultural University, MBA Part I, IABM, 2008, adapted)

SOLUTION

Cash Flow from Operating Activities for the Year Ended 31-03-10

Particulars	Amount (₹)
Net Profit for the Year	10,00,000
Adjustment for non-cash/non-operating items shown in P & L account	
■ Preliminary expenses written off	15,000
■ Loss on sale of plant	1,250
■ Provision for tax	1,50,000
■ Depreciation on fixed assets	17,500
■ Transfer to dividend equalization reserve	17,500
■ Profit on sale of investment	(7,500)
Cash Flow from Operating Activities before adjustment for working capital items (cash-operating profit)	11,93,750
Adjustment for working capital items (other than cash and cash equivalents)	
■ Increase in Debtors	(7,500)
■ Decrease in Bills Receivables	3,750
■ Increase in Pre-paid Expenses	(250)
■ Increase in Creditors	12,500
■ Decrease in Bills Payables	(5,000)
■ Decrease in Outstanding Expenses	(2,500)
■ Increase in Provision for Bad Debts	2,750
Cash flow from operating activities before payment of tax	11,97,500
Less: Tax paid	1,50,000
Net cash flow from operating activities	10,47,500

Working notes:

(i) It has been assumed that tax paid is equal to the amount of provision made during the year.

(ii) Transfer to provision for bad debts has been assumed as net change in the balance of this provision account and taken as reduction in the debtors.

EXAMPLE 10 From the following details, prepare cash flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
A. Sources of Funds		
Capital	1,25,000	1,53,000
Creditors	40,000	44,000
Loan from B	20,000	Nil
Loan from PNB	45,000	50,000
B. Application of Funds		
Cash	11,000	8,000
Debtors	29,000	49,000
Inventory	30,000	20,000
Plant and Machinery	85,000	60,000
Premises	35,000	60,000
Land	40,000	50,000

During the year, a machine costing ₹ 10,000 accumulated depreciation on it ₹ 3,000 was sold for ₹ 5,000. The opening and closing balance, respectively of provision for depreciation was ₹ 25,000 and ₹ 40,000. Net profit for the year was ₹ 45,000.

(Rajasthan Technical University Kota, MBA Sem-I, Feb. 2009, adapted)

Solution

Cash Flow Statement

Particulars	Amount (₹)
A. Cash Flow from Operating Activities	
Net profit for the year	45,000
(a) Adjustment for non-cash/non-operating items shown in P & L account	
■ Depreciation for the year	18,000
■ Loss on sale of machinery	2,000
Cash Flow from Operating Activities before adjustment for working capital items (cash-operating profit)	65,000
(b) Adjustment for working capital items (other than cash and cash equivalents)	
■ Increase in Debtors	(20,000)
■ Decrease in Inventory	10,000
■ Increase in Creditors	4,000
Cash flow from operating activities before tax	59,000
Less: Tax paid	Nil
Net Cash flow from operating activities after tax	59,000
B. Cash Flow from Investing Activities	
■ Sale of Machinery	5,000
■ Purchase of Land	(10,000)
■ Purchase of Premises	(25,000)
Net Cash Flow from Investing Activities	**(30,000)**
C. Cash Flow from Financing Activities	
■ Drawing by owner	(17,000)
■ Repayment of B's Loan	(20,000)
■ Loan raised from PNB	5,000
Net Cash Flow from Financing Activities	**(32,000)**
Total flow (change) of cash from all the activities during the year (59,000 − 30,000 −32,000)	**(3,000)**
Add: Opening Balance of Cash and Cash Equivalent	11,000
Closing Balance of Cash and Cash Equivalent	**8,000**

Working notes:

Plant and Machinery Asset A/C (at net value)

Particulars	Amount (₹)	Particulars	Amount (₹)
To Balance b/f	85,000	By P & L a/c (depreciation)	18,000
		By Bank (sales)	5,000
		By Profit and Loss a/c (loss)	2,000
		By Balance c/f	60,000
	85,000		85,000

Provision for Depreciation A/C

Particulars	Amount (₹)	Particulars	Amount (₹)
To Accumulated Depreciation on asset sold	3,000	By Balance b/f	25,000
To Balance b/f	40,000	By Depreciation for the year (balancing figure)	18,000
	43,000		43,000

Capital A/C

Particulars	Amount (₹)	Particulars	Amount (₹)
To Drawing by owner (balancing figure)	17,000	By Balance b/f	1,25,000
		By Net profit for the year	45,000
To Balance b/f	1,53,000		
	1,70,000		1,70,000

KEY TERMS

Cash balance
Investment activities
Foreign currency cash flow
Cash equivalent
Financing activities
Unrealized gain/loss
Operating activities
Non-cash transactions

FINAL RECAP

- A **cash flow statement** explains the changes in the cash balance, including cash equivalent between two consecutive financial years. It depicts sources of cash and application of cash during 12 months that elapsed between two financial years.
- Cash balance, including **cash equivalent**, includes cash held in office, bank balance, bank overdraft and balance in cash credit account of the business firm.
- With the help of cash flow statement, a caution about the future sources and application of cash can be made.
- Cash flow statement helps the managers in making an assessment of **cash position** of the business organization but at the same time different stakeholders also get a feedback about the liquidity position and financial planning of the business organization.
- The different **stakeholders** interested in analysing cash flow statement are business executives, creditors/suppliers, banks/moneylenders, debenture holders, shareholders and others.
- **Profitability** means generating good return on invested capital that might be due to the positive impact of both the types of leverages.
- **Liquidity** means having sufficient cash resources to meet regular cash requirement.
- At times, a business enterprise might have remarkable profitability record but its liquidity might be very poor.
- At times, an organization might have ample liquidity but might not have sufficient profitability.
- Accounting Standard **AS-3** (now Ind-AS 07) has been enforced from April 2001. It is mandatory for all the companies whose securities are listed on a recognized stock exchange.
- The final outcome of the cash flow statement in both the methods depicts the following three:
  - Cash Flow from Operating Activities
  - Cash Flow from Investing Activities
  - Cash Flow from Financing Activities
- **Provision for tax** appearing on the liability side of the balance sheet can either be considered as current liability or as an appropriation of profits.
- **Dividend payable** appearing on the liability side of the balance sheet can either be considered as current liability or as an appropriation of profits.

Review Questions

Multiple Choice Questions

1. Which one of the following is not appropriate with regard to cash flow statement?
   (a) Cash flow from operating activities
   (b) Cash flow from recurring activities
   (c) Cash flow from investing activities
   (d) Cash flow from financing activities
2. Cash flow statement is not useful for which one of the following stakeholders?
   (a) Customers of the business enterprise
   (b) Suppliers of the business enterprises
   (c) Debenture holders of the business enterprises
   (d) Banker to the business enterprises
3. Which one of the following is done if tax payable is considered as current liabilities?
   (a) Tax paid is shown as an application in the operating activities.
   (b) Provision made for tax is shown in the operating activities.
   (c) Change in the tax payable as reflected in the balance sheet is shown in the adjustment for working capital items.
   (d) All of these.
4. Which one of the following is not done when dividend payable is considered as an appropriation of profits?
   (a) Dividend paid is shown as an application in the financing activities.
   (b) Provision made for dividend is shown in the operating activities.
   (c) Change in the dividend payable as reflected in the balance sheet is shown in the adjustment for working capital items.
   (d) All of these.
5. In the best cash flow statement, majority of the cash should be generated from
   (a) Operating activities (b) Financing activities
   (c) Investing activities (d) All of these
6. Which of the following has not been provided in IAS-7 but has been provided in AS-3?
   (a) Cash flow from operating activities (b) Cash flow from financing activities
   (c) Cash flow from investing activities (d) Statement about extraordinary items
7. To verify the cash flow from operating activities as calculated under direct and indirect method, which statement is prepared?
   (a) Fixed asset account (b) Cash account
   (c) Reconciliation statement (d) Statement about extraordinary items

Descriptive Questions

1. 'Liquidity does not mean profitability and profitability does not mean liquidity.' Elaborate this statement.
2. Cash flow statement is useful not only for business executives but also for several other stakeholders. Do you agree with this? Explain.
3. Write a short note on foreign currency cash flow.
4. 'Preparation of cash flow statement is like investigating past accounting records but it is one of the important tools to predict flow of cash for future.' Discuss.

Numerical Problems

1. From the following details, prepare statement showing cash flow from operating activities using direct method and indirect method:

Profit and Loss Account

For the year ended March 31, 2010

Particulars		Amount (₹)	Particulars	Amount (₹)
To Opening stock		40,000	By Sales of goods	
To Purchase of goods			■ In cash	3,00,000
■ In cash		90,000	■ On credit	1,00,000
■ On credit		2,50,000	By Purchase return	6,000
To Direct Expenses		4,000		
To Sales return		14,000	By Closing Stock	68,000
To Gross Profit c/d		76,000		
		4,74,000		4,74,000
To Depreciation		52,000	By Gross Profit b/d	76,000
To Preliminary Expenses written off		15,000	By Investment Income	90,000
To Goodwill written off		2,000	By Profit on sale of Investment	18,000
To Salaries and Wages			By Discount from Creditors	12,000
Paid	18,000			
Add: Outstanding	1,000	19,000		
To Rent paid	16,000			
Less: Pre-paid	600	15,400		
To Stationery and postage		1,000		
To Director's Fees		3,500		
To Managerial Remuneration		4,500		
To Bad Debts		1,200		
To Provision for Doubtful Debts		3,000		
To Provision for Discount on Debtors		1,000		
To Discount		300		
To Selling Expenses		3,000		
To Interest on Loan		3,600		
To Provision for tax		4,500		
To Net Profit c/d		67,000		
		1,96,000		1,96,000
To Transfer to General Reserve		10,000	By Balance b/d	35,300
To Interim Dividend		18,000	By Net Profit for the year	67,000
To Proposed Final Dividend		7,200		
To Balance c/d		67,100		
		1,02,300		1,02,300

Other Information

Particulars	Balance on 31-03-08	Balance on 31-03-09
Sundry Debtors	23,000	22,000
Sundry Creditors	8,500	11,100
Provision for Tax	3,000	3,800

2. From the following details, prepare cash flow statement and analyse it:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
A. Sources of Funds		
Equity Share Capital	5,50,000	6,00,000
Debentures	3,20,000	3,50,000
Tax Payable	70,000	40,000
Profit and Loss Account	96,000	1,95,000
Dividend Payable	57,000	35,000
Bank Overdraft	37,000	45,000
B. Application of Funds		
Fixed Assets	7,00,000	7,00,000
Investment	1,00,000	1,00,000
Stock in Trade	2,40,000	3,15,000
Accounts Receivables	60,000	1,20,000
Cash in Hand	30,000	30,000

Additional Information:

(i) During the year, depreciation on fixed assets charged to Profit and Loss Account was ₹ 30,000.

(ii) Tax paid during the year was ₹ 60,000.

(iii) Interest paid on debentures was ₹ 28,500.

(iv) During the year, ₹ 42,000 was received as dividend on investment and credited to profit and loss account.

3. From the following details, prepare cash flow statement and analyse it:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
A. Sources of Funds		
Equity Share Capital	3,00,000	4,00,000
8% Preference Share Capital	4,50,000	1,00,000
General Reserve	40,000	70,000
P & L Appropriation a/c	30,000	48,000
Creditors	97,000	1,33,000
Bank Overdraft	20,000	36,000
Outstanding Expenses	40,000	50,000
B. Application of Funds		
Goodwill	1,15,000	1,10,000
Land and Building	2,00,000	1,70,000
Plant	80,000	2,00,000
Debtors	1,60,000	2,00,000
Stock	2,77,000	1,09,000
Bills Receivable	20,000	30,000
Cash in hand	95,000	10,000
Cash at bank	30,000	8,000

Additional Information:

(i) Depreciation of ₹ 10,000 and ₹ 20,000 has been provided on plant and land and building, respectively.

(ii) An interim dividend of ₹ 5,000 was paid during the year and the final dividend for the year was ₹ 15,000.

(iii) Tax paid during the year was ₹ 35,000.

(iv) During the year preference shares were redeemed at 5% premium.

4. The following is the summary of cash account of Deepak Agro Ltd for the year ending March 31, 2009. Prepare cash flow statement using direct method as discussed in AS-3.

Summary Cash Account

Particulars	Amount (₹)	Particulars	Amount (₹)
To Balance as on 1-04-2008	80,000	By Payment to creditors	21,00,000
To Issue of equity shares	3,00,000	By Purchase of fixed assets	1,00,000
To Receipt from debtors	28,00,000	By Overheads (Expenses)	2,50,000
To Sale of investment	70,000	By Salary and Wages	50,000
		By Corporate tax paid	2,50,000
		By Final dividend paid	50,000
		By Repayment of debentures	3,00,000
		By Balance as on 31-03-2009	1,50,000
	32,50,000		32,50,000

(Rajasthan Technical University Kota, MBA, Sem.-I, Jan. 2010)

5. From the following balance sheets of WWW Ltd, prepare cash flow statement and draw inferences:

Particulars	31-03-08	31-03-09	Particulars	31-03-08	31-03-09
Equity share capital	3,00,000	4,00,000	Goodwill	1,15,000	90,000
8% Preference Shares	1,50,000	1,00,000	Land and building	2,00,000	1,70,000
General Reserve	40,000	70,000	Plant and machinery	80,000	2,00,000
Profit and Loss Account	30,000	48,000	Debtors	1,60,000	2,00,000
Proposed dividend	42,000	50,000	Stock	77,000	1,09,000
Provision for corporate dividend tax	5,500	8,300	Bills Receivables	20,000	30,000
			Cash in hand	15,000	10,000
Creditors	49,500	74,700	Cash at bank	10,000	8,000
Bills Payables	20,000	16,000			
Provision for tax	40,000	50,000			
	6,77,000	8,17,000		6,77,000	8,17,000

Additional Information:

(i) ₹ 35,000 income tax was paid during the year 2008–09.

(ii) Depreciation of ₹ 10,000 and ₹ 20,000 have been charged on plant and machinery and on land and building, respectively for the year 2008–09.

(iii) A portion of building was sold at book value.

(iv) An interim dividend of ₹ 20,000 has been paid in the year 2008–09 along with ₹ 3,000 for corporate dividend tax thereon.

(Rajasthan University MBA, Part-II, 2006)

6. From the following summary cash account of Y Limited, prepare cash flow statement for the year ended March 31, 2010 in accordance with AS-3:

Summary Cash Account

Particulars	Amount (₹)	Particulars	Amount (₹)
To Balance as on 1-04-2008	50,000	By Payment to creditors	20,00,000
To Issue of equity shares	3,00,000	By Purchase of fixed assets	2,00,000
To Receipt from debtors	28,00,000	By Overheads (Expenses)	2,00,000
To Sale of fixed assets	1,00,000	By Salary and Wages	1,00,000
		By Income tax paid	2,50,000
		By Final dividend paid	50,000
		By Repayment of debentures	3,00,000
		By Balance as on 31-03-2009	1,50,000
	32,50,000		32,50,000

(C.A. Final, November 2001)

7. Redraft the following cash flow statement as per the provisions of accounting standard (AS-3) applicable in India:

Particulars	₹ in lakh	₹ in lakh
Net profit (before interest, tax and dividend)		60,000
Add:		
Sales of investments	70,000	
Depreciation on fixed assets	11,000	
Issue of preference shares	9,000	
Loan raised	4,500	
Decrease in stock	12,000	1,06,500
Less:		1,66,500
Purchase of fixed assets	65,000	
Decrease in creditors	6,000	
Increase in debtors	8,000	
Exchange gain	8,000	
Profit on sale of investment	12,000	
Redemption of debentures	5,700	
Dividend paid	1,400	
Interest paid	945	1,07,045
Net Cash Generated in the Year		59,455
Add: Opening cash and cash equivalents		12,341
Closing cash and cash equivalents		71,796

(C.A. Final, November 2007)

8. Prepare cash flow statement in accordance with AS-3.

Comparative Balance Sheet

Particulars	2009 (₹)	2010 (₹)
A. Sources of Funds		
Share capital	4,50,000	4,50,000
General reserve	3,00,000	3,10,000
Profit and loss account	56,000	68,000
Sundry creditors	1,68,000	1,34,000
Provision for tax	75,000	10,000
Mortgage loan	------	2,70,000
B. Application of Funds		
Fixed assets	4,00,000	3,20,000
Investments	50,000	60,000
Stock	2,40,000	2,10,000
Sundry Debtors	2,10,000	4,55,000
Bank	1,49,000	1,97,000

Additional Information:

(i) Investments costing ₹ 8,000 were sold during the year 2009–10 for ₹ 8,500.

(ii) Provision for tax made during the year 2009–10 was ₹ 9,000.

(iii) During the year part of the fixed asset costing (book value) ₹ 10,000 was sold for ₹ 12,000 and profit included in the profit and loss account.

(iv) Dividend paid during the year 2009–10 was ₹ 40,000.

(CS Final, June 1999 and 2004, adapted)

9. Prepare cash flow statement in accordance with AS-3.

Income Statement for the year ending March 31, 2011

(₹ in '000)

Particulars	Amount (₹)
Sales	1,200
Less: Cost of goods sold	800
Less: Selling, general and administrative expenses	150
Earning Before Interest and Tax	250
Less: Interest paid	50
Earning Before Tax	200
Less: Tax	100
Earning After Tax	100

- Dividend paid for the year ₹ 35
- Transferred to retained earnings ₹ 65
- Depreciation for the year ₹ 75

Comparative Balance Sheet (₹ in '000)

Particulars	2010	2011
A. Sources of Funds		
Paid up capital	50	50
Retained earnings	350	415
Long-term debt	500	550
Accounts payable	80	100
Bills payables	80	90
	1,060	1,205
B. Application of Funds		
Gross fixed assets	1,000	1,125
Less: Accumulated depreciation	(100)	(175)
Stock in trade	100	110
Sundry debtors	50	60
Bank	10	85
	1,060	1,205

(ICWA Final, June 1998, adapted)

Answers

Multiple Choice Questions

1. (b), 2. (a), 3. (c), 4. (c), 5. (a), 6. (d), 7. (c)

Numerical Problems

Problem Number	Cash Flow from Operating Activities	Cash Flow from Investing Activities	Cash Flow from Financing Activities
1	(39,600)	--	--
2	(14,500)	12,000	(5,500)
3	2,84,500	(1,20,000)	(2,87,500)

4	1,50,000	(30,000)	(50,000)
5	86,000	(1,20,000)	27,000
6	2,50,000	(1,00,000)	(50,000)
7	49,000	5,000	5,455
8	(1,84,500)	2,500	2,30,000
9	235	(125)	(35)

CASE

Assessment of Parameters for Lending through Cash Flow Statement

The managing director of Sigma Co-operative Bank has received the following facts from one of its clients. The bank is considering to sanction a working capital loan to this client.

Comparative Balance Sheet

Particulars	2009 (₹)	2010 (₹)
A. Sources of Funds		
Share capital	4,50,000	6,50,000
General reserve	3,00,000	5,10,000
Profit and loss account	56,000	1,68,000
Sundry creditors	1,68,000	3,34,000
Provision for tax	75,000	1,10,000
Mortgage loan	------	2,70,000
B. Application of Funds		
Fixed assets	4,00,000	6,20,000
Investments	50,000	2,60,000
Stock	2,40,000	5,10,000
Sundry Debtors	2,10,000	4,55,000
Bank	1,49,000	1,97,000

Additional Information:

(i) Investments costing ₹ 80,000 were sold during the year 2009–10 for ₹ 85,000.

(ii) Provision for tax made during the year 2009–10 was ₹ 90,000.

(iii) During the year part of the fixed asset costing (book value) ₹ 1,00,000 was sold for ₹ 1,20,000 and profit included in the profit and loss account.

(iv) Dividend paid during the year 2009–10 was ₹ 3,40,000.

Discussion Question

Assume that you are the credit officer of the bank, evaluate the profitability position, short-term liquidity and long-term solvency with the help of cash flow statement.

CHAPTER 10

Inventory—Accounting and Reporting Issues

Learning Objectives

After reading this chapter, you will be able to

- Familiarize with inventory and inventory valuation
- Understand accounting standard for inventory
- Learn about the cases regarding the controversy between accounting standard and income tax rules
- Know about the physical verification for inventory
- Gain an insight into the accounting perspective for inventory

Wrong Valuation and Misreporting of Inventory

In India, the council of the Institute of Chartered Accountants of India (ICAI) has issued **Accounting Standard, AS-2,** 'Valuation of Inventories'. This revised standard came into effect in respect of accounting periods commencing on or after 01.04.1999 and is mandatory in nature. The statement deals with the ascertainment of the cost of inventories and any write-down thereof to the net realizable value (NRV).

Valuation of inventory has an impact on the profits of two financial years—the year in which it appears as **closing stock** and the subsequent year in which it appears as **opening stock**. Thus, wrong valuation and misreporting of inventory in one accounting period shall have an impact on profits of two accounting years. An error in inventory valuation shall directly affect the gross profits of an organization.

An **overstatement** in inventory valuation shall lead to an overstatement of profits for that year and also the **understatement** of profits for the subsequent year and vice versa. It is worth-mentioning that the combined profits of the said two years shall, however, remain unchanged. Inventory errors, thus, result in timing differences. Any such errors in inventory valuation occurring after the balance sheet date or closing of accounts, materially affecting the true and fair view of the state of affairs, should be disclosed in the **Director's Report** as part of **Events occurring after balance sheet date** in accordance with the Accounting Standard AS-4, 'Contingencies and Events occurring after Balance Sheet date'.

INVENTORY

Inventory items are such items that are maintained with the objective of sales and not with the objective of using them for the production of goods and services. Therefore, fixed assets do not form the part of inventory. Inventory includes the goods procured/produced by an organization with the objective of sales. It encompasses stock of raw material, semi-finished goods and finished goods produced by a merchandizing organization. It also includes the items, such as chemicals, lubricants and additive agents consumed in the production of goods and services.

Different Inventory Items

Inventory items in a manufacturing organization can broadly be classified into the following categories:

- On the basis of traceability
  - Direct material
  - Indirect material
- On the basis of nature
  - Main raw material
  - Supporting/ancillary raw material
  - Consumable stores
  - Tools and spare parts

USEFUL INFO

Inventory includes:

- Raw material
- Work-in-process units
- Finished goods
- Consumables
- Maintenance supplies and loose tools awaiting use in the production

Procuring and Maintaining Inventory—the Mechanism

Inventory control implies a proper planning, timely procurement, safe storage, minimize pilferages and cost minimization on account of material consumption.

Inventory items, being an important constituent of the production process, require efficient and effective control. By **inventory control**, we mean to have a proper check on the procurement, storage, maintenance, use and handling of raw material, semi-finished goods (work-in-process), finished goods, consumable stores and related items so as to have a smooth flow of production and sales function.

The first and foremost **aim of inventory control** is to facilitate proper execution of production schedule with the timely availability of right kind of material at right production location. Timely availability of material not only saves labour time but also helps in proper sequencing of activities in the factory. With the help of this, optimum utilization of resources is possible to either manage the bottom line or maximize the profits. The process of inventory control starts once a business entity has placed the order for inventory items to be purchased. The **process of purchase** entails the following:

- Setting the specification including quality parameters of items to be purchased.
- Inviting bids, if required and selection of vendor.
- Placing the order for items to be purchased.

Inventory Control Activities

Inventory control is not a single function but it is a group of activities performed in a logical sequence with the aim to exercise control over the different constituents of inventory. The process of inventory control includes the following:

- Receiving
- Quality Checking
- Storage
- Record Keeping
- Issue
- Stock Audit

PHYSICAL VERIFICATION OF INVENTORY

Inventory items as discussed earlier may be used in a manufacturing/merchandizing as well as service organization. In a manufacturing organization, a large number of inventory items are used as compared to a service organization. At the same time, a manufacturing organization usually has inventory of raw material, work-in-process and finished goods, whereas a service organization, such as hotel or restaurant has either raw material and finished goods only in a relatively small quantity. Inventory items are **physically stored** at multiple locations, such as godown of purchase department, godown of factory, warehouse of sales department and sometimes, it is in transit. If we consider a company manufacturing FMCG (fast moving consumer goods) products, we find stock of raw material in the purchase department's godown that is subsequently moved to the factory for consumption purpose and remains in the factory godown. Likewise, semi-finished goods and finished goods are stored in the factory godown. Finished goods might be in transit or in the godown of sales department. Therefore, physical verification becomes an important task in every business organization, specially in manufacturing and merchandizing organization.

Different items, such as raw material, semi-finished goods (work-in-process) and finished goods are considered inventory only at the time of year-end or at the time of finalization of books of accounts for the purpose of **financial reporting**. If an organization maintains perpetual system of inventory record keeping then the quantity as well as value of inventory available at the financial year-end is readily available in the **stock ledger/account** maintained either in the accounts department or in the warehouse. The quantity as disclosed by the stock ledger requires a cross checking by carrying out physical verification of the inventory items. This is referred to as **stock taking**. The physical verification of the inventory is carried out by considering the following:

Physical verification of inventory implies cross verification of stock disclosed by stock ledger and physically available quantity of inventory items in the godown.

USEFUL INFO

In physical verification, we consider:

- Inventory in godown
- Inventory in transit
- Goods on consignment
- Goods on sale or approval basis

Steps in Physical Verification

Physical verification involves the following steps:

Step 1: Preparation of stock-taking instruction to be used by verification staff

Step 2: Sub-division of inventory items into different groups

Step 3: Preparation of inventory tags with serial numbers, each tag has a foil and counterfoil. Each tag has a description of inventory item, such as name of item, code number of item, quantity, location, verification date, verifiers' name and signature of verifier. Foil is attached with inventory item and counterfoil is used to prepare inventory sheets.

Step 4: Preparation of item-wise consolidated inventory sheets.

Step 5: Reconciliation of physical count/quantity with the quantity disclosed by accounting records.

Step 6: Finding out the discrepancy, if any and recounting the concerned items; if discrepancy still persists then next step is taken.

Step 7: Reporting discrepancy (shortage/surplus) to higher management that might be investigated by top management with the help of company auditors.

Step 8: Shortage as disclosed and untracked stock is recorded either as normal wastage or abnormal wastage.

Step 9:

For normal wastage, the following accounting entry is passed:

Factory Overheads a/c Dr.
To Purchase/Direct Material a/c

For abnormal wastage, the following accounting entry is passed:

Profit & Loss a/c Dr.
To Purchase/Direct Material a/c

For normal surplus

Purchase/Direct Material a/c Dr.
To Factory Overheads a/c

For abnormal surplus

Purchase/Direct Material a/c Dr.
To Profit & Loss a/c

Reconciliation of Physically Verified Inventory

The physical verification of inventory in the godown is done by counting the inventory items by the store keeper under the supervision of accounts officer. The items are counted by putting serial number on the items and the items for which physical verification is difficult or not possible are counted with the help of technical staff, such as finding out quantity of liquid items. The quantity as disclosed by physically verified stock is cross matched with the quantity disclosed by the accounting records/stock ledger. The physically verified quantity might not match with the quantity disclosed by the accounting records; therefore, a reconciliation is carried out to trace the mismatch. The probable **cause of mismatch** might be on account of inventory in transit, goods on consignment and goods sold to customers on approval basis.

> **Mismatch** between inventory quantity as disclosed by stock ledge and physically available quantity of inventory might be on account of goods in transit, goods on consignment or goods on sale or approval.

A cross verification of purchase invoices with the inward stock register can reveal the quantity of inventory items in transit, the purchase items for which payment has been made to supplier and recorded as purchase are considered stock-in-transit. The goods that have been despatched to customers but not recorded as sales are also the goods in transit. The goods transferred from one warehouse to another warehouse are also the **goods in transit**. Similarly, the account sales received from the consignee reveals the stock on consignment. The detail of sales records helps in finding out the quantity of goods sold on approval basis for which customers still have the option to return the goods. Table 10.1 shows an inventory reconciliation statement.

TABLE 10.1 Inventory Reconciliation Statement

Particulars	Qty	Cost (₹)
Stock as revealed by physical verification **Add:** (1) Goods in transit ■ Purchase recorded but still in transit ■ Goods despatched to customers but not recorded as sales (2) Stock on consignment (3) Stock on sale on approval basis		
Total		

METHODS FOR THE COST MEASUREMENT OF INVENTORY

In a merchandizing organization, cost of inventory is measured either by using specific cost method or by using other method as per the requirement of business situation. Under specific cost method, actual cost of each inventory item available in the godown is considered to arrive at the cost of inventory item. However, practically it is not feasible to assess the cost by using specific cost method in such situation any one of the following methods should be adopted:

- Retail method
- Standard cost method
- (Gross profit) method

Retail Method: Cost to Sales Value Ratio Method

Retail method is applied in a merchandizing organization, under this method cost and sales value of opening inventory, net purchase during the year and sales value of goods sold is considered while calculating cost of closing inventory. For valuing inventory, the following arrangements are necessary:

(a) Cost and sales value of opening inventory is brought forward from the previous year
(b) Inventory recording system is designed in such a manner so that cost as well as sales value of each item purchased during the year is recorded.
(c) Sales value of items sold is ascertained from the sales invoice records
(d) The cost of closing inventory is ascertained as shown in Table 10.2.

TABLE 10.2 Statement Showing Cost of Closing Inventory

Particulars	Cost (₹)	Sales Value
Opening inventory	****	****
Add: Purchase during the year	****	****
Goods available for sale	****	****
Less: Sales value goods sold		****
Sales value of closing inventory		****
Cost to sales value ratio = (Cost of Goods Available/Sales Value of Goods Available) × 100 Cost of closing inventory =	(Sales value of closing inventory × cost to sales value ratio)/100	

Example 1 Danish departmental stores reported the facts about the grocery items that it had opening stock of sales value ₹ 1,47,500 (cost ₹ 1,20,400) during the year company purchased the items for which total cost of acquisition was ₹ 18,45,600 with a normal selling price of ₹ 20,82,700. Sales at normal selling price during the year was of ₹ 19,45,200. Using retail method, ascertain the cost of inventory items at the end of the year.

Solution With the details given the cost of inventory at the end of the year can be worked out using cost to sales price ratio. The solution will be as follows:

Statement showing cost of closing inventory

Particulars	Cost (₹)	Sales Value
Opening inventory	1,20,400	1,47,500
Add: Purchase during the year	18,45,600	20,82,700
Goods available for sale	19,66,000	22,30,200
Less: Sales value of goods sold		19,45,200
Sales value of closing inventory		2,85,000
Cost to sales value ratio = (Cost of Goods Available/Sales Value of Goods Available) × 100	(19,66,000/22,30,200) × 100 = 88.15%	
Cost of closing inventory =	(2,85,000 × 88.15)/100 = 2,51,228	

Standard Cost Method

Standard cost method is adopted in a manufacturing organization. The value of closing inventory is ascertained by using pre-determined standard cost for raw material, direct labour, absorption rates for fixed and variable overhead rates. This method is suitable in an organization where actual level of production quantity approximately equals budgeted production capacity. If actual production differs significantly from the budgeted production capacity then standard cost is adjusted accordingly.

Gross Profit Method

This method of measurement of inventory cost is applicable in a merchandizing as well as manufacturing organization. Under this system past record of gross profit margin is taken as the strong basis for the measurement of inventory cost. It is believed that the organization earns similar level of gross profit margin on the goods sold by the organization year after year. This percentage of gross profit is applied on the sales value and the amount of gross profit is deducted from the sales to arrive at the cost of goods sold. This cost of goods sold is deducted from the total cost of goods available for sales the resulting value is the cost of closing inventory. Table 10.3 depicts a statement showing cost of inventory.

TABLE 10.3 Statement Showing Cost of Inventory

Particulars	Amount (₹)
Sales during the year	
Less: Gross profit on sales	
Cost of goods sold	
Opening stock at cost	
Add: Net purchase during the year	
Less: Abnormal wastage during the year	
Cost of goods available for sales	
Less: Cost of goods sold as calculated above	
Cost of closing inventory	

EXAMPLE 2 The following facts have been extracted from the books of Truth International Corporation: Sales during the year ₹ 1,34,70,000, the opening stock at cost was ₹ 61,25,000 and company made a purchase of ₹ 56,38,000. Certain goods costing ₹ 94,000 were damaged by fire and considered as abnormal loss. Past records reveal that company has been earning a gross profit margin of 37% on sales value that can be considered as a reasonable level of gross profit on sales. Estimate cost of closing inventory.

Statement Showing Cost of Inventory

Particulars	Amount (₹)
Sales during the year	1,34,70,000
Less: Gross profit on sales (1,34,70,000 × 37)/100	49,83,900
Cost of goods sold	84,86,100
Opening stock at cost	61,25,000
Add: Net purchase during the year	56,38,000
Less: Abnormal wastage during the year	**94,000**
Cost of goods available for sales	1,16,69,000
Less: Cost of goods sold as calculated above	**84,86,100**
Cost of closing inventory	31,82,900

Alternative Format

Instead of preparing the statement shown in Example 2, a **memorandum trading account** on the date of stock valuation can also be prepared. This will be as follows:

Memorandum Trading Account

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening stock	61,25,000	By Net sales	1,34,70,000
To Purchase (net)	56,38,000	By Abnormal loss (cost)	94,000
To Manufacturing expenses	–	By Closing stock at cost	31,82,900
To Wages		(Balancing figure)	
To Gross profit			
(1,34,70,000 × 37)/100	49,83,900		
	1,67,46,900		1,67,46,900

Special Cases and Valuation of Inventory

Stock-taking, physical verification and valuation of inventory in every organization is carried out at the end of the financial year. It becomes an important pre-requirement for the preparation of final accounts. Few of the organizations have the practice of valuing the inventory at the end of each quarter or half-year also. Sometimes due to administrative reasons or due to some emergency, the valuation of stock does not get carried out on specified date but it is done subsequently. To ascertain the stock as on a back date or with reference to a retrospective date, a memorandum trading accounting is prepared using gross profit method of inventory valuation. The occasion may be as follows:

- Stock gets destroyed due to fire or other casualty and later on, cost of stock on the date of fire is to be ascertained.
- Stock valuation was not completed on the date of balance sheet but it was done subsequently.

In these types of cases, valuation of inventory is done using the fundamentals of gross profit method.

EXAMPLE 3 Sach Organics Ltd could not complete the valuation of inventory on March 31, 2009; however, it valued the inventory on April 9, 2009. The relevant facts extracted from the accounting records for the period April 1, 2009 to April 9, 2009 were as follows:

Sales ₹ 65,76,000; purchase ₹ 28,33,000: wages ₹ 9,13,000; manufacturing expenses ₹ 2,45,000; closing stock on April 9, 2009 was ₹ 16,78,000.

Past accounting records reveal that company earns gross profit @ 29% on sales value. Ascertain value of opening stock on April 1, 2009.

SOLUTION

Memorandum Trading Account

For the period from April 1 to April 9, 2009

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening stock (balancing figure)	23,55,960	By Net sales	65,76,000
To Purchase (net)	28,33,000	By Closing stock at cost (Balancing figure)	16,78,000
To Manufacturing expenses	2,45,000		
To Wages	9,13,000		
To Gross profit (65,76,000 × 29)/100	19,07,040		
	82,54,000		82,54,000

Value of stock on April 1, 2009 is ₹ 23,55,960.

INVENTORY VALUATION SYSTEM

Recording inventory and exercising control over it is the prime objective of accounting for inventory. Under this, record of inventory items is maintained in such a manner so as to facilitate valuation (cost estimation) of closing inventory as on a particular date as well as to find out the cost of items consumed or sold during the reporting period. **Inventory accounting** primarily involves the record-keeping for inventory and facilitate valuation of inventory. The record-keeping function with respect to inventory items is maintained at two different levels—one in the financial accounting department so as to record purchase and make the payment of purchase of inventory; here, different inventory related costs, such as purchasing cost, cost for maintaining the inventory are also recorded in the books of accounts. The second stage of recording is done in the godown/warehouse with the aim to have a track of the inventory items stored in the godown. Both the levels of recording have the primary objective of inventory valuation and control.

Recording for Issues and Inventory Valuation System

There are two systems used for inventory valuation:

- Continuous system
- Periodic system

Continuous System

A **continuous system of inventory valuation** is the one in which a stock register is maintained on an ongoing basis. Every purchase and issue/sales of the inventory item is entered in this register as soon as it takes place. By doing so, the cost of items consumed/sold as well as the cost of remaining inventory can be ascertained in a routine manner. The following are the methods of maintaining stock ledger/register:

LIFO (Last in First out) Method Under this method, it is considered that the latest inventory item has been consumed/sold first and stock of inventory items is out of the oldest stock.

FIFO (First in First out) Method Under this method, it is considered that the inventory items procured at first get consumed/sold first and stock of inventory items is out of the latest purchase.

Simple Average of Price Method Under this method, the stock of inventory is valued at the simple average of price of inventory items purchased at different times.

Weighted Average of Price Method Under this method, the stock of inventory is valued at the weighted average of price of inventory items purchase at different times.

HIFO (Highest in First out) Method Under this method, the stock of inventory items is valued at the lowest of the different prices at which inventory items have been procured at different times.

Base Inventory Method Under this method, the stock of inventory items is valued at the base rate as decided by the experts or management of the company. Base inventory method is also called **standard rate method**.

An example regarding maintaining stock register under continuous system of inventory valuation is given below.

Example 4 The following records have been extracted from the stores ledger of DXL Ltd:

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/01/07	10,000	100	15/01/07	8,500
21/01/07	7,000	95	28/01/07	3,500
31/01/07	2,200	96	21/02/07	7,000
10/02/07	800	100	02/03/07	800
15/03/07	6,200	101	29/03/07	4,400

Prepare stock register under continuous inventory valuation system using (a) LIFO, (b) FIFO, (c) simple average of prices and (d) weighted average of prices method.

Solution **(a) LIFO Method**

Stock Register (Lifo Method)

Date	Receipts			Issues			Balance		
	Qty.	Rate	Amt. (₹)	Qty.	Rate	Amt. (₹)	Qty.	Rate	Amt. (₹)
2/1/7	10,000	100	10,00,000	–	–	–	10,000	100	10,00,000
15/1/7	–	–	–	8,500	100	8,50,000	1,500	100	1,50,000
21/1/7	7,000	95	6,65,000	–	–	–	1,500 7,000	100 95	8,15,000
28/1/7	–	–	–	3,500	95	3,32,500	1,500 3,500	100 95	4,82,500
31/1/7	2,200	96	2,11,200	–	–	–	1,500 3,500 2,200	100 95 96	6,93,700

(*Contd*)

(*Contd*)

10/2/7	800	100	80,000	–	–	–	1,500 3,500 2,200 800	100 95 96 100	7,73,700
21/2/7	–	–	–	800 2,200 3,500 500	100 96 95 100	6,73,700	1,000	100	1,00,000
2/3/7	–	–	–	800	100	80,000	200	100	20,000
15/3/7	6,200	101	6,26,200	–	–	–	200 6,200	100 101	6,46,200
29/3/7	–	–	–	4,400	101	4,44,400	200 1,800	100 101	2,01,800

On March 29, 2007 closing inventory is 2,000 units having a total cost of ₹ 2,01,800 as per LIFO method under continuous system of inventory valuation.

(b) FIFO Method

Stock Register (FIFO Method)

Date	Receipts			Issues			Balance		
	Qty.	Rate	Amt. (₹)	Qty.	Rate	Amt. (₹)	Qty.	Rate	Amt. (₹)
2/1/7	10,000	100	10,00,000	–	–	–	10,000	100	10,00,000
15/1/7	–	–	–	8,500	100	8,50,000	1,500	100	1,50,000
21/1/7	7,000	95	6,65,000	–	–	–	1,500 7,000	100 95	8,15,000
28/1/7	–	–	–	1,500 2,000	100 95	3,40,000	5,000	95	4,75,000
31/1/7	2,200	96	2,11,200	–	–	–	5,000 2,200	95 96	6,86,200
10/2/7	800	100	80,000	–	–	–	5,000 2,200 800	95 96 100	7,66,200
21/2/7	–	–	–	5,000 2,000	95 96	6,67,000	200 800	96 100	99,200
2/3/7	–	–	–	200 600	96 100	79,200	200	100	20,000
15/3/7	6,200	101	6,26,200	–	–	–	200 6,200	100 101	6,46,200
29/3/7	–	–	–	200 4,200	100 101	4,44,200	2,000	101	2,02,000

On March 29, 2007 closing inventory is 2,000 units having a total cost of ₹ 2,02,000 as per FIFO method under continuous system of inventory valuation.

(c) Simple Average of Prices

Stock Register (Simple Average of Prices Method)

Date	Receipts			Issues			Balance		
	Qty.	Rate	Amt. (₹)	Qty.	Rate	Amt. (₹)	Qty.	Rate*	Amt. (₹)
2/1/7	10,000	100	10,00,000	–	–	–	10,000	100	10,00,000
15/1/7	–	–	–	8,500	100	8,50,000	1,500	100	1,50,000
21/1/7	7,000	95	6,65,000	–	–	–	8,500	97.50	8,15,000
28/1/7	–	–	–	3,500	97.50	3,41,250	5,000	97.50	4,73,750
31/1/7	2,200	96	2,11,200	–	–	–	7,200	95.50	6,84,950
10/2/7	800	100	80,000	–	–	–	8,000	97	7,64,950
21/2/7	–	–	–	7,000	97	6,79,000	1,000	97	85,950
2/3/7	–	–	–	800	97	77,600	200	97	8,350
15/3/7	6,200	101	6,26,200	–	–	–	6,400	100.50	6,34,550
29/3/7	–	–	–	4,400	100.50	4,42,200	2,000	100.50	1,92,350

* Rate for further issue. It has been calculated as follows:

1. On 21/01/07,
   Simple Average of Prices = (100+95)/2 = ₹ 97.50
2. On 31/01/07, simple average of prices has been calculated by taking only two latest prices, i.e., ₹ 96 and ₹ 95, as only 7,200 units are in stock and these come from the latest purchase of 31/01/07 and 21/01/07.
   Simple Average of Prices = (95+96)/2 = ₹ 95.50
3. On 10/02/07, simple average of prices has been calculated by taking only three latest prices, i.e., ₹ 96 , ₹ 95 , and 100 as only 8,000 units are in stock and these come from the latest purchase of 10/02/07, 31/01/07 and 21/01/07.
   Simple Average of Prices = (95+96+100)/3 = ₹ 97
4. On 15/03/07, simple average of prices has been calculated by taking only two latest prices, i.e., ₹ 101 and ₹ 100 as only 6,400 units are in stock and these come from the latest purchase of 15/03/07 and 10/02/07
   Simple Average of Prices = (100 + 101)/3 = ₹ 100.50
   On March 29, 2007 closing inventory is 2,000 units having a total cost of ₹ 1,92,350 as per simple average of prices under continuous system of inventory valuation.

Balance quantity and amount have been calculated as follows:

(a) After every purchase, quantity purchased is added to the previous balance quantity and the amount of purchase is added to the previous amount of balance column.

(b) After every issue quantity issued is deducted from the previous balance quantity and amount of issue is deducted from the previous amount of balance column.

(d) Weighted Average of Prices

Stock Register (Weighted Average of Prices Method)

Date	Receipts			Issues			Balance		
	Qty.	Rate	Amt. (₹)	Qty.	Rate	Amt. (₹)	Qty.	Rate*	Amt. (₹)
2/1/7	10,000	100	10,00,000	–	–	–	10,000	100	10,00,000

(*Contd*)

(*Contd*)

15/1/7	–	–	–	8,500	100	8,50,000	1,500	100	1,50,000
21/1/7	7,000	95	6,65,000	–	–	–	8,500	95.88	8,15,000
28/1/7	–	–	–	3,500	95.88	3,35,580	5,000	95.88	4,79,420
31/1/7	2,200	96	2,11,200	–	–	–	7,200	95.92	6,90,620
10/2/7	800	100	80,000	–	–	–	8,000	96.33	7,70,620
21/2/7	–	–	–	7,000	96.33	6,74,310	1,000	96.33	96,310
2/3/7	–	–	–	800	96.33	77,064	200	96.33	19,246
15/3/7	6,200	101	6,26,200	–	–	–	6,400	100.85	6,45,446
29/3/7	–	–	–	4,400	100.85	4,43,740	2,000	100.85	2,01,706

* Rate for further issue. It has been calculated as follows:

1. On 21/01/07
   Weighted Average of Prices = Balance Amt./ Balance Qty.
   Weighted Average of Prices = 8,15,000/ 8,500 = ₹ 95.88
2. On 31/01/07
   Weighted Average of Prices = 6,90,620/ 7,200 = ₹ 95.92
3. On 10/02/07
   Weighted Average of Prices = 7,70,620/ 8,000 = ₹ 96.33
4. On 15/03/07
   Weighted Average of Prices = 6,45,446/ 6,400 = ₹ 100.85

On March 29, 2007 closing inventory is 2,000 units having a total cost of ₹ 2,01,706 as per weighted average of prices under continuous system of inventory valuation .

Balance Quantity and Amount have been calculated as follows:

(a) After every purchase, quantity purchased is added to the previous balance quantity and amount of purchase is added to the previous amount of balance column.

(b) After every issue quantity issued is deducted from the previous balance quantity and amount of issue is deducted from the previous amount of balance column.

Periodic System

It is a system of inventory valuation in which stock register is not maintained on a continuous basis instead a record of all the receipts/purchases and issues/sale is maintained that is used at the end of the period to find out the value of closing inventory as at the end of a particular period. Under this system, entry of each and every receipt and issue is not maintained in the stock register on an ongoing basis. The methods used for assigning value to closing inventory are discussed below.

LIFO (Last in First out) Method Under this method, it is considered that the latest inventory item has been consumed/sold first and stock of inventory items is out of the oldest stock.

FIFO (First in First out) Method Under this method, it is considered that the inventory items procured at first, get consumed/sold first and stock of inventory items is out of the latest purchase.

Simple Average of Price Method Under this method, the stock of inventory is valued at the simple average of price of inventory items purchased at different times.

Weighted Average of Price Method Under this method, the stock of inventory is valued at the weighted average of price of inventory items purchase at different times.

HIFO (Highest in First out) Method Under this method, the stock of inventory items is valued at the lowest of the different prices at which inventory items have been procured at different times.

Base Inventory Method Under this method, the stock of inventory items is valued at the base rate as decided by the experts or management of the company. Base inventory method is also called **standard rate method**.

Steps to Calculate Value of Inventory

Step One

Find out closing stock (quantity) of inventory item.

Closing stock = Opening Stock + Quantity Purchased – Quantity Sold.

Step Two

Find out the value of closing stock by using the appropriate method.

Example 5 The following records have been extracted from the stores ledger of DXL Ltd:

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/01/07	10,000	100	15/01/07	8,500
21/01/07	7,000	95	28/01/07	3,500
31/01/07	2,200	96	21/02/07	7,000
10/02/07	800	100	02/03/07	800
15/03/07	6,200	101	29/03/07	4,400

Find out value of closing inventory under periodic system using (a) LIFO, (b) FIFO, (c) Simple Average of Prices and (d) Weighted Average of Prices method.

Solution Closing Inventory Qty. = Opening Inventory Qty. + Purchase Qty. – Issued Qty.
Here, Closing Inventory Qty. = nil + 26,200 – 24,200, i.e., = 2,000 units. Cost of these 2,000 units under periodic system can be worked as follows:

(a) LIFO Method
2,000 units are from the initial purchase as latest purchase is consumed first; therefore, cost of inventory 2,000 units is @ ₹ 100 amounting to ₹ 2,00,000.

(b) FIFO Method
2,000 units are from the latest purchase as initial purchase is consumed first; therefore, cost of inventory 2,000 units is @ ₹ 101 amounting to ₹ 2,02,000.

(c) Simple Average of Prices Method
Under this system cost of 2,000 units is to be calculated by taking simple average of all the prices at which inventory item has been purchased, this is as follows:
Simple Average of Prices = (100 +95 +96+ 100 + 101)/ 5 = ₹ 98.40
Now 2,000 units are to be valued at ₹ 98.40 per units having a total cost of ₹ 1,96,800.

(d) Weighted Average of Prices Method
Under this system cost of 2,000 units is to be calculated by taking weighted average of all the prices at which inventory item has been purchased, this is as follows:

Weighted Average of Prices

= Total Value of All the Purchases / Total Qty. of All the Purchases

$$= \frac{\{(10{,}000 \times 100) + (7{,}000 \times 95) + (2{,}200 \times 96) + (800 \times 100) + (6{,}200 \times 101)\}}{(10{,}000 + 7{,}000 + 2{,}200 + 800 + 6{,}200)}$$

= ₹ 98.56

Now 2,000 units are to be valued at ₹ 98.56 per units having a total cost of ₹ 1,97,120.

Recap 1

So far, we have discussed the following topics:

Inventory:
- Definition
- Different Inventory Items
- Procuring and Maintaining Inventory—the Mechanism
- Inventory Control Activities

Physical Verification of Inventory:
- Reconciliation of Physically Verified Inventory

Methods for Measurement of the Cost of Inventory:
- Retail Method
- Standard Cost Method
- Gross Profit Method
- Special Cases and Valuation of Inventory

Inventory Valuation System:
- Continuous System
- Periodic System
- LIFO, FIFO, Simple Average of Price Method ,Weighted Average of Price Method
- HIFO, Base (standard) Inventory Method
- Maintaining Stock Register under Continuous System of Inventory Valuation

Self-assessment

1. Discuss methods for cost measurement for inventory.
2. Discuss inventory valuation systems in practice.

The following topics will be delved into next:

Valuing Inventory from Accounting Perspective—Accounting Standard-AS-02

Cost of Inventory
- Under/Over Absorption of Overheads
- Costs not Included as Part of Inventory Cost
- Inventory Valuation Rules Accounting Standard vs Income Tax Rules

Inventory and Reporting in Final Accounts
- Accounting Prudence—Lower of Cost and Market Value Rule

Misreporting for Inventory and Effect on Profits
- Accounting Adjustment for Wrong Valuation of Inventory
- Convention of Consistency and Full Disclosure
- Change in Inventory Valuation Method and Impact on Profit

Case—Managerial Decision

VALUING INVENTORY FROM ACCOUNTING PERSPECTIVE—ACCOUNTING STANDARD (AS-2)

As inventory of different items is important not only for merchandizing organization but also for service organizations, therefore, it requires certain policy guidelines and procedures in the accounting department of every organization so as to facilitate proper record keeping of inventory items namely raw material, semi-finished goods, finished goods and finished goods. Indian accounting standards also contain the provisions for inventory accounting and valuation of inventory. Different provisions of AS-2 specify that inventory encompasses the basic raw material, ancillary inputs, work-in-process, finished goods and supporting material consumed in the production of goods and services. The accounting standard provides for the cost estimation of inventory items. According to AS-2, the following concepts are relevant:

- Cost of Inventory
- Techniques for the cost measurement

USEFUL INFO

AS-2 Provides for
- Cost of inventory
- Techniques for cost measurement

Cost of Inventory

According to the provisions of AS-2, cost of inventory includes the purchase cost, conversion costs and other related costs that are incurred in bringing the inventory items in deliverable form. Usually, the following costs form the cost of inventory:

- All purchase costs
- Costs of conversion
- Any other costs incurred for bringing the inventories to their present location or condition.

Cost of inventory includes cost of purchase, conversion cost and other costs in bringing the inventory in saleable position.

Cost of Purchase

The **purchase costs** include cost of the inventory (raw material, semi-finished goods, finished goods), purchase commission, quality testing costs, carriage inwards, freight inwards duties and taxes levied on these items. From this, purchase discount, duty draw back and other receivables on account of inventory purchase are deducted.

Cost of Conversion/Production

The **cost of conversion** is used by an organization that is a manufacturing company engaged in the conversion of raw material into finished or semi-finished goods it includes both direct and indirect cost incurred at the factory level. These costs are like cost of direct and indirect material attributable to the product, cost of direct and indirect labour, fixed as well as variable overheads attributable or apportioned to the product.

Only such costs are absorbed into the inventory items (semi-finished and finished goods) that are incurred in bringing the inventory items to the current state.

INVENTORY VALUATION PRACTICE

XYZ Pvt. Ltd, manufacturing garments, has valued at the year-end its closing stock of packed finished goods for which firm export contracts have been received, at realizable value inclusive of profit and export cash incentive. As at the year-end, the ownership of the goods has not been transferred to the foreign buyers. Comment.

Clarification:
Valuation of Inventories: AS-2 requires that inventories should be valued at lower of cost and net realizable value (NRV). A departure from the general principle can be made if the AS-2 is not applicable or having regard to the nature of industry. AS-2 also states that (a) work-in-progress arising under construction contracts, including directly related service contracts (b) work-in-progress arising in the ordinary course of business of service providers; (c) shares, debentures and other financial instruments held as stock-in-trade; and (d) producers' inventories of livestock, agricultural and forest products are measured as NRV based on established practices. In the given case, the sale is assumed under a forward contract but the goods are not of a nature covered by the above exceptions taking into account the facts, the closing stock of finished goods should have been valued at cost, as it is lower than the realizable value (as it includes profit). Further, export cash incentives should not be included for valuation purposes.

The policy adopted by the company for valuing its closing stock of inventory of finished goods on selling price plus export incentives is not correct. The statutory auditor should give a qualified report.

Under/Over Absorption of Overheads

While absorbing fixed overheads into the product (cost unit), the normal production capacity is considered. In case the factory fails to match the actual production with the normal production capacity then there is likely to be the difference between actual fixed overheads and fixed overheads absorbed into the product. If actual overheads are more as compared to the absorbed overheads then it is termed as **under absorption of overheads**. The amount of under absorption may be considered as **normal incidence**. Then the accounting entry will be

Cost of Production a/c Dr.
To Fixed Overheads a/c

and in case it is considered **abnormal incidence** then to record a loss, the following entry is passed.

Profit & Loss a/c Dr.
To Fixed Overheads a/c

In case of **over absorption**, i.e., the absorbed amount is more than the actual amount of overheads. If this difference is considered **abnormal incidence** then entry will be

Fixed Overheads a/c Dr.
To Profit & Loss a/c

However, when it is considered as **normal incidence** then the entry will be

Fixed Overheads a/c Dr.
To Cost of Production a/c

In case of joint products and by-product, an appropriate system of accounting is followed to ascertain the cost of product. Joint costs are apportioned and re-apportioned on a judicious basis. After this, the joint costs are absorbed into the products.

USEFUL INFO

Costs which are not the part of inventory cost:
Administrative, selling and distribution costs are not part of inventory cost

Costs not included as part of inventory cost

The costs, such as administrative cost that are not involved in bringing the inventory (raw material/semi-finished goods/finished goods) to its present state are not included in the cost of inventory. The costs, such as storage cost, administrative cost, selling and distribution costs, cost in maintaining the inventory—e.g., usual refrigeration costs—are not included in the cost of inventory. All these costs are the costs for the period and matched; hence, matched against the **revenue for the period**. Likewise, **abnormal wastage and spoilage costs** are also excluded from the cost of inventory. However, the normal wastage of inventory items is considered as part of the cost of inventory and included in the cost.

Accounting records are maintained in a routine manner in the financial accounting department as well as in the godown/warehouse. The main question of inventory valuation arises only at the end of the accounting year when matching concept is to be followed. According to the **matching concept**, all the relevant cost that have been incurred for generating the sales revenue for the year must be matched against the revenue for the year.

Practically, **inventory** means the items that have not been used/sold and remained in the factory or warehouse awaiting the use/sale likely to take place in the next year; therefore, the cost of these items is such proportion of the total cost of inventory items that could not be matched against the revenue for the accounting year. By following this aspect, the revenue can be calculated appropriately at the same time assets can also be valued at the appropriate amount.

Inventory valuation Rules: Accounting Standard vs Income Tax Rules

As per Section 145A of Income Tax Act, stock valuation should be inclusive of any tax, duty, cess or fee actually paid by assessee to bring the goods to the place of its location and condition as on date of valuation, even if such tax or duty is recoverable subsequently. Thus, duty paid on inputs will have to be added while valuing stock, even if Cenvat credit is availed of such duty paid. In respect of finished stock, excise duty payable should be added to the inventory valuation even if not paid as goods are still lying in the factory. Both opening as well as closing stock should be valued on the same basis. The amended Section 145A is effective from 1-4-1999 and is applicable to AY 1999–2000 and onwards.

However, **as per AS-2 inventory cost** should comprise all cost of purchases, cost of conversion and other costs incurred in bringing the inventories to the present location and condition. The cost of purchases should be exclusive of duties that are recoverable from the taxing authorities (e.g., Cenvat). Inventory should be valued at lower of cost or net realizable value. Inventory should be valued on FIFO (First in First Out) method or weighted average method. LIFO is not permitted.

Thus, for the purpose of Income Tax, inventory is required to be valued inclusive of excise duty, even if assessee is entitled to get Cenvat credit of duty. However, for purposes of balance sheet as per Companies Act, inventory should be valued exclusive of excise duty, if assessee is entitled to get Cenvat credit of duty paid on inputs. In view of this conflict, Institute of Chartered Accountant of India has advised that in the company accounts, inventory of inputs should be valued without considering Cenvat. For purposes of income tax Section 145A, computation should be made outside the books.

Inventory valuation is responsibility of auditor also—A note in balance sheet of many companies states—Inventory (As valued and certified by Management). This gives an impression that inventory valuation is not a responsibility of the auditor. Hence, ICAI has advised that these words should not be used in balance sheet, as the auditor is required to perform audit procedures to check inventory.

INVENTORY AND REPORTING IN FINAL ACCOUNTS

Inventory for all practical purposes is the stock of raw material, semi-finished goods, finished goods and different stores items that have remained unused and unsold at the end of the year or at the date of balance sheet. The normal procedure is to carry out physical verification and match the result of physical verification with the quantity as disclosed by stock ledger or accounting records. Once stock as disclosed by physical verification gets reconciled, it needs to be shown in the final accounts. The accounting entry for recording inventory is as follows:

(a) When books of accounts have not been closed and trial balance has not been prepared

Particulars	Amount (₹)
Closing Stock a/c Dr. To Purchase/Direct Material a/c	Cost of inventory

(b) When books of accounts have been closed and trial balance has been prepared

Particulars	Amount (₹)
Closing Stock a/c Dr. To Manufacturing/Trading a/c	Cost of inventory

Accounting Prudence—Lowering of Cost and Market Value Rule

The preamble of accounting prudence insists on **convention of conservatism** that implies that one should anticipate future losses and provide for such losses in the books of accounts but future profits should never be provided in the books of accounts. According to this convention, inventory items are to be shown in the books of accounts (specifically final accounts) at the cost or market value, whichever is lower.

Sometimes net realizable value is used instead of market value. By doing this, the following two objectives are achieved:

- Cost of goods sold gets calculated appropriately
- Profits are shown at appropriate level
- Inventory as closing stock in the balance sheet gets reported appropriately

When closing entries as discussed have already been passed at the cost and subsequently, it is disclosed that market value of the inventory item more as compared to cost then there is no requirement for an adjustment in the books of accounts as the cost is lower than the market value. In contrast to this, when market value is less as compared to the cost already recorded in the books of accounts then the following adjustment entry is passed to give effect to the rule of conservatism:

Profit & Loss a/c Dr.
Or
Inventory Fluctuation Fund a/c Dr.
To Closing Inventory a/c

MISREPORTING FOR INVENTORY AND EFFECT ON PROFITS

Although AS-2 prescribes the convention of conservatism in valuing and reporting, the inventory for final accounts preparation, however in certain circumstances, the concept is not adhered to. The impact of such deviation from the conservative convention results into wrong calculation of profits and at the same time, the closing stock as an asset gets reported at a wrong value.

Accounting Adjustment for Wrong Valuation of Inventory

If inventory is shown at a value less than its appropriate value then it results into less amount of profit and at the same time closing stock also gets shown in the balance sheet at a lower value as compared to its real value. This requires a correction either at the time of preparing final accounts or when the facts about **under valuation** are reported after the finalization of books of accounts, i.e., after the preparation of final accounts then adjustment is carried out in the next financial year. Similarly, when inventory has been shown at a value higher than its appropriate value, the effect of it will be that the reported profit for the year gets inflated along with the reporting of closing stock in the balance sheet at a higher value this is called **over valuation of inventory**. The adjustment for this is as follows:

(a) When books of accounts have been closed, entry for closing stock has been passed and trial balance has been prepared but final accounts have not been prepared.

Particulars	Amount (₹)
For under valued inventory Closing Stock a/c Dr. To Manufacturing/Trading a/c	With amount of difference
For overvalued inventory Manufacturing/Trading a/c Dr. To Closing Stock a/c	With amount of difference

(b) When final accounts have been prepared and correction has to be done in the next financial year.

Particulars	Amount (₹)
For under valued inventory Opening Stock a/c Dr. To Reserve and Surplus a/c	With amount of difference
For overvalued inventory Reserve and Surplus a/c Dr. To Opening Stock a/c	With amount of difference

(**Note:** Closing stock of previous financial year becomes the opening stock of the current year.)

Convention of Consistency and Full Disclosure

The accounting standards provide for the consistency of accounting practices followed by an organization year after year. The inconsistency may be about adopting same accounting policies with respect to valuation of inventory, reporting of inventory in final accounts, depreciation of assets, revenue recognization, etc. In the normal course of business, a change in the policies is not expected and accepted. However, in rare circumstances, accounting policies might be changed. If changed then a full disclosure is necessary to facilitate correct analysis and interpretation. In case the policy about inventory valuation and reporting is changed during the current financial year then the impact of such change on the profit and closing inventory is to be disclosed in the annual report of the company. The change might be from LIFO to FIFO or vice versa.

Change in inventory valuation method and impact on profit is illustrated in Examples 6 and 7.

SOLVED EXAMPLES

EXAMPLE 6 The following records have been extracted from the stock ledger of XXL Ltd:

Date	Purchase Qty.	R Rate per unit	Date	Issue Qty.
02/04/07	10,000	100	15/04/07	8,500
21/05/07	7,000	95	28/05/07	3,500

(*Contd*)

(*Contd*)

31/07/07	2,200	96	21/08/07	7,000
10/02/08	800	100	02/03/08	800
15/03/08	6,200	101	29/03/08	4,400

The opening inventory was 3,000 units costing ₹ 92 per unit. Till last year, the company used to follow LIFO method under periodic inventory valuation system, during the current year it was changed to FIFO. Find out the effect of change in the policy on profit and on the value of inventory.

Solution Closing Inventory Qty. = Opening Inventory Qty. + Purchase Qty. – Issued Qty.
Here, Closing Inventory Qty. = 3,000 + 26,200 – 24,200, i.e., = 5,000 units. Cost of these 5,000 units under periodic system can be worked as follows:

(a) LIFO Method

5,000 units comprise 3,000 units of opening stock @ ₹ 92 and 2,000 units from the first purchase @ ₹ 100 each; therefore, the value of 5,000 units will be ₹ 4,76,000 (3,000 × 92 + 2,000 × 100)

(b) FIFO Method

5,000 units are from the latest purchase as opening inventory and initial purchase is consumed first. Therefore, cost of inventory 5,000 units is @ ₹101 amounting to ₹ 5,05,000

Now had the company followed LIFO method then value of closing inventory would have been ₹ 4,76,000 but the company has changed to FIFO method and closing inventory has been reported at ₹ 5,0,5000, ₹ 29,000 more as compared to LIFO method. The impact of such change is that the profit of the current financial year has been reported higher by ₹ 29,000 as well as the closing inventory also.

Similarly, had there been FIFO method till last year and during the current year, the company changes it to LIFO then the effect on profit and closing stock would have been just the opposite.

Example 7 Opening stock of an item in the godown is 2,000 units costing ₹ 22 per unit, during the year, the following purchase was made:
10,000 units @ ₹ 25; 6,000 units @ ₹ 24 ; 9,000 units @ ₹ 23
During the year, 24,500 units were sold. Find out value of closing inventory under periodic system using LIFO, FIFO, simple average and weighted average method.

Solution The quantity of closing inventory is equal to opening stock + purchase quantity less sales quantity. Therefore, closing inventory is 2,500 units (2,000 + 10,000 + 6,000 + 9,000 − 24,500).
Valuation under different methods will be

(a) FIFO method: closing inventory of 2,500 units is out of the last purchase, i.e., 9,000 hence value of inventory is ₹ 57,500 (2,500 × 23). Cost of goods consumed will be ₹ 5,87,500 (6,45,000[1] − 57,500).
(b) LIFO method: closing inventory of 2,500 units is comprises 2,000 units of opening stock valued @ ₹ 22 per unit and 500 units out of the first purchase valued @ ₹ 25 per unit. Therefore, value of closing inventory is ₹ 56,500. Cost of goods consumed will be ₹ 5,88,500 (6,45,000 − 56,500).

[1]Total cost of goods available = value of opening inventory + value of units purchased during the year.

(c) Simple average method: Closing inventory of 2,500 units is to be valued at average price that is ₹ 23.50[2] per unit. Therefore, value of closing inventory is ₹ 58,750. Cost of goods consumed will be ₹ 5,86,250 (6,45,000 − 58,750).

(d) Weighted average method: weighted average of price is simply total cost of goods available divided by the total available quantity. Here it will be ₹ 23.89 (6,45,000/27,000[3]) and closing inventory of 2,500 units is to valued at this price. Therefore, value of closing inventory is ₹ 59,725. Cost of goods consumed will be ₹ 5,85,275 (6,45,000 − 59,725).

Key Terms

Inventory	Inventory control	Physical verification
Reconciliation of inventory	Retail method	Standard cost method
Gross profit method	LIFO	FIFO
Simple average method	HIFO Weighted average method	Under valuation
Over valuation		

Final Recap

- **Inventory** includes the goods procured/produced by an organization with the objective of sales. Inventory encompasses stock of raw material, semi-finished goods and finished goods produced by a merchandizing organization.
- Inventory includes raw material, work-in-process units, finished goods, consumables, maintenance supplies and loose tools awaiting use in the production.
- **Inventory control** implies a proper planning, timely procurement, safe storage, minimize pilferages and cost minimization on account of material consumption.
- **Physical verification** of inventory implies cross verification of stock disclosed by stock ledger and physically available quantity of inventory items in the godown.
- In physical verification, we consider inventory in godown, inventory in transit, goods on consignment and goods on sale on approval basis.
- **Reconciliation is carried due to mismatch** between inventory quantity as disclosed by stock ledge and physically available quantity of inventory. Such mismatch might be on account of goods in transit, goods on consignment or goods on sale or approval.
- **Retail method** is applied in a merchandizing organization. Under this method, cost and sales value of opening inventory, net purchase during the year and sales value of goods sold is considered while calculating cost of closing inventory.
- **Standard cost method** is adopted in a manufacturing organization. The value of closing inventory is ascertained by using pre-determined standard cost for raw material, direct labour, absorption rates for fixed and variable overhead rates.
- **Gross profit method** of measurement of inventory cost is applicable in a merchandizing as well as manufacturing organization.
- **Continuous system** of inventory valuation is the one in which a stock register is maintained on an ongoing basis.
- **Periodic system** of inventory valuation in which stock register is not maintained on a continuous basis instead a record of all the receipts/purchases and issues/sale is maintained that is used at the end of the period to find out the value of closing inventory as at the end of a particular period.

[2]Simple average price is the mean of all the four prices = (22+25+24+23)/4 = Rs. 23.50.

[3]Total available inventory quantity is = opening quantity + purchase quantity.

- **LIFO** (Last in First out) Method—Under this method, it is considered that the latest inventory item has been consumed/sold first and stock of inventory items is out of the oldest stock.
- **FIFO** (First in First out) Method—Under this method, it is considered that the inventory items procured at first get consumed/sold first and stock of inventory items is out of the latest purchase.
- **Simple Average of Price Method**—Under this method, stock of inventory is valued at the simple average of price of inventory items purchased at different times.
- **Weighted Average of Price Method**—Under this method, stock of inventory is valued at the weighted average of price of inventory items purchase at different times.
- **HIFO** (Highest in First out) Method—Under this method, stock of inventory items is valued at the lowest of the different prices at which inventory items have been procured at different times.
- **Base Inventory Method**—Under this method, stock of inventory items is valued at the base rate as decided by the experts or management of the company. Base inventory method is also called **standard rate method**
- **Cost of inventory** includes cost of purchase, conversion cost and other costs in bringing the inventory in saleable position.
- Administrative, selling and distribution costs are **not a part of inventory cost.** According to this convention, inventory items are to be shown in the books of accounts (specifically final accounts) at the cost or market value, whichever is lower.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Which of the following accounting standards is applicable for inventory valuation?
   (a) AS-3 (b) AS-4 (c) AS-10 (d) AS-2
2. From among the following, which one is not included in inventory?
   (a) Raw material (b) Loose tools
   (c) Work-in-process (d) Spare parts forming part of the machinery
3. According to ICAI rules, which of the following methods of pricing issues has been discontinued?
   (a) FIFO (b) LIFO (c) HIFO (d) Weighted average
4. While reporting inventory in the final accounts, which rule is used as accounting prudence?
   (a) Showing all inventory items at cost or market price, whichever is less
   (b) Showing inventory always at cost
   (c) Showing raw material at cost and finished goods at market price
   (d) Always showing both raw material and finished goods at market price
5. As per income tax rules, which of the following Sections is applicable for inventory valuation?
   (a) Sec. 80HHC (b) Sec. 145 (c) Both (d) Neither of these

DESCRIPTIVE QUESTIONS

1. Explain the FIFO and LIFO methods of inventory valuation. Under what circumstances, these are applicable?
2. What do you understand by periodic system of inventory valuation and how it is different from continuous method of inventory valuation?
3. What are the different costs involved in the management of inventory? Explain.

Numerical Problems

1. The following records have been extracted from the stores ledger of VXI Ltd:

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/01/08	20,000	110	15/01/08	3,500
21/01/08	17,000	100	28/01/08	13,500
31/01/08	14,200	98	21/02/08	15,600
10/02/08	1,000	99	02/03/08	5,800
15/03/08	6,200	101	29/03/08	4,400

Prepare stock register under continuous inventory valuation system using (a) LIFO, (b) FIFO, (c) simple average of prices and (d) weighted average of prices method.

2. The following records have been extracted from the stores ledger of Manglam Enterprises Ltd:

Date	Purchase Qty.	R Rate per unit	Date	Issue Qty.
02/01/08	20,000	110	15/01/08	18,500
21/01/08	17,000	100	28/01/08	13,500
31/01/08	14,200	98	21/02/08	15,600
10/02/08	1,000	99	02/03/08	800
15/03/08	6,200	101	29/03/08	4,400

Find out value of closing inventory under periodic system using (a) LIFO, (b) FIFO, (c) simple average of prices and (d) weighted average of prices method.

3. Kumar Silk Mills reported these facts about the silk items—opening stock of sales value ₹ 2,00,000 (cost ₹ 1,80,400) during the year company purchased the items for which total cost of acquisition was ₹ 22,55,600 with a normal selling price of ₹ 25,15,000. Sales at normal selling price during the year were of ₹ 20,45,000. Ascertain the cost of inventory items at the end of the year.
4. The following facts have been extracted from the books of Faith International Corporation:
Sales during the year ₹ 2,54,90,000, the opening stock at cost was ₹ 81,25,000 and company made a purchase of ₹ 1,16,39,000. Certain goods costing ₹ 1,94,000 were damaged by fire and considered as abnormal loss. Past records reveal that company has been earning a gross profit margin of 30% on sales value that can be considered as a reasonable level of gross profit on sales. Estimate cost of closing inventory.

Answers

Multiple Choice Questions

1. (d), 2. (d), 3. (c), 4. (a), 5. (b)

Numerical Problems

1. Closing stock 5,600 units: (a) LIFO @ ₹ 110, (b) FIFO @ ₹ 101, (c) Simple average of prices @ ₹ 100, (d) Weighted average of prices method @ ₹ 100.59;
2. Closing stock 5,600 units: (a) LIFO @ ₹ 110, (b) FIFO @ ₹ 101, (c) Simple average of prices @ ₹ 101.60, (d) Weighted average of prices method @ Rs. 103.03;
3. Cost of closing inventory Rs. 6,01,124; 4. Cost of closing inventory Rs. 17,27,000

CASE

Changing Inventory Valuation Policies and Reworking of Profit

Milky Enterprises—First Year's Results

It was first year of operations of Milky Enterprises, during the year firm purchased the raw material several times the records of stores department showed the following records:

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/01/07	10,000	100	15/01/07	8,500
21/01/07	7,000	95	28/01/07	3,500
31/01/07	2,200	96	21/02/07	7,000
10/02/07	800	100	02/03/07	800
15/03/07	6,200	101	29/03/07	4,400

Under continuous inventory valuation system, the firm adopted LIFO method of inventory valuation. As a result, the closing inventory for the year ending March 31, 2007 was 2,000 units having cost ₹ 2,01,800 (market value ₹ 1,89,700[4]). After considering these facts and other accounting records, the firm reported a gross profit of ₹ 12,79,300 for the year ending March 31, 2007 and the net profit for the year was ₹ 6,64,500.

Milky Enterprises—Second Year's Results

The second year of the firm was more challenging as many new firms had entered in the industry that intensified the level of competition as a result the Milky Enterprises had a tough time in managing its business activities. The records of the stores department showed the following details:

Opening stock 2000 units (200 units @ ₹ 100 and 1,800 units @ ₹ 101)

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/04/07	20,000	110	15/04/07	18,500
21/01/08	17,000	100	28/01/08	13,500
31/01/08	14,200	98	21/02/08	15,600
10/02/08	1,000	99	02/03/08	1,800
15/03/08	6,200	110	29/03/08	9,000

During the year, the accountant of the company was changed as the previous accountant was not fulfilling the requisite qualification. The new accountant adopted the FIFO method under continuous inventory valuation system as a result the closing inventory for the year ending 2008 was 2,000 units valuing ₹ 2,20,000 (Market value Rs 2,49,000[5]). The sales activity for the current year was almost of the same level as that of the previous year and the gross profit reported by the firm was ₹ 12,95,200 and net profit was ₹ 6,81,200. The chief executive of the firm expressed feeling of satisfaction and relief over the results and motivated the employees to further improve the performance in the next financial year.

Discussion Questions

1. Evaluate the accounting policy of the business firm.
2. If you feel that the accounting policy of the firm is not appropriate, then rework the profit using appropriate accounting policy.

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[4]Closing stock was shown in the final accounts at the cost.

[5]Closing stock was shown in the final accounts at market value.

CHAPTER

11

Accounting and Measurement of Assets

Learning Objectives

After reading this chapter, you will be able to

- Recognize fixed assets—property, plant and equipment
- Know about intangible assets
- Familiarize yourself with impairment of assets
- Understand the concept of reversal of impairment loss
- Gain an insight into the provisions of IAS and AS

Internally Generated Goodwill

Medicity Ltd, an established company in the pharmaceuticals sector, with the help of a survey recognizes its brand equity at ₹ 300 crore, with the technical skills imparted to employees at ₹ 120 crore. The agreement with internal and external customers stands at a value of ₹ 30 crore. It recognizes all these items as intangible asset in the annual accounts and starts the amortization of these as per rules.

When annual accounts are put for income tax assessment, the tax authorities deny saying thereby that all these are internally generated intangible assets over which company has no control; therefore, these should not be recognized as intangible asset—rather actual expense on building these should be expensed in the year in which such expenses are incurred.

CAPTIAL EXPENDITURE—DIFFERENT TYPES OF ASSETS

Capital expenditure takes place much before the inception of the business operations of the company, such as spending money on research and development, development of infrastructure, acquisition of technology and pre-operative expenses (preliminary expenses). Accounting for all these expenses requires specialized knowledge so that proper segmentation of fixed assets in different categories can be done.

Capital expenditure is the one that helps in acquiring a tangible or intangible item that is likely to generate utility over a long time period beyond the current financial year. When a capital expenditure leads to the acquisition of some tangible asset to be used over a period beyond one year then it is classified as **fixed asset.** On the contrary, if it results into acquisition of an intangible item (copyright, patents, trade mark or logo, etc.), which is likely to generate utility beyond one accounting year, it is called **intangible asset**. These are collectively called **non-current assets**. Capital expenditure has the following aspects:

- It is non-recurring in nature.
- It generates operating capacity.
- It results into the acquisition of fixed assets—tangible or intangible.
- It is intended for value addition in the existing capacity to produce goods or services.

Non-current assets, particularly fixed assets are economic resources. Anything that can be owned or controlled to generate economic value by using it is called an **asset**. Assets are what a business enterprise owns, such as building, plant, machinery, furniture, cash, stock, sundry debtors and others. The assets provide operating capacity as well facilitate to utilize the operating capacity. Different fixed assets (property, plant, equipment, copyrights, etc.), also termed as **non-current assets** and **long-term assets**, generate operative capacity, whereas **current assets**, also termed as **short-term assets**, get created during capacity utilization as provided by the non-current assets. Different assets held in a business enterprise include both current and non-current assets.

Primary Classification of Assets

Assets are basically classified in the following manner:

1. Current assets:
   - Cash
   - Cash equivalent—marketable securities
   - Short-term investment
   - Sundry debtors
   - Bills receivables
   - Stock
   - Accruals—pre-paid expenses, accrued income
2. Non-current assets
   - Property, plant and equipment—fixed assets
   - Investment
   - Intangible assets—intangible and fictitious assets

Capital expenditure is an expenditure that results into the acquisition of an asset that is likely to generate future economic benefits for a period exceeding one year.

The main point about recognition of assets in different classes is the timing aspect and the purpose of maintaining the asset non-current assets, particularly fixed assets are maintained for use in the business, whereas current assets are purchased with the aim to sell it back within a short time period. In this chapter, we shall focus on fixed asset, i.e., non-current assets. The discussion will revolve around the following aspects:

- Recognition of expenditure as capital expenditure—fixed asset

- Measuring the cost of fixed asset
- Methods of providing depreciation/amortization of assets
- Book value/depreciable base—carrying amount of asset
- Disposal of assets
- Obsolescence or impairment of assets

Expired proportion of capital expenditure (fixed assets) is called an **expense** and shown as depreciation in the income statement.

PROPERTY, PLANT AND EQUIPMENT—FEATURES AND RECOGNITION

Property, plant and equipment provide production capacity to the business organization. Property includes the **infrastructure** on which production facilities have been installed, such as plant, equipment and machinery, furniture, fixtures and office equipment. In case of **airlines companies**, the infrastructure will include the land on which runway, office building, fencing, airstrip siding, aircrafts, vehicles, elevators, equipment, cash machines, computers, and other facilities have been set up. Infrastructure comprises land and building, such as factory land and building, office land and building.

Different mechanical and electronic devices, such as tools and machines, are grouped as **plant and equipment**. The property, plant and equipment are purchased by the business organization with the aim to use it and not to sell it. By using it, the organization intends to generate regular cash inflows. Due to these, the assets are called **cash-generating units** (**CGU**). However, these might be sold if these are not fit to generate the production capacity as desired. The cash flow generated at the time of sale of these assets is termed as **terminal cash inflow**.

Certain fixed assets are the **cash-generating units** as these collectively help in realizing cash inflow when utilized through operating cycle.

Property, plant and equipment are not matched directly as an expense against the sales revenue for the year, such as revenue expenses are matched directly. These are shown as an expense by the process of amortization—charging depreciation.

IAS vs AS on Property, Plant and Equipment—Fixed Assets

International Accounting Standard (IAS-16) and Indian Accounting Standard (AS-10) are applicable for the recognition, measurement, depreciation, impairment and other issues related to fixed assets.

According to **IAS-16**, the items satisfying the following criteria are classified under the heading property, plant and equipment:

(i) These are held for production of goods and services, or for given on rental or for administrative purposes.

(ii) These are expected to generate the utility beyond one year.

According to **AS-10**, fixed asset includes all such assets held for the purpose of producing goods/services and not held for sale in routine course of business activities.

Features

The prominent features of property, plant and equipment—fixed assets are that these are procured and maintained with the aim to generate the cash inflow by using these and not by selling these assets. The following are the **prominent features** of these assets:

- Tangible in form
- Provide productive capacity

- Capable to generate cash flow by putting to use on the principle of synergy
- Not intended for sale in routine course of business
- Subject to depreciation or amortization

Common items included in property, plant and equipment are (i) land and building, (ii) plant and machinery, (iii) furniture and fixtures, (iv) infrastructure, such as road, wells and power generation facilities owned by business enterprises.

CAPITALIZATION OF STAND-BY/SERVICING EQUIPMENT AND MACHINERY SPARES

Both **IAS-16** and **AS-10** provide that these items should be capitalized and are to be considered as part of fixed assets—property, plant and equipment only when it is considered that such items will be consumed over the life span of the main asset. However, if spares are consumed as a matter of routine to operate the fixed asset—property, plant and equipment then it is to be shown as revenue expenses to profit and loss account and not to be capitalized.

Cost of certain items of fixed assets may be recorded separately as different items of assets and not as one item of asset. This is to be done when different items have different economic life. For example, the engine of an aeroplane has different lifespan as compared to the life of an airbus; therefore, both should be recognized as different asset items and not as single asset item.

ANCILLARY ITEMS RECOGNITION OF PART OF PROPERTY, PLANT AND EQUIPMENT—FIXED ASSETS

Safety equipment and environment protection tools/equipment are called **ancillary items** as these protect or enhance the economic benefits to be generated from main fixed assets; however, these ancillary items do not generate any direct economic benefits. Therefore, the cost incurred on these items is to be capitalized and considered as part of fixed assets.

Recognition

Capitalization of cost means adding a particular cost to the total cost of an asset.

Recognition of property, plant and equipment—a fixed asset implies making a measurement of cost/value at which it has to be shown in the books of accounts. Recognition is not a one-time activity rather it is an ongoing process so as to have true and fair view of assets. The recognition involves estimation of cost associated with the fixed asset. The most common elements recognized as cost are (i) purchase price, including import duties and levies, (ii) different costs directly associated and attributable to its acquisition/construction less discount and rebates in acquisition and (iii) installation costs and pre-installation handling costs. The cost at which property, plant and equipment—fixed asset is recognized is called **carrying amount**.

We shall now discuss the recognition in two phases:

- Initial recognition
- Subsequent recognition

INITIAL RECOGNITION OF PROPERTY, PLANT AND EQUIPMENT—FIXED ASSETS

Property, plant and equipment are classified as **fixed assets**. Indian GAAP addresses these items as fixed assets that include plant and machinery, equipment, tools, goodwill, etc., whereas international accounting standards specify these by the name of 'property plant and equipment'. **Initial recognition** means making an assessment about the initial cost of the fixed asset at which it is to be recorded in the books of accounts at first.

Cost or Carrying Amount

Initial recognition is the act of recognition of cost at the time of acquisition of fixed asset, or till the time asset becomes useable. Therefore, the term **initial recognition** means making a sum total of the costs that can be capitalized to arrive at the start-up cost of the asset that is to be considered as initial depreciable base. Usually, all the costs incurred and attributable with the incidence of bringing the asset in useable form are capitalized into the cost of asset. The capitalized cost of a fixed asset comprises the following:

- Purchase price including purchase expenses and levies, less discount/rebate.
- Costs of site preparation at which designated fixed assets are to be installed.
- Dismantling costs, site improvement costs and installation costs including initial delivery and handling costs.
- Professional fees, technical fees and other administrative costs attributable to the incidence of acquisition or construction of a particular fixed asset.

ARE ADMINISTRATION EXPENSES AND GENERAL OVERHEADS COST OF FIXED ASSETS?

As these expenses/overheads cannot be associated and attributed directly to the acquisition/construction of fixed assets, therefore, the common practice is not to recognize these as cost of fixed assets. However, there are the incidences when these costs are specifically incurred in acquiring a particular fixed asset then these should be recognized as cost of such particular asset.

Self-Constructed Fixed Assets

These are the assets that are constructed as per the specification of business enterprises, such as building, road, dam, highways, bridges, plant—power generation plant, wind mill plant and refinery. The carrying cost of these fixed assets depends upon several factors out of which the common one is the principle of direct association of a particular cost to the asset under construction. The costs incurred in connection with self-constructed fixed assets are classified as follows:

- Preliminary Stage Costs
- Construction Costs

Preliminary Stage Costs

These are the costs that are incurred much before the actual construction work begins; such as cost incurred in carrying out a survey, routine administrative cost of the company that cannot be associated directly to the fixed asset being constructed. In a way, these an irrelevant cost with reference to the fixed asset being constructed. Therefore, these costs should not be capitalized and not to be included in the carrying amount of the fixed asset being constructed. These are considered as **routine revenue expenses** and matched against the revenue for the period.

An **irrelevant cost** means such cost that does not change with the change in the course of action or level of activity.

Property Plant and Equipment—Expenditure during Construction (Construction costs)

These are the specific costs directly associated with the construction of property, plant and equipment—fixed asset. The fixed asset so constructed is also called **project**. The most common costs are as follows:

- Site development, dismantling costs, specific survey and estimation costs and costs of construction.
- Expenses incurred on start-up and commissioning of the project.
- Test run and experimental expenses till the time commercial production starts.
- General administrative costs including depreciation of fixed assets associated with the construction activity.
- Costs of temporary facilities and structures, etc.

> **START-UP AND PRE-COMMERCIALIZATION—COMMISSIONING COSTS**
>
> These are the costs incurred in bringing the fixed asset—property, plant and equipment in the usable state or to bring them at the stage of full commercialization. These include pre-operative costs, costs during the gestation period, initial operating loss when production has not been started at full swing, cost of relocation of certain business operations incidental to the commercialization of the fixed asset under recognition.
>
> There cannot be any precise answer whether these are to be capitalized or shown as an expense to profit and loss account. It is the matter of accounting prudence and best judgement. If it is perceived that without these costs normal commercialization cannot succeed then these should be **capitalized**. If these are the part of routine activity and cannot be associated with the incidence of commercialization then these should not be capitalized and should be shown as routine **revenue expenses**.

The earlier-mentioned costs are capitalized but the costs incurred after the period when project is ready for commercialization are not capitalized, rather these are charged to profit and loss account against the revenue for the period. When actual **commercialization** of a fixed asset/project is delayed beyond the date when it was ready for commercialization, the expenses attributable to fixed asset incurred during this period should not be capitalized. However, these may either be shown to profit and loss account or recognized as **deferred revenue expenditure** to be written off for a maximum period not exceeding five years from the actual commercialization of the project.

Income During Construction Period

Sometimes a business enterprise might earn certain income from the asset under construction during the period when such asset is under construction; such as in case of constructing road, dam or bridge certain minerals and forest product—firewood, agricultural crop are procured. The accounting rules implies that net revenue realized from such items should be deducted while arriving at the carrying cost of the asset so constructed.

Non-Monetary Consideration

When an item of property, plant and equipment—fixed asset is acquired in exchange for another non-monetary asset, the recognition of fixed asset so acquired is done as in the following, only when there is **commercial substance**.

- At the fair value of consideration given up in exchange
- At the fair value of asset acquired in exchange

> **Non-monetary consideration** is the consideration paid in the form of an asset/financial instrument other than cash.

If an exchange transaction *lacks commercial substance* then the asset acquired is to be recognized at the carrying amount of the asset given up.

Out of these two, the one that can be estimated clearly and in an evident manner is to be used as initial carrying cost of asset received in exchange.

When a fixed asset is acquired in exchange for **share/debentures**, it is to be recognized at the fair value of asset acquired or shares/debentures issued, whichever can be estimated evidently and precisely. The transaction involving non-monetary consideration is called **exchange transaction**.

COMMERCIAL SUBSTANCE AND EXCHANGE OF NON-MONETARY ASSETS

When one non-monetary asset is exchanged for another non-monetary asset then the recognition of asset acquired in exchange is carried out at the fair value only when the exchange transaction has commercial substance. **Commercial substance** exists when the economic benefits from the asset acquired in exchange differ from the economic benefits of asset given up. *Lack of commercial substance* of exchange transaction implies that it is difficult to estimate the changes in the economic benefits from such exchange transaction.

In the absence of commercial substance as well as failure to estimate fair value of both, the assets involved in exchange then asset acquired is recognized at the **book value of asset given up in exchange.**

EXAMPLE 1 Ramesh Ltd (RL) has a machine with carrying amount ₹ 4,50,000 and Kapil Ltd (KL) has a machine with carrying amount ₹ 4,35,000. Both the companies decide to exchange these machines for the mutual benefit. The active market value of the machines is ₹ 4,95,000 and ₹ 4,78,000, respectively. Show how these are to be recognized in the books of these companies when (i) there is commercial substance and (ii) there is no commercial substance from the exchange transaction.

SOLUTION

(i) The accounting standards provide that in case of exchange transaction has a commercial substance the assets exchanged should be recognized at the fair value in this case at the active market value. RL should recognize the machine at ₹ 4,95,000 and a profit of ₹ 45,000 is to be credited to profit and loss account, and KL at ₹ 4,78,000 and profit credited to profit and loss account ₹ 43,000.

(ii) The accounting standards provide that in case of exchange transaction when there is lack of commercial substance the assets exchanged should be recognized at the carrying amount of asset given up, respectively. RL should recognize the machine at ₹ 4,50,000 and KL at ₹ 4,35,000.

Fixed Assets Acquired Through Government Grants

According to Indian GAAP, accounting for government grants is regulated by the provisions of accounting standard AS-12, whereas international accounting standard IAS-20 contains the provisions to the same aspect. The abstract of both of these standards is that non-monetary government grant or government grant to acquire a particular fixed asset—property, plant and equipment should be accounted for at fair value. Both the amount of grant received and asset so acquired should be shown at the fair value. If assessment of the fair value is not evident and reliable then both the grant and corresponding asset should be shown at the **nominal value**.

The recognition of grant in the books of accounts depends upon the nature of asset. In case of **depreciable assets**, it is recognized as revenue by using either deferred

An **asset** the carrying cost of which is likely to get expensed on account of business use or obsolescence is called **depreciable asset**.

revenue method or using direct deduction method. **Deferred revenue method** provides that total amount of grant received should gradually be recognized as revenue over the depreciable life of the asset exactly in proportion of the depreciation shown in the income statement. Under **direct deduction method**, the amount of grant received is directly deducted from the book value of asset thereby resulting in the reduced amount of depreciation to be shown in the income statement.

In case of **non-depreciable assets**, the amount of grant is shown as an addition to capital reserve or as an addition to capital fund. This method helps in identifying the asset as well as the amount of grant separately in the balance sheet.

When fixed asset is provided free of cost then it should be shown at the nominal value say at ₹ 1 only.

Is Cost of Land Development Recognized as Cost of Land and Building?

Land development cost is an integral part of land and building. However, recognition of a particular cost incurred on land development with reference to land and building depends upon (i) ownership status and (ii) type of benefits accruing from such land development.

In case of **self-owned assets**, the cost of land development is to be capitalized only when it can be directly associated to land and building and it enhances the economic benefits from land and building so constructed/acquired. In case of **rented** or **leased** land and building, the land development cost is to be capitalized to the extent it is not recoverable from lessor.

If a particular land development cost cannot be associated directly to a particular land and building or it does not enhance the economic benefits from land and building so acquired/constructed then such land development cost should not be capitalized; rather it should be shown as an expense to profit and loss account.

Foreign Currency-Denominated Fixed Assets and Capitalization of Exchange Difference

In case a fixed asset is imported and payment for such item is to be made in foreign currency then there might arise some exchange difference. Such exchange difference might be due to the settlement of foreign currency-denominated obligation or restatement of such obligation to pay for fixed asset. According to **Indian accounting standards**, this difference is to be added to carrying cost of asset and capitalized as other costs of asset are capitalized; whereas **international accounting standard** provides that such difference should not be capitalized rather shown as loss due from exchange difference to the income statement.

Foreign currency-denominated fixed assets are the one that are purchased by making payment in a foreign currency.

Group Accounting vs Component Accounting

There are the incidences when more than one individual asset is acquired by making a consolidated payment. The accounting for assets so acquired can be done either as group of asset or as a separate component. **Group accounting** is adopted when any one or all of the following conditions are met:

- It is difficult to make fair valuation of each of the individual component.
- Useful life of all the components is same.
- All the components provide similar pattern of economic benefits.

Under **group accounting**, a collective account of all the components is maintained and accordingly depreciation is charged for the group and not for individual component.

When all the above-mentioned conditions are not met, then **component accounting** is advisable. This implies that each of the separately identifiable component to be recognized individually and its account is to be made exclusively. By doing so, proper accounting for depreciation, derecognition and impairment of fixed asset can be adopted. Component accounting also helps in having true and fair view of final accounts. The following illustrations discuss a few instances of recognition of assets.

ILLUSTRATIONS

1. A power generation company acquires a power generation unit at ₹ 50 crore that comprises furnace of cost ₹ 20 crore, transmission line of cost ₹ 12 crore and transformers of cost ₹ 18 crore. All of these three components have different useful life and different economic benefits. Therefore, these should be recognized using component accounting fundamental.
2. A transport company acquires fleet of diesel-operated taxis costing ₹ 2 crore. The technical estimates provide that the economic life of engine and body are different but separate fair valuation of these as independent components is possible but realization of economic benefit from these cannot be separated from each other; therefore, both of these should be recognized as group of assets and not as component asset.
3. A company buys a complete project at a cost of ₹ 150 crore. The project comprises machines and tools costing ₹ 78 crore and independent land costing ₹ 23 crore and rest is the cost of land and building combined. Here machine and tools should be recognized separately. Similarly, independent land should be recognized separately but rest of the land and building should be recognized as a group of asset as both cannot be separately valued at fair value.

DISCOUNT, REBATE, DAMAGES AND PENALTY CLAIMED

There are instances when supplier of property, plant and equipment—fixed asset allows a discount or rebate then such discount or rebate is to be deducted from the capitalized cost of the fixed asset, thereby reducing the depreciable base of the fixed asset.

Sometimes agreement about the acquisition of fixed asset entitles for the claim of damage or penalty for default by the supplier—the default may be about delay in supply or sub-standard quality of fixed asset. In this case, the recognition of damage or penalty so received is to be related to the performance of the fixed asset concerned. If such default has an adverse impact on the performance of the fixed asset as a result of which economic benefits are likely to be affected adversely then the amount of damage/penalty received is to be *adjusted against the carrying cost* of the fixed asset. On the contrary, when such default is not likely to have any adverse impact on the performance or economic benefits of the fixed asset, the damage/penalty so received is to be recognized as **other income** in the profit and loss account.

Income not relating to the core business activities is called **other income**.

Similarly, when an unclaimed amount lying against a fixed asset has become time-barred and such liability ceases to exist then such unclaimed amount becomes **time-barred payment/liability**. The accounting treatment for such time-barred payment is to reduce the carrying cost of corresponding asset. However, such incidence of payment becoming time-barred should happen only by the enforcement of law and not otherwise.

SUBSEQUENT EXPENDITURE ON PROPERTY, PLANT AND EQUIPMENT—FIXED ASSETS

Introduction

Subsequent expenditures on fixed assets may be either on maintaining the capacity and productive efficiency of these assets or it might be incurred to enhance the capacity or efficiency of these assets. Depending upon the impact of the expenses on capacity and efficiency of the fixed asset, the accounting effect is provided.

Improvements vs Repairs and Maintenance

Improvement costs are such subsequent costs that result into any or all of the following:

- Productive capacity of the fixed asset is enhanced.
- Economic life of the fixed asset is improved.
- Scope of functional uses/performance is widened.
- Quality of output from fixed asset is enhanced.
- Speed of the fixed asset in discharging intended functions improves.

As per the provisions of IAS-16 and AS-10, if a subsequent expenditure in connection with a particular fixed asset is likely to augment the previously estimated performance or capacity of the fixed asset is to be capitalized and added to the carrying cost – gross book value of the concerned fixed asset.

All such subsequent costs are called **improvement costs** and these should be **capitalized**, i.e., to be added to existing carrying cost of the asset.

Repairs and Maintenance expenses are such expenditures that are incurred in routine to maintain the performance or capacity of the fixed asset. These expenses are part of the routine servicing or maintenance of the asset so that the capacity or performance of concerned asset can be maintained; therefore, these expenses/costs should be considered as normal repairs and maintenance cost to be charged to the revenue of current period by debiting to profit and loss account. These costs should not be capitalized as these do not result into augmenting the capacity/performance of the fixed asset rather maintain the capacity/performance of the asset.

Renewal Costs vs Relocation Costs

Renewal costs are such costs that help in making a modification in the existing project/fixed asset—property, plant and equipment. These costs not only help in maintaining the existing performance of the asset but also augment the performance of the fixed asset concerned. The practical impact of these costs might be in the form of replacement of some component of the asset or help in expanding the scope or life of the asset. Therefore, these are also called **replacement and extension/expansion costs**. All these costs should be *capitalized and depreciated* as the main asset is depreciated.

ILLUSTRATION Cost incurred on replacing diesel engine with petrol engine of a four wheeler. Such replacement is likely to enhance the performance of the asset as well as likely to result into addition economic benefits for business enterprises. Similarly, replacing petrol engine with the CNG (compressed natural gas) engine to bring an improvement in the existing car is to be **capitalized**.

Sometimes, such renewal leads to the **expansion of the existing asset***,* such as building or plant and economic life of such extension is longer as compared to the economic life of the main asset. In this situation, both main asset and extension should be *depreciated separately* as if these were independent assets but generating synergy benefits.

Relocation costs are such costs that are incurred in shifting a particular fixed asset to a new location from its existing location. If such relocation is likely to enhance the capacity/performance of the existing asset then it is to be capitalized and added to the existing carrying cost of the asset. On the contrary, if relocation costs do not result into the enhancement of the capacity/performance then it is to be considered as revenue expense and *debited to profit and loss account*.

EXAMPLE 2 The following facts have been extracted from the books of accounts of Reliable Enterprises Ltd (REL):

The company acquired a new plant and machinery costing ₹ 12,00,000 and spent ₹ 30,000 as carriage and ₹ 20,000 as installation charges to install it. To finance it, the company raised a loan of ₹ 7,00,000 on July 1, 2010 bearing a rate of interest 12% p.a. The plant and machinery was ready for commercial production on December 31, 2010. The loan was repaid on March 31, 2011 along with interest thereon. In the month of February 2011, ₹ 5,000 were spent for the routine inspection and ₹ 15,000 for annual maintenance contract (AMC) for 12 months.

Show how these costs are to be recognized for the year ending March 31, 2011.

SOLUTION As per the provisions of AS-10, cost of fixed assets should comprise only purchase price, purchase expenses, installation charges and borrowing cost till the date of commissioning of asset. In this case, the cost of plant and machinery ₹ 12,00,000, carriage ₹ 30,000 is considered as purchase expense and ₹ 20,000 installation charges and interest ₹ 42,000 (7,00,000 × 12/100 × 6/12) on loan up to December 31, 2010 are to be considered as initial cost of plant and machinery. Therefore, plant and machinery should be recognized initially at ₹ 12,92,000 (12,00,000 + 30,000 + 20,000 + 42,000) the initial cost of plant and machinery.

The interest ₹ 21,000 from January 1, 2011 till March 31, 2011, ₹ 5,000 on routine inspection and ₹ 15,000 of AMC are to be considered as routine expenses and to be expensed to profit and loss account for the year ending March 31, 2011.

HIRE PURCHASE AND JOINT OWNERSHIP AND VALUATION

A fixed asset purchased on **hire purchase** does not entitle the ownership but it is to be recognized at its **cash price.** As per the provisions of AS-10, if cash price cannot be estimated precisely then cash price is to be calculated using appropriate rate of interest as applicable to the class of asset so acquired. Such asset is to be presented in the annual account with appropriate narration by showing that the business enterprise does not has full ownership thereof.

Asset that are not held as sole owner but *held jointly* with some other business entity then these are to be recognized at the proportion of total cost contributed by the enterprise less prorate accumulated depreciation. While reporting these assets in the annual accounts, the facts about joint ownership are to be disclosed properly.

Purchase of an asset on hire purchase means making only down payment at the time of acquisition and rest is to be paid in installment. Upon the payment of last installment, the title is transferred.

EXAMPLE 3 Zeta Ltd (ZL) has acquired a boiler on hire purchase scheme for this company paid ₹ 3,50,000 as down payment and rest of the amount is to be paid in 36 equal monthly installments of ₹ 20,000 each. The title to boiler will be transferred in the favour of ZL on the payment of last installment. The current cash price of this type of boiler is ₹ 9,20,000. The prevailing rate of interest for this industry is 12% per annum. Show how this boiler is to be recognized initially in the books of accounts.

Solution The provisions of AS-10 provide that the asset acquired on hire purchase is to be recognized at the cash price. Here cash price ₹ 9,20,000 is given; therefore, this boiler is to be recognized at this amount initially. While reporting this boiler in the balance sheet the fact that it is the asset acquired on hire purchase and ZL has no clean ownership for it. At the same time, installments not due but to become due in future is to be recognized as a hire purchase liability. Here rate of interest is not to be used for initial recognition.

Example 4 Kite Ltd (KL) has acquired a boiler on hire purchase scheme for this company paid ₹ 3,50,000 as down payment and rest of the amount is to be paid in 36 equal monthly installments of ₹ 20,000 each. The title to boiler will be transferred in the favour of ZL on the payment of last installment. The prevailing rate of interest for this industry is 12% per annum. However, the estimate about the cash price is not available. Show how this boiler is to be recognized initially in the books of accounts.

Solution Here cash price of the asset is not given; therefore, it needs to be estimated as the present value of value of total installments to be paid plus the amount of down payment. The present value is to be calculated using 12% rate of interest as given in this case. Such present value is

Present value of installments = 20,000 × $PVIFA_{1\%,36}$

$PVIFA_{1\%,36}$ = present value interest factor for an annuity at the rate of 1% p.m. for 36 months.

Present value of installments = 20,000 × 30.108 = 6,02,160

Therefore, the best estimate of the cash price is ₹ 9,52,160 (6,02,160 + 3,50,000).

SUBSEQUENT MEASUREMET OF PROPERTY, PLANT AND EQUIPMENT—FIXED ASSETS

Subsequent measurement implies presentation and restatement of fixed asset after initial recognition. The most prominent method of subsequent recognition is to show the fixed asset at the cost (carrying amount) less accumulated depreciation. This is also termed as **subsequent recognition of fixed assets**.

AS-10 and Subsequent Measurement of Fixed Asset

Accounting standard AS-10 provides for presentation of fixed asset at the historical cots—cost recognized initially less accumulated depreciation to the date of presentation. However, sometimes revaluation of all or part of a fixed asset is carried out and fixed asset is presented in the annual accounts at the revalued cost and not at the historical cost.

The revaluation may be carried out by using (i) fair value method, (ii) cost indexation method, or (iii) valuers' report method.

Accounting Effect and AS-10

When an asset is revalued then its depreciable base also gets changed; therefore, the process of revaluation not only enhances the gross block of the asset but also the net block of the asset. The following provisions of AS-10 are to be applied to account for revaluation in the books of accounts.

First Time Revaluation of a Particular Fixed Asset

(i) An **increase** in the value of asset on account of revaluation should be added to owner's equity by way of crediting **revaluation reserve account** to be shown along with owner's equity.

(ii) A **decrease** in the value of asset on account of revaluation should be *debited to profit and loss account* for the year as a revaluation loss.

Revaluation of a Particular Fixed Asset beyond First Time

(i) An **increase** to the extent of previous decrease that ought to have been debited to profit and loss account in the past should be credited to profit and loss account, and any surplus is to be credited to revaluation reserve.

(ii) A **decrease** to the extent of previous increase that ought to have been credited to revaluation reserve is to be debited to revaluation reserve account and surplus if any is to be debited to profit and loss account.

Assets so revalued are to be stated separately in the annual accounts.

Revaluation always implies upward movement in the carrying amount, whereas **impairment** implies downward movement in the carrying amount.

IAS-16 and Subsequent Measurement of Property, Plant and Equipment—Fixed Assets

Provisions of international accounting standard IAS-16 provide that a business enterprise is free to adopt either cost model or revaluation model for subsequent recognition of property, plant and equipment in its annual accounts.

Cost Model

According to this, property, plant and equipment should continuously be presented in the annual accounts at the historical cost less accumulated depreciation appropriate for the asset under recognition. Appropriately, this model is to be followed when estimation of fair value of an asset is not possible with reliability and with precision.

Revaluation Model

According to this, property, plant and equipment should be revalued regularly if estimation of fair value can be done reliably and reasonably. Such revaluation is to be carried out at a regular interval so that property, plant and equipment are presented in the annual accounts at the value that does not differ materially from their fair value. The frequency of revaluation depends upon the frequency with which changes take place in the fair value of the asset under subsequent recognition. The purpose of revaluation is to have true and fair representation of fixed assets in the annual accounts as on reporting date.

Market value is to be used to estimate the **fair value** of property, plant and equipment, if market value is not available then either the **present value of future benefits** likely to be realized from the asset or its **replacement cost**, whichever is measurable reliably.

PRECAUTIONS IN SUBSEQUENT MEASUREMENT/RECOGNITION

Both IAS-16 and AS-10 provide the following precautions in subsequent recognition:

(i) For assets held as group the whole class of asset, i.e., group of asset is to be revalued, partial revaluation is not allowed.

(ii) Accumulated depreciation to the date of revaluation is to be adjusted proportionately so as to have proper presentation of net block of the asset to make it equal to its revalued net block.

PROPERTY PLANT AND EQUIPMENT—FIXED ASSETS AND INDIAN GAAP

Indian accounting standards commonly referred as Indian GAAP (generally accepted accounting principles) provide a detailed coverage for property plant and equipment under the heading fixed assets. Accounting standard AS-10 provides a detailed coverage about accounting for fixed assets. Fixed assets referred herein are like synonyms to 'property, plant and equipment' as defined in IAS-16.

Accounting standards AS-6 provides for the depreciation of fixed assets—property plant and equipment. Provisions of AS-10 and AS-6 have been discussed in this chapter under property, plant and equipment—fixed assets and depreciation of fixed assets.

DEPRECIATION ON PROPERTY, PLANT AND EQUIPMENT—FIXED ASSETS

Depreciation represents diminution in the book value of a fixed asset on account of it use, wear and tear, obsolescence on account of (i) technological changes, (ii) time decay, and (iii) market trends. Depreciation is provided to record diminution in the productive capacity of a fixed asset. Fixed asset get consumed/expired/used-up in generating revenue for a business enterprise; therefore, depreciation is a charge on such fixed assets to record expired proportion of these assets. By providing depreciation on capital expenditure—fixed assets expired proportion of these assets is expensed gradually over the useful life of these assets. The practical implication of providing depreciation is that the relevant proportion of the fixed asset as considered expired is eliminated from the gross block of the asset and shown as an expense in the profit and loss account. Deduction of depreciation from the gross block of a fixed asset leaves net block of the fixed asset. For charging depreciation, an asset should be depreciable as provided in the provisions of accounting standard AS-6.

Depreciation results from business use of the asset, whereas **impairment loss** results from the decline in the recoverable amount of an asset below its carrying amount.

Depreciable Assets

Accounting standard AS-6 defines an asset as depreciable asset if it meets the following qualifications:

(i) The asset is to be used for a period more than one accounting year.
(ii) The asset has finite useful life not like land that has infinite life.
(iii) The asset is maintained by the business enterprises in producing goods/service or renting it to others as a part of core business activities, or for administrative purpose.
(iv) The asset is not held primarily for the purpose of sale.

Depreciable Amount

Depreciable amount of an asset is the cost of the assets that includes purchase cost and other direct costs attributed to the asset in bringing the asset in working condition less estimated net residual value. Net residual value is the estimated residual value less disposal expenses, if any to be incurred to dispose the asset. Depreciable amount depends upon the factors, such as historical cost, expected net residual value and expected useful life of the asset.

Basis of Depreciation

The amount of depreciation charged on a fixed asset depends upon the following factors:

- Historical cost or substituted cost of fixed asset
- Expected useful life of fixed asset
- Estimated residual value of fixed asset

Historical Cost

The cost that ought to have been spent in the acquisition of a particular fixed asset is defined as historical cost. It includes purchase price, purchase expenses, duties and levies less discount/rebate, attributable expenses that are incurred in the acquisition of the fixed asset under consideration. Historical cost is also called initial carrying amount. Depreciation is to be charged on the historical cost unless it is revalued and replaced by suitable substituted cost.

Historical cost is the initially recognized cost, whereas **substituted cost** is the cost measured at the time of revaluation of the asset.

Substituted Cost

The accounting standard as well as accounting prudence provides for the revaluation of fixed assets as and when considered necessary. The revalued amount of an existing fixed asset is called substituted cost. The depreciation is to be charged on the net value after such revaluation for the remaining life after the exercise of revaluation.

(Both of these facts have been discussed in detail in the previous section of this chapter)

Expected Useful Life

Decision about the useful life of a fixed asset depends upon several facts, such as enforcement of law—expiry of legal agreement/contract, past experience with reference to the asset being used, technological estimates, circumstances of use, pattern and mode of use—single/double/triple shift of working and environmental factors. Therefore, estimation of useful life may not be objective in every case but in certain cases it may be highly subjective and depends upon the accounting prudence and best judgement with reference to the application of accounting policies as governed by the accounting standards. In case of multiple estimates about the useful life of a fixed asset, the one that is more reliable and feasible is to be used for the purpose of depreciation.

Useful life of the asset as estimated initially or revised remaining useful life at the time of subsequent measurement, whichever is more practicable should be used.

Expected Residual Value

Residual value as expected or estimated by best judgement about the asset should be considered while arriving at the depreciation base and amount of depreciation. If residual value expected at the end of useful life of a fixed asset is insignificant then it should be taken as 'zero' and complete gross value with due consideration to revaluation of gross value is to be depreciated over the useful life of the asset.

Residual value is the value to be realized from the asset at the end of its useful life.

However, when expected, residual value of a fixed asset is significant and there is a fair chance to realize such value at the end of the useful life of the asset then the depreciable amount of an asset is to be reduced by the amount of such expected residual value.

Change in Historical Cost, Useful Life and Residual Value

Change in Historical Cost

Historical cost is the cost incurred in the acquisition of the asset. It includes all the costs incurred up to the point when an asset becomes useable for the first time. Sometimes, the historical cost of a fixed asset needs a change on account of increase or decrease in the long-term liability on account of exchange rate difference, price adjustment and changes in levies and duties or similar type of factors. The depreciation on the revised amount is to be made applicable 'prospectively' over the remaining useful life of the asset.

Change in Useful Life

Either the enforcement of statute/law or changes in the pattern/mode of usage of a fixed asset might require a revision in useful life of a fixed asset. As a result of this change, the book value (unamortized value) of the fixed asset is to be depreciated over the revised and remaining useful life of the fixed asset. This implies the change to be made effective prospectively.

Change in Residual Value

Residual value is the value to be realized at the end of the life of the fixed asset or when such fixed asset is disposed off. Estimate of residual value is to be revised, whenever it is applicable; any change in the estimated residual value of asset should be accounted for in the unamortized value (book value) and applied over the remaining useful life of the asset. This implies the change to be made effect prospectively.
Both AS-6 and IAS-38 provide that all these cases of change should be made effective prospectively.

Depreciation on Addition or Extension to Fixed Assets

Subsequent expenditure relating to a particular fixed asset that is of capital nature as recognized in the subsequent measurement of the fixed asset results into an addition or extension of an existing fixed asset. The capitalized amount of such addition or extension is to be depreciated over the remaining useful life of the main asset and to be depreciated at the rate applicable for the main asset.

However, if an addition or extension can be separated from the main asset then the capitalized cost of such addition or extension is to be depreciated over the useful life of the addition or extension and the rate that is applicable for this addition and not as applicable for the main asset.

Depreciation Method

For charging depreciation on a fixed asset over useful life of the asset, several methods are prevalent and selection of method depends upon managerial judgement, enforcement of law, industry practices, pattern and mode of use, pattern and rate of future economic benefits expected from the asset, and many other factors depending upon the type of industry in which asset is being used. The methods are as follows:

Depreciation by straight line method can result into zero book value at the end but written down value method cannot result into zero book value.

Straight Line Method (SLM)

Under this method, the total depreciable amount is spread equally over the useful life of the asset. It results into equal amount of depreciation in each of the year.

Example 5 On April 1, 2008 a machine was purchased for ₹ 70,000. Estimated useful life of machine is three years with an estimate of salvage value ₹ 7,000 at the end. If the company provides depreciation as per straight line method then calculate the amount of depreciation for each of the three years.

Solution Here the amount of depreciation is to be calculated using the following formulae:

$$\text{Annual depreciation amount} = \frac{\text{Original cost} - \text{Estimated salvage value}}{\text{Estimated useful life}}$$

Annual depreciation = (70,000 − 7,000)/3 = ₹ 21,000

In each of the year 2008–09, 2009–10 and 2010–11 ₹ 21,000 is to be expensed as depreciation. The net book value in the balance sheet will be ₹ 49,000 in 2008–09, ₹ 28,000 in 2009–10 and ₹ 7,000 in 2010–11. ₹ 7,000 is also the residual value.

The rate of depreciation will be 30% p.a. (21,000 × 100 /70,000) on original cost to be used on straight line basis.

Written Down Value (WDV) Method

Under this method, depreciation is charged on the opening net book value of the asset in each of the year, therefore, it results into reducing amount of depreciation year after year, till the end of useful life of the asset. This is also called **reducing balance method** of charging depreciation.

Example 6 On April 1, 2008, a machine was purchased for ₹ 70,000. Estimated useful life of machine is three with an estimate of salvage value ₹ 15,000 at the end. If company provides depreciation as per written down value method using 40% p.a. as the depreciation rate, then calculate the amount of depreciation for each of the three years.

Solution Here the amount of depreciation in each of the year is to be calculated on the opening net book value of the machine. The depreciation for each of the year and net book value will be as follows:

Table showing depreciation and book value (amount in ₹)

Year	Opening net book value	Depreciation	Closing net book value
2008–09	70,000	28,000 (70,000 × 40/100)	42,000 (70,000 − 28,000)
2009–10	42,000	16,800 (42,000 × 40/100)	25,200 (42,000 − 16,800)
2010–11	25,200	10,080 (25,200 × 40/100)	15,120 (25,200 − 10l080)

At least 95% of the carrying cost should be depreciated by using a particular depreciation method.

Out of these methods, the most commonly used methods are **straight line method (SLM)** and **written down value (WDV) method**.

Hourly Rate Method

This method is applicable for the fixed assets for which useful life is estimated in number of productive hours. The amount of depreciation in each of the accounting year depends upon the number of hours for which a fixed asset is put to use.

Example 7 On April 1, 2009 a furnace was purchased for ₹ 2,70,000. Estimated useful life of this furnace is 25,000 hours with an estimate of salvage value ₹ 20,000 at the end. During the year 2009–10, the furnace was put to use for 4,100 hours and during 2009–10 it was used for 4,250 hours of working. Show how depreciation and book value of the furnace is to be recognized in the annual accounts.

Solution Here the amount of depreciation in each of the year is to be calculated by using hourly rate of depreciation as life of the furnace is 25,000 hours in total with a salvage of ₹ 20,000 at the end. The total depreciable amount is ₹ 2,50,000 (₹ 2,70,000 less estimated salvage value ₹ 20,000). The hourly depreciation applicable for the furnace is ₹ 10 (2,50,000/25,000).

Now in the year 2009–10, depreciation will be ₹ 41,000 (10 × 4,100) and book value at the end of the year will be ₹ 2,29,000 (2,70,000 – 41,000).

For the year 2010–11, depreciation will be ₹ 42,500 (10 × 4,250) and book value at the end of the year will be ₹ 1,86,500 (2,29,000 – 42,500).

Output Based Method

This method is applicable for the fixed assets for which useful life is represented by the quantity of output, such as mileage running of a truck tyre and oil from an oil well. The annual amount of depreciation depends on the quantity of output generated from the use of fixed asset.

Example 8 On April 1, 2009, a transport company purchased 20 truck tyres costing a total amount of ₹ 6,60,000 with an estimated total mileage from each of the tyre of 1,00,000 kilometres with a salvage value of ₹ 3,000 per tyre at the end. During the years 2009–10 and 2010–11, each of the tyre was used for a total mileage of 20,000 and 24,000 kilometres, respectively. Show how depreciation and book value of the tyres is to be recognized in the annual accounts.

Solution Here the amount of depreciation in each of the year is to be calculated by using output based method, i.e., depreciation per kilometre. The total depreciable amount is ₹ 6,00,000 (6,60,000 less estimated salvage value ₹ 60,000 for all the tyres). Total output from all the 20 tyres is 20,00,000 kilometres (20 × 1,00,000). Per kilometre rate of depreciation is ₹ 0.30 (6,00,000/20,00,000).

Now in the year 2009–10, depreciation will be ₹ 6,000 (0.30 × 20,000) and book value at the end of the year will be ₹ 6,54,000 (6,60,000 – 6,000).

For the year 2010–11, depreciation will be ₹ 7,200 (0.30 × 24,000) and book value at the end of the year will be ₹ 6,46,800 (6,54,000 – 7,200).

> IAS-16 provides for prospective implementation of change, if any in depreciation method but AS-6 requires retrospective implementation of change, if any in depreciation method.

Pro-rata Depreciation

- When rate of depreciation is given as per annum rate

Depreciation is an annual charge on the fixed assets. The amount of depreciation is to worked pro-rata when a particular asset is put to use for a period less than complete 12 months. This might be on account of acquisition in between the accounting year or disposal in between the accounting year.

- When rate of depreciation is given as flat rate not as per annum rate

In this case, pro-rata depreciation is not provided even if a particular asset is not put to use for complete 12 months of the accounting year. In this case, depreciation is provided for complete 12 months in case of purchase during the accounting year and depreciation is not charged when asset is disposed during the accounting year.

Change in Depreciation Method

Although the principle of consistency does not allow change in depreciation method in routine course of business activities, however, sometimes the method of providing depreciation is changed due to the enforcement of a law or warranted by the changes in industry practices or change in pattern and mode of use of the fixed asset.

Change in Method and AS-6

When depreciation method is changed during the year for an existing asset being used atleast from the previous year then such change should be made effective with **retrospective effect.** The amount of accumulated depreciation is to be calculated from the date when such asset had been recognized first time as fixed asset. The difference in the accumulated depreciation as calculated now and as per the old method should be shown to profit and loss account in the year in which such change in method is conceived.

Surplus or deficit on account of change in method is to be disclosed in the profit and loss account under the heading prior period items and its effect on profit or loss is to be disclosed as the effect of changes in accounting policies.

Change in Method and IAS-16

Selection of depreciation method for a particular asset should be in accordance with the future economic benefits from the fixed asset. The method of charging depreciation is to be reviewed in every financial year and is should be changed if pattern of future economic benefits is likely to change. Therefore, the change in method should be **prospective.**

EXAMPLE 9 On April 1, 2007, a machine was purchased for ₹ 70,000. Estimated useful life of machine is five years with an estimate of zero salvage value at the end. Company provides depreciation @ 20% p.a. as per straight line method. Till the year 2008–09, the depreciation was charged as per SLM and from the year 2009–10, the method of charging depreciation was changed to WDV method @ 30% per annum. Show how depreciation is to be showed in these years and how such change is to be effected as per AS-6 and IAS-16.

SOLUTION The amount of depreciation under SLM for the years 2007–08 and 2008–09 under both the accounting standards is ₹ 14,000 in each of the year. The book value is ₹ 42,000 on April 1, 2009. Now the method of depreciation has been changed to WDV @ 30% in the year 2009–10 onwards.

According to AS-6, such change should be retrospective, i.e., effective from 2007–08; therefore, the opening net book value of this machine is to be adjusted to have retrospective effective. It will be as follows:

(i) Total amount of depreciation charged till April 1, 2009 under SLM is ₹ 28,000.

(ii) Total amount of depreciation had WDV method effected from the beginning ₹ 35,700. (₹ 21,000 (70,000 30/100) for first year and ₹ 14,700 (49,000 × 30/100) for second year.)

(iii) The difference of ₹ 7,700 (35,700 − 28,000) is to be expensed as additional depreciation in the beginning of the year 2009-10 so that opening net book value is ₹ 34,300 (70,000 − 21,000 − 14,700).

(iv) Now depreciation for the year 2009–10 shall be ₹ 10,290 (34,300 × 30/100).

According to IAS-16, such change should be prospective, i.e., effective from 2009–10; therefore, the opening net book value of this machine need not to be adjusted and depreciation under WDV method will be calculated on the opening net book value of ₹ 42,000 @ 30% from the year 2009–10 onwards. The depreciation for 2009–10 will be ₹ 12,600 (42,600 × 30/100).

Because of the changes to be made prospective, the net book value in the beginning of 2009–10 need not be adjusted and the book value of ₹ 42,000 is to be depreciated over remaining useful life.

Depreciation Rate

The rate, as applicable for the depreciation on a fixed asset, depends upon two factors—first, as prescribed under statute or law; second, estimate by management. The provisions of Companies Act, 1956 provide for different rate of depreciation on different group of asset as classified under the Act. Similarly, income tax rules also prescribe for the depreciation rate on fixed asset. Therefore, a business enterprise should apply such rate of depreciation that is in compliance with the relevant stature/law while presenting the records for the purpose of such statute. Where the statute does not prescribe the rate of depreciation then it should be according to the accounting prudence and the best managerial judgement practised by the business enterprise. Usually, the companies provide depreciation at the rates prescribed in the Schedule XIV of Indian Companies Act, 1956.

ABSTRACTS FROM ANNUAL REPORT OF LARSEN & TOUBRO FOR 2007–08

Depreciation has been provided on straight line method (SLM), the rate for depreciation has been as follows:

Category of Asset	Rate of Depreciation (% p.a.)
(a) Office equipment	6.67
(b) Cranes above 1000 ton capacity used for construction	6.67
(c) Minor plant and machinery of construction activity	20.00
(d) Heavy lift equipment of construction activity	5.00
(e) Earthmoving, tunnelling & transmission lines	10.00
(f) Air conditioning and refrigeration equipment	8.33
(g) Laboratory and canteen equipment	12.50
(h) Motor cars	14.14

(**Source:** Annual report of L & T Ltd for 2007–08).

FIXED ASSETS DISCARDED, DEMOLISHED OR DESTROYED

Certain fixed assets might be abandoned on account of not being put to use or due to some other natural or man made reasons. If the net book value of such assets is significant the AS-6 provides that these should be reported separately and exclusively in the balance sheet, and *not to be expensed* to profit and loss account.

However, if net book value of such asset is insignificant then it is *to be expensed* by showing to profit and loss account in the year in which it is discarded, demolished or destroyed.

Consistency of Depreciation Method and Rate of Depreciation

The purpose of presenting annual accounts is to have a true and fair view of profit/loss and assets and liabilities. In view of this, the method of depreciation as well as its rate to be applied is consistent without any significant change. Such consistency facilitates comparability of financial results and value of assets in the annual accounts. However, if circumstances, trends, statute or any other factor forces a change in the method of depreciation or rate of depreciation or both then the effect of such change should be disclosed appropriately for a fair interpretation of the financial results.

SPECIAL ISSUES ABOUT DEPRECIATION

Commencement of Depreciation

Charging of depreciation on a fixed asset is governed by the element of time. The commencement of depreciation on a fixed asset should start from the time when the asset is recognized as fixed asset first time, even if the business enterprises decides to start using such asset later. An asset is recognized as fixed asset when is usable for the first time and capable to produce economic benefits.

Cessation (Discontinuation) of Depreciation

Providing of depreciation should cease as soon as an asset is disposed, discarded or demolished. The charging of depreciation is to be ceased as soon as it is anticipated that the asset will fail to realize economic benefits.

Capital Work-in-Progress and Depreciation

In case of self-constructed fixed asset, certain part of the asset under construction remains incomplete the expenditure attributable to such incomplete part is recognized as the cost of capital work-in-progress. As capital work-in-progress is not recognized as fixed asset; therefore, it is not subject to depreciation.

Asset Held for Sale

In certain cases, an asset is abandoned from use but not disposed. Such asset is to be disclosed exclusively in the balance sheet under the heading 'assets held for sale'. AS-6 and AS-10 provide that such asset is to be depreciated till the time it is not disposed; whereas IAS-16 provides that depreciation should cease as soon as a fixed asset is classified as 'held for sale/disposal' irrespective of the fact that it is disposed at a later date.

Revalued Assets and Depreciation

When an asset is revalued as applicable for the class of asset under consideration, the depreciation is to be provided on the basis of revalued book value over the remaining useful life of the asset.

Insignificant/Immaterial Value of Asset and Depreciation

Usually, fixed assets of small amount recognized as insignificant as compared to the total value of fixed asset in use by the business enterprises, the complete initial cost is depreciated in the year of initial recognition of such fixed asset.

Impairment Loss and Depreciation

Impairment loss arises when recoverable value of a fixed asset is less than the carrying amount (book value) and then the difference is accounted as impairment loss and is to be recognized as impairment loss in the profit and loss account for the year. The depreciable amount of the asset after the adjustment of such impairment loss should be amortized over the remaining useful life of the asset.

DEPRECIATION ON PROPERTY PLANT AND EQUIPMENT—FIXED ASSETS AND INDIAN GAAP

Accounting standard AS-6 contains the provisions about depreciation of assets. It deals with the method of calculating depreciation and the accounting effect of depreciation. The provisions also provide for the accounting in case the method of providing depreciation is changed in a particular financial year. The provisions also provide for the disclosure of method of depreciation while presenting financial statements of the company. The disclosure should also include the effect of change in the method of depreciation, if any.

RETIREMENT OF PROPERTY, PLANT AND EQUIPMENT—FIXED ASSET

Upon disposal of a fixed asset, it should be eliminated from the financial statements. This is also called **derecognition of fixed asset**. If a business enterprise considers that a particular property, plant and equipment—fixed asset is not likely to generate economic benefits for business enterprises then it should be disposed and derecognized immediately. Derecognition should also be done when a fixed asset has been disposed permanently. Profit or loss on account of such derecognition is to be recognized and accounted for as follows:

For Assets Retired and Disposed Permanently

Profit or loss on recognition is to be recognized by taking the difference between net book value and net realized value on disposal. The profit or loss is to be transferred to profit and loss account for the year in which asset is retired or disposed. However, the amount of loss that relates to an increase in the value of asset on account of previous revaluation exercise should be transferred to revaluation reserve account created previously for such asset. The credit balance of revaluation reserve after the disposal of the asset should be transferred to general reserve.

For Assets Retired and Held for Sale

Fixed assets retired from their active use but not disposed off rather held for sale are to be shown separately in the financial statement. Such assets are to be shown at the net book value or net realizable value, whichever is lower. The expected losses should be adjusted to the value so recognized and transferred as a loss to profit and loss account.

> Assets abandoned permanently from use but not disposed immediately are to be disclosed as **assets held for sale**.

Property Plant and Equipment—Fixed Assets: Asset Retirement Obligation

Certain specific asset creates a financial obligation for business enterprise upon dismantling or disposing the fixed asset. For example, land on which coal mine is operated is to be reclaimed if law requires such reclamation of land. Similarly, a refinery using a crude oil well is required to prepare the land platform for subsequent use once it disposes the oil well. Similarly, a telecom company might be required to spend heavy expenses for restoring the land and building on which telecom towers were installed. Such financial obligations are identified as **asset retirement obligation.**

These are to be recognized appropriately, if these can be recognized fairly and precisely at the time of initial recognition then asset retirement obligation provision is to be credited and the corresponding asset account is to be debited, thereby increasing the initial carrying cost of the asset. Upon the payment of financial obligation at the time of retirement of the asset provision account is liquidated. If these cannot be recognized at the time of initial recognition then these should be recognized as and when a fair assessment of such retirement obligation is feasible and accounted for as explained.

DISCLOSURE—PROPERTY, PLANT AND EQUIPMENT (FIXED ASSETS)

The financial statements, particularly balance sheet and schedules forming the part of balance sheet should disclose sufficient details about fixed asset. The provisions of accounting standard AS-1, AS-6, AS-10 and IAS-1, IAS-16 regarding such disclosure are as follows:

- Fixed assets should be reported in different classes as 'Fixed Assets—Tangible' by showing owned assets and leased assets separately. Within each class as far as items should be grouped as Land and Building, Plant and Machinery, Furniture and Fixtures, or any other classification is applicable.
- For each class of fixed asset, gross carrying amount (gross block), accumulated amortization and net carrying amount (net block) should be disclosed appropriately.
- Method of providing depreciation and any change, if any in the method of providing depreciation should be disclosed properly.
- Additions, disposals, impairment and retirement should be disclosed properly for each class of fixed asset so as to provide true and fair view of these assets.
- Fixed assets not in active use and held for disposal/sale, along with their carrying cost and impairment loss, if any.
- Revaluation practice for each class of fixed asset.
- Fixed asset under construction should be disclosed under the heading **Capital work-in-process.**

The main objective of such disclosure is to provide true and fair view of different fixed assets being used by a business enterprise.

Abstracts From the Annual Report 2008 of APTECH Ltd

Fixed Assets

Fixed assets are stated at cost less accumulated depreciation and impairment loss, if any. Cost comprises the purchase price and any cost attributable to bring the asset to its working condition for its intended use.

Depreciation and Amortization

Depreciation on fixed assets is provided on SLM at the rates and in the manner specified in the Schedule XIV of the Indian Companies Act, 1956. The rates used were 3.33% for office premises, 20% for furniture and fixtures, 33.33% for computers hardware, software and courseware.

(**Source:** Annual report of Aptech Ltd for the year 2007–08)

INTANGIBLE ASSETS—MEANING, FEATURES AND IDENTIFICATION

Meaning

Intangible assets are such productive resources that are not in physical substance. These assets rarely generate economic benefits independently or individually but enhance the value of economic benefits likely to be generated from other assets. Intangible assets are either generated internally or acquired externally. Certain intangible assets come into existence on account of research and development, scientific and technical research leading to intellectual property, development of patents or acquisition of license—production, export/import, fishing, operation/production licenses.

As defined in AS-26, An intangible asset is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.

Features

To qualify as an intangible asset, the asset must have certain inherent features also called **qualities** to be eligible for recognition as an intangible asset. The prominent features are as follows:

(i) Identifiability and separability of intangible assets
(ii) Control of intangible assets
(iii) Future economic benefits from intangible assets

An item to be recognized as intangible asset in the annual accounts must qualify for all of these features.

Identifiability and Separability of Intangible Assets

For an intangible asset to be recognized and reported in annual accounts, it must qualify identification test as specified in AS-26 and IAS-38. Accordingly, an intangible asset is identifiable only when it meets the following criteria:

- It should be clearly distinguished from goodwill.
- It should be capable of being disassociated from the entity for the purpose of sale, transfer, exchange, to let out individually or together with some other asset or contract.
- It should arise from certain contractual obligation or rights whether separable from entity or from main contract/obligation.
- It should be capable to generate economic benefits either individually or jointly with other assets.

> Prominent **intangible assets** are patent, logo, copyrights, licenses and goodwill.

> Being identifiable does not imply being separable; **separability** is not the pre-condition for **identifiability**.

Separability of intangible asset is applicable from the angle of its identification and not necessarily it can be sold or rented out individually. There are incidences in which consideration is paid for a group of assets resulting into the acquisition of an intangible asset. Such intangible asset can be identified specifically from the viewpoint of its contribution in the economic benefits to be generated from the group of assets but it cannot be sold individually. Therefore, being **identifiable is must** and being **separable is not compulsory** for an intangible asset to be recognized in the books of accounts.

ILLUSTRATION A toy manufacturing company develops a plastic mould along with patent to use it by spending ₹ 1,25,000 (including expenses on trial run and research and development). The prominent condition of the agreement for such patent is that it cannot be sold separately and can be used with the mould only. Here, patents are an integral part of the mould but it can be identified from the viewpoint of economic benefits but it cannot be separated. But still this patent is to be recognized as intangible asset.

Control of Intangible Assets

Control with reference to an intangible asset implies the ability or power of the business enterprises in restricting and directing the economic benefits flowing from the use of an intangible asset. Control is also enforceable when the business enterprise holding the asset can restrict others from using the same if used by others then it can charge them for rental or certain other fees.

ILLUSTRATIONS

1. In case of copyrights, trademark and logo, patents, etc., usually, control is enforceable through law; however, it is not the pre-condition for control, there are other ways through which control over an intangible asset can be exercised, such as skilled employees are bound to perform their duties towards the business enterprises and expenses spent by the business enterprises in the skill enhancement can be recognized as an intangible asset.
2. A private hospital is having a team of 20 specialized doctors. The hospital has the provision of granting paid leave and reimbursement of higher skill training expenses to be attained by doctors while in

> **Control over an intangible asset** can be either due to some legal rights or due to natural causes.

service with the written agreement having a provision of condition for the doctor to continue in the service for atleast three years after completing the concerned course of higher skills. Here, all the higher skill training expenses including paid leave for the training period is to be recognized as cost of intangible asset and amortized over relevant period; in this case, it is three years.

Instances Showing Lack of Control—Not to be Recognized as Intangible Asset There are certain intangible assets that despite of being in existence—identifiable and separable, the business enterprise does not has control over such asset should not be recognized as an asset. All expenditure on such assets should be expensed by showing to profit and loss account in the year in which these are incurred. The incidences of lack of control may be, such as (a) control over professional and technical skills of employees (b) control over brand loyalty of customer and (c) control over market share enhanced through sales promotion expenses.

Future Economic Benefits from Intangible Assets

The cases discussed earlier should be recognized as an intangible asset only when these are likely to generate economic benefits in future apart from present benefits, if any. If an expense that meets the criteria of **identification, separation and control** as discussed above but fails to generate any economic benefits in future then it is to be recognized as **revenue expense** for current accounting year and debited to profit and loss account for the year. The increase in future economic benefits might accrue in the form of **reduction in the future costs** also.

Intangible Assets Contained in/on a Physical Substance

Usually, intangible assets are in non-physical substance, but there are incidences in which a particular asset recognized as intangible might be contained in or represented by a physical substance; such as a compact disk (CD) as a part of a software, written document in case of an agreement, license or a legal document granting a particular right to realize future economic benefit. Whether such asset is to be recognized a **fixed asset under AS-10** or **an intangible asset under AS-26** depends upon accounting prudence that is as follows:

- If cost of physical substance containing the intangible asset is not much significant as compared to the total cost of such asset then such asset is to be recognized as an intangible asset and not as fixed asset.
- If cost of physical substance containing the intangible asset is significant as compared to the total cost of such asset then it should be recognized as a fixed asset and not as an intangible asset.
- If both physical and non-physical substances are separable from each other then the physical part is to be recognized as fixed asset and the non-physical part is to be recognized as an intangible asset.

Here the judgement requires the assessment as to which part is predominant in the total asset under recognition.

Illustrations 1. In a computer-controlled rocket, the software to operate the rocket is an integral part of the rocket and cannot be used independently. Here, the software is an intangible substance but rocket is in physical substance. As a matter of evidence, the cost of physical substance seems to be predominant as compared to the cost of non-physical substance, therefore, complete asset including physical and non-physical substance is to be recognized as fixed asset.

2. A piece of computer software can be used on any computer. Therefore, computers being in physical substance are recognized as fixed asset and the operating and application software being in non-physical substance to be recognized as an intangible asset. The apparent reason is that both can be used independently.
3. A film producer produces a movie costing Rs 300 crores. Out of the total cost of 300 crore, ₹ 1 crore is the cost attributable to the disks and film rolls (a physical substance) on which movie is recorded. Here, out of the total cost, the cost of physical substance is not significant; therefore, the total amount of ₹ 300 crores is to be recognized as an intangible asset—copyrights.

INTANGIBLE ASSET—RECOGNITION AND INITIAL MEASUREMENT

Recognition

An item of intangible asset as discussed earlier should be recognized as an intangible asset in the books of accounts only when it meets the following criteria:

(i) Cost of such intangible asset can be measured reliably and precisely.

(ii) The estimation that the future economic benefits will flow from the asset.

The judgement about the flow of future economic benefits is to be supported by certain evidences and supporting data. In the lack of sufficient evidence supporting the flow of future economic benefits, the intangible asset should not be recognized.

In case of acquisition of an intangible asset as a result of **amalgamation of companies** the transferee company should recognize the intangible asset only when it is identifiable, separable, controllable, and its economic benefits and cost are measurable as discussed above. Otherwise, it should not be recognized as intangible asset but to be recognized as goodwill.

Initial Measurement (Cost)

Initial measurement implies estimation of cost at which an intangible asset is to be reported in the books of accounts. **Estimation of cost** of the asset should be made by using **reliable measurement** bases. The initial cost at which intangible asset is to be recorded in the books of accounts should be reliable as well as paid specifically in creating or acquiring such asset. *Initial recognition of an intangible asset is to be done at the cost only.* Cost of an intangible asset comprises the following:

(i) Purchase price paid including duties and levies thereon.

(ii) Expenses attributable to such asset till the time it become useable.

Rebate and discount received while purchasing an intangible asset or any of its components should be deducted from the total cost as discussed earlier. Thus, the amount so calculated will be the **carrying amount** of the intangible asset under measurement.

MODE OF ACQUISITION AND INITIAL MEASUREMENT (COST)

The measurement, i.e., estimation of cost as discussed earlier is done differently in different cases. The common principles in all the measurement cases are (i) principle of reliability and (ii) principle of best and prudent judgement about cost.

Separate Acquisition by Cash Payment

When an item of intangible asset is acquired externally as a separate asset, such as license to produce a product/service from other business enterprises, patent rights and copyrights. The measurement of cost is apparently the **cash price paid** in acquiring such intangible asset. The cost includes purchase price, duties and levies thereon, expenses directly attributable to the acquisition of intangible asset, less discount, rebate and allowances received.

Separate Acquisition by Exchange of Securities

In the case when consideration for separate acquisition is settled by the issue of securities—shares and debentures of the company. Here cost for initial recognition is either the fair value of the intangible asset so acquired or fair value of the securities issued, whichever can be measured reliably and reasonably.

Acquisition as a Part of Business Combination or Amalgamation

An intangible asset acquired at the time of amalgamation in purchase method is recognized and measured in accordance with the provision of accounting standard AS-14—accounting for amalgamation. The cost of an intangible asset so acquired is to be measured as follows:

- Separate cost allocated to an individual item of intangible asset by using fair value estimated reliably and reasonably.
- The fair value may be equal to the quoted market price of the asset if its active market is available.
- In the absence of active market, the cost of such intangible asset should be taken as the bid price of the most recent similar transaction.
- In the absence of active market as well as similar previous transaction, the most reasonable amount at which such intangible asset can be traded at an arm's length distance between a knowledgeable buyer and the seller.

Note of Caution: If cost of an intangible asset cannot be assessed as discussed earlier, it should not be recognized as a separate intangible asset but to be adjusted with goodwill/capital reserve arising on account of amalgamation.

Acquisition by Way of Government Grant

There are incidences when an intangible asset is allotted or granted by government as government grant. Such asset might be acquired from government either by making appropriate price for it or at concession or free of cost.

EXAMPLE Obtaining a license from government to produce or for import/export, license to operate or use certain infrastructure facilities, such as road, airport route, power plant, dam, bridge and highways.

The initial measurement of such intangible asset is to be done as per the provision of AS-12 applicable for non-monetary government grants. Accordingly, intangible asset acquired at **concessional rate** should be reported at the acquisition cost plus attributable expenses incurred in acquiring such asset. An asset acquired **free of cost** is to be reported at **nominal value** only.

Barter (Exchange) Transaction

An intangible asset acquired in a barter transaction is to be measured and reported in the books of accounts as per the provision discussed under the measurement of fixed asset resulting from barter transaction.

Internally Generated Intangible Asset

Internally generated intangible asset is the one that is developed by a business enterprise through internal process adopted by it, such as development of a patent through research and development for the production of medicines and development of copyrights for producing books. Such internally generated assets should be measured at the **cost incurred** for generating the asset. Usually, it includes direct costs, attributable costs, allocated costs using reasonable basis of allocation, less benefit realized during the process of internal generation of the intangible asset.

INTERNALLY GENERATED INTANGIBLE ASSET

Certain intangible assets are generated by using internal resources of the business enterprises, such as employees, technical and professional skills, use of raw material and fixed assets in developing new product, patent and copyrights. These are the examples of **internally generated intangible assets**.

Internally generated goodwill, such as brand equity, customer's loyalty, technical and professional skills of employees not protected through an agreement are not to be recognized as intangible assets.

Recognition

An internally generated intangible asset is to be recognized only when it meets the general recognition criteria—identifiability, separability, control and future economic benefits, as discussed earlier. Apart from this, an internally generated asset must satisfy the following two criteria:

- Such internally generated intangible asset passes through the phase of research and development.
- Research and development phases can be separated from each other.

If an internally generated intangible asset does not satisfy the general criteria of recognition as well as above mentioned criterion then such expense is to be debited to profit and loss account for the year as routine expense.

ITEMS NOT RECOGNIZED AS INTERNALLY GENERATEED INTANGIBLE ASSETS

Internally Generated Goodwill

Sometimes research and development activities intended to generate internal intangible asset do not lead to the acquisition of an intangible asset in such case all the expenses attributable to such intended intangible asset are classified as **internally generated goodwill.** The provisions of AS-26 provide that internally generated goodwill should not be recognized as an intangible asset as it does not meet the recognition criteria of identifiability, separability, control and future economic benefits. Therefore, expenses on such internally generated goodwill are expensed to profit and loss account in the year of expenses.

Brands, Mastheads and Others

Internally generated brands, brand equity, publishing titles, dealers/customers lists and other such items need not be classified as an intangible asset because these come into existence on account of routine business development activities and not paid for exclusively. At the same time, the estimation of future economic benefits attributable to such intangible assets cannot be measured precisely. Therefore, these should not be recognized as an intangible asset and expenses on these should be expensed to profit and loss account in the year of expense.

However, brands, publishing titles and other similar items acquired externally should be recognized as an intangible asset and are subject to annual impairment test.

Research and Development Expenditure

Majority of the internally generated intangible assets are developed through the process of research and development. The recognition and measurement should be considered by considering the following phases.

Research Phase

It is the phase preceding development phase. Expenditures incurred during the research phase are *not considered* as part of internally generated intangible asset as at this stage the business enterprise does not foresee the identification of an intangible asset that is capable of generating future economic benefits.

Development Phase

This is the phase during which intangible asset might be identified that is capable of generating future economic benefits. Recognition arises only when the following symptoms are met:

(i) Development of intangible asset is technically feasible and it will be viable for sale or use after the development.
(ii) Costs to be attributed to the development of intangible asset are measurable precisely.
(iii) Future economic benefits are measurable and sure to be achieved once the development phase is complete.

Although research and development are inseparable activities but for recognizing intangible assets, these are separable.

Cost of Internally Generated Intangible Assets Other Than Goodwill—Initial Measurement

Expenses incurred during the research phase should not be considered at the time of initial measurement of intangible asset. As the initial recognition of an internally generated intangible asset takes place during the development phase; therefore, only the *expenses from the stage of initial recognition onwards* are to be included in the initial measurement of the asset so generated. These are the expenditures directly attributed or allocated reasonably to the development of such asset. These cost include the following:

(i) Expenditure on materials, consumables consumed and services used while generating the asset.
(ii) Directly attributable expenses, such as registration fees for registration of legal rights or licenses.
(iii) Employee costs that can reasonably be allocated by using justifiable basis of allocation.
(iv) Overheads including depreciation of fixed assets, insurance premium and similar expenses that can precisely be traced to the development of such asset and can be allocated appropriately.
(v) Borrowing costs exclusively associated with the developmental activities.

Recognition of an Expense

Certain expenses should be recognized **as an expense** and **not as initial cost** of an internally generated intangible asset.

- When expenditure is incurred to develop intangible asset but eventually none of the asset (intangible or physical) gets generated then such expenditure is expensed as and when incurred or recognized like this.

Further to it, the following expenses should not be considered while arriving at the initial cost of an internally generated intangible asset:

- General administrative, selling and other expenses unless these are directly attributed to the development of asset being recognized.
- Initial losses and cost of inefficiencies before the recognition of asset.
- Expenditure on training and skill enhancement of employees to operate the asset.
- Start-up expenses unless these have been recognized as part of fixed asset.
- Routine advertising and sales promotion expenses.

Past Expenses not to be recognized while initial recognition of intangible asset

Certain expenses of past that have been recognized as routine expenses should not be included in the initial cost just because the similar expense has contributed now to the development and recognition of an internally generated intangible asset.

Example 10 Masters Ltd is engaged in the development of education equipment and educational methods. It carries research and development activities to bring improvement in the teaching methodologies. It incurred ₹ 100 crore on general research work and another 70 crore to be allocated equally to research and development work leading to a patent right duly documented. How should these expenses be recognized?

Solution
(i) ₹ 100 crores, which is only research expense, and ₹ 35 crores out of research and development; however, leading to the acquisition of patents rights also relates to research work not be recognized as an intangible asset rather to be expensed.
(ii) ₹ 35 crore spent on development of patent should be recognized as cost of patent and to be capitalized.

INTANGIBLE ASSET—SUBSEQUENT EXPENDITURE

Subsequent expenditure incurred in connection with previously recognized intangible asset can be either to bring an improvement with regards to productive capacity of such asset or to maintain the productive capacity of such asset. Depending upon the nature of expenditure, it should be accounted for in the books of accounts.

Improvements Costs

Improvement costs are such subsequent costs that result into any or all of the following:

- Productive capacity of the intangible asset is enhanced.
- Economic life of the intangible asset is improved.
- Scope of functional uses/performance is widened.
- Quality of output from intangible asset is enhanced.
- Speed of the intangible asset in discharging intended functions improves.

As per the provisions of IAS-38 and AS-26 if a subsequent expenditure in connection with a particular intangible asset is likely to augment the previously estimated performance or capacity of the intangible asset is to be capitalized and added to the carrying cost – gross book value of the concerned intangible asset.

All such subsequent costs are called **improvement costs** and these should be **capitalized,** i.e., to be added to existing carrying cost of the particular asset.

Subsequent cost resulting into enhancement of capacity/performance is to be capitalized.

Maintenance Costs

Maintenance costs are such expenses that are incurred in routine to maintain the performance or capacity of the intangible asset. These expenses are part of the routine servicing or maintenance of the asset so that the capacity or performance of concerned asset can be maintained. Therefore, these expenses/costs should be considered as **normal maintenance cost** to be charged to the revenue of current period by debiting to profit and loss account. These costs should not be capitalized as these do not result into augmenting the capacity/performance of the intangible asset rather maintain the capacity/performance of the asset.

Subsequent cost incurred to maintain the capacity/performance is not to be capitalized rather expensed.

INTANGIBLE ASSET—SUBSEQUENT MEASUREMENT (MEASUREMENT AFTER INITIAL RECOGNITION)

An internally generated intangible asset requires subsequent measurement after recognition and measurement at the initial stage. After initial measurement, the asset is to be measured and reported at cost less accumulated amortization and impairment losses. The process of showing expired proportion of an intangible asset as an expense to profit and loss account is called **amortization** of intangible asset.

IAS-16 and Subsequent Measurement of Intangible Assets

Provisions of international accounting standard IAS-16 provide that a business enterprise is free to adopt either cost model or revaluation model for subsequent recognition of intangible asset in its annual accounts.

Cost Model

According to this, an intangible asset should continuously be presented in the annual accounts at the historical cost less accumulated amortization and impairment loss appropriate for the asset under recognition. Appropriately, this model is to be followed when estimation of fair value of an asset is not possible with reliability and precision.

> In case of failure to estimate fair value of an asset, it should be recognized subsequently at the cost only.

Revaluation Model

According to this, an intangible asset should be revalued regularly if estimation of fair value can be done reliably and reasonably. Such revaluation is to be carried out at a regular interval so that intangible assets are presented in the annual accounts at the value that does not differ materially from their fair value. The frequency of revaluation depends upon the frequency with which changes take place in the fair value of the asset under subsequent recognition. The purpose of revaluation is to have true and fair representation of intangible assets in the annual accounts as on reporting date.

Market value is to be used to estimate the **fair value** of intangible asset. If market value is not available then either the **present value of future benefits** likely to be realized from the asset or its **replacement cost**, whichever is measurable reliably, should be used.

AS-26 and Subsequent Measurement

The provisions of AS-26 provide that an intangible asset should be reported at initially recognized cost less accumulated amortization as applicable for the asset under subsequent measurement after the initial recognition. The amortization of an intangible asset is to be carried out by following the provision relating to amortization.

AMORTIZATION

Meaning

Amortization is the process to spread the cost of an intangible asset over its useful life. Normally, the process of amortization spreads the total cost of the intangible asset equally over each of the years of useful life of the asset being amortized. The period over which an intangible asset is to be amortized depends upon legal factor, duration of future economic benefits, accounting prudence, etc.

Amortization of Intangible Assets with Finite Useful Life

Amortization is the process to spread cost of an asset over its useful life.

For the purpose of amortization, intangible assets are classified as assets with finite life and assets with infinite life. The assets, such as logo, brand name and renewal licenses are the examples of intangible assets with infinite life, but accounting standard AS-26 does not recognize this fact and considers that all the intangible assets have a finite life usually not exceeding 10 years' time period.

Example 11 Cupla Ltd, manufacturing speciality drugs, purchases patent from Hexa Ltd at a cost of ₹ 9,00,000. The patent right is acquired for a period of five years with zero recoverable value at the end. Show how patent is to be amortized over five years.

Solution As there is no residual value, the amortizable amount is ₹ 9,00,000 to be spread equally over these five years. The annual amortization is ₹ 1,80,000 (9,00,000/5).

Amortization Period

Intangible assets are likely to generate economic benefits over certain future time period to abide by the matching principle of accounts cost of these should be amortized over the period during which economic benefits are likely to be received by the business enterprise. The depreciable amount of the asset should be spread across its *useful life* while considering the following facts:

- Product life cycle of the asset and its expected usage by the enterprises in generating economic benefits.
- Stability of the industry in which the asset is being used and the market demand of the products and services produced from the asset.
- The period of control as restricted by the enforcement of some law or nature.
- Level of maintenance expenditure required to obtain the expected future benefits.
- Dependence of intangible asset on other assets being used by the business enterprises.
- Estimation of impairment loss.
- Technical estimates about the life of the asset.

Accounting Prudence and Amortization Period

The accounting prudence as derived from the provisions of AS-26 and IAS-38 provides the following about amortization period:

- Normal convention is to amortize the intangible assets over a period not exceeding 10 years from the date of first time use of such asset.
- A recognition of shorter or longer time period is subject to the following provisions:
  - Time duration as restricted or specified by some legal rights
  - Significant evidence of realizing future economic benefits for a period less than or more than 10 years
  - Certainty about the renewal of the legal rights on the expiry of initial time period

If uncertainty prevails in estimating useful life of the intangible asset, the maximum amortization period should not exceed 10 years' time period, unless, otherwise justifiable.

AMORTIZATION OF GOODWILL

As per the provisions of accounting standard AS-14, goodwill is to be recognized as an asset only when it has been paid for by the business enterprises. Therefore, usually goodwill arises at the time of amalgamation of companies. As per the accounting standard goodwill is to be amortized over a maximum period of five years, unless a longer useful life of goodwill can be justified. *However, goodwill is subject to impairment test every year.*

Amortization Method

Amortization method to spread the cost of an intangible asset over the amortization period as discussed earlier can be any one out of the methods, such as straight line method, written down value method, output linked depreciation method, hourly rate of method and consumption method. The selection of method depends on the following factors:

- The amortization method selected should reflect the pattern of future economic benefits to be realized from the asset.
- If a reliable assessment about the pattern of future economic benefits is not feasible then **straight line method** of amortization should be adopted.
- When future economic benefits are likely to diminish at a consistent rate over the useful life then the most appropriate method is **written down value method**.
- Amortization method should be applied consistently year after year without any change, unless, otherwise required by law or due to the nature of the intangible asset.
- If there is any change in the amortization method then it should be justified and disclosed properly in the annual account along with their impact on cost/profit.

Normally, intangible assets other than goodwill should be amortized over a period not exceeding 10 years and goodwill over a period not exceeding five years.

Amortization and Annual Accounts

The amount of cost amortized out of the carrying cost of an intangible asset should be shown as an **expense** to profit and loss account. If the use of intangible asset leads to the creation of some other asset, such as inventory and building then the amortized cost should be added to the **carrying cost of such asset** and not to be debited to profit and loss account.

Residual Value of Intangible Asset

Normally, residual value of an intangible asset is considered **zero;** therefore, total carrying cost as measured by applying best judgement as explained earlier is to be amortized over the amortization period. Such amortization should leave zero book value of the asset at the end of the useful life of the asset. In the following cases, residual value may be considered **other than zero**:

- There is a commitment or legal binding on a third party to purchase the asset at the end of useful life or contract period as applicable.
- There exists an active market to dispose the asset at the end of the useful life.
- The realizable (residual) value likely to be received at the end can be assessed reasonably.

Review of Amortization Period and Amortization Method

Once a particular amortization period and amortization method is decided and adopted, it needs an annual review. If evidences support a change in either amortization period, or amortization method or both then such change is to be implemented. The effect of change is to be disclosed properly in the annual accounts as provided in the accounting standard AS-5. The change is to be effected in the following circumstances only:

- There is a significant change in the estimated useful life of the asset as compared to the previously estimated useful life for the purpose of amortization.
- There is a significant change in the pattern of future economic benefits to be realized from the asset to be amortized, and it becomes justifiable to change the amortization method so as to reflect the changed pattern of benefits.

Change in amortization period or in amortization method should be supported by relevant evidence and disclosed properly.

Impairment Losses—Recoverability of Carrying Amount

As every intangible asset is amortized over a definite time period, therefore, regular assessment of its recoverable amount becomes inevitable for a true and fair presentation of annual accounts. Depending upon the assessment of recoverable amount, impairment losses are recognized. For the purpose of estimating recoverable amount, each intangible asset is subject to impairment test at least once in a financial year preferably at the end of the financial year. *Estimation of recoverability of carrying amount and recognition of impairment losses is must for the following category of intangible assets:*

Categories of Intangible Assets for Calculating Recoverable Amount

(i) An intangible asset that is not yet available for use
(ii) An intangible asset that is amortized for a period exceeding 10 years

These types of intangible assets are subject to annual valuation at the end of each financial year and recognize impairment losses as per the provisions of AS-5. Accordingly, impairment loss is to be expensed to profit and loss account as soon as recognized.

DERECOGNITION OF INTANGIBLE ASSETS—RETIREMENT AND DISPOSAL

An intangible asset is to be derecognized, i.e., eliminated from annual accounts—balance sheet as soon as it is disposed or it has no future economic benefits. The act of disposal is self-evident, whereas the act of lack of future economic benefits is based on the best judgement and accounting prudence.

An asset abandoned permanently from its use or disposed off should be **derecognized**.

Accounting Effect of Derecognition

Upon derecognition, the following accounting effects should be applied:

- If disposed for a reasonably measurable consideration then profit or loss is to be shown to profit and loss account of the year of such disposal.
- When future economic benefits are not expected, the remaining book value is to be recognized as loss and transferred to profit and loss account in the year of such estimation.

Intangible Asset Held for Disposal/Sale

An intangible asset that is not in active use by business enterprise because it has stopped generating economic benefits but not disposed. Such intangible asset is to be disclosed in the balance sheet as **intangible asset held for disposal/sale**. As per the provisions of impairment of assets, such assets are subject to impairment test at the end of each financial year and impairment loss, if any is to be expensed to profit and loss account. Such assets are to be reported in the balance at the carrying cost less impairment loss.

INTANGIBLE ASSETS—DISCLOSURE AND INDIAN GAAP

The financial statements, particularly balance sheet and schedules forming the part of balance sheet should disclose sufficient details about intangible asset. The provisions of accounting standard AS-26 and IAS-38 regarding such disclosure are as follows:

- Intangible assets should be reported in different classes as (i) Internally generated intangible assets, (ii) separately acquired intangible assets and (iii) other intangible assets.
- Useful life, amortization method, rate of amortization should be disclosed individually for each class of intangible asset.
- For each class of intangible asset, gross carrying amount (gross block), accumulated amortization and net carrying amount (net block) should be disclosed appropriately.
- Additions, disposals, impairment and retirement should be disclosed properly from each class of intangible asset so as to provide a true and fair view of these assets.
- Intangible assets not in active use and held for disposal/sale, along with their carrying cost and impairment loss, if any.
- Revaluation practice for each class of intangible asset.

The main purpose of such disclosure is to have a true and fair view of different intangible assets contributing in generating revenue for the business enterprise.

Recap 1

So far, we have discussed the following topics:

- Capital Expenditure
- Property Plant and Equipment—Fixed Assets
- Initial Recognition of Fixed Assets
- Subsequent Expenditure on Fixed Assets
- Subsequent Recognition of Fixed Assets
- Intangible Assets
- Initial Recognition of Intangible Assets
- Subsequent Recognition of Intangible Assets

Self-assessment

1. Explain the concept of internally generated intangible assets.
2. Differentiate between fixed assets and intangible assets.

The following topics will be delved into next:

- Impairment of Individual Fixed Assets
- Impairment of CGU
- Reversal of Impairment Loss
- Current Assets
- Investment
- Case

IMPAIRMENT OF ASSETS—CONCEPT, MEASUREMENT AND RECOGNITION

Concept

Impairment of an asset is recognized when the recoverable amount of the asset is less than its carrying amount. The difference between the recoverable amount and carrying amount is termed as **impairment loss**. Such impairment loss is either recognized as a loss by debiting to profit and loss account or adjusted against the revaluation reserve relating to the asset.

Measurement

An asset is impaired when its carrying amount exceeds its net recoverable value. The impairment loss so recognized is measured as follows:

Impairment loss = Carrying Amount – Recoverable Amount

Recoverable amount is the higher of net selling value (NSV) and value in use (VIU) of assets put to impairment test. **NSV** is the net amount likely to be realized, if the asset is sold less disposal expenses. **VIU** is the present value of both (i) future cash flows to be generated if the asset is put to use for the remaining useful life and (ii) salvage value to be realized at the end of useful life. The present value is calculated using appropriate discount rate as prevailing in the market subject to the adjustment for the risk as applicable for the type of asset.

> Lowering down of recoverable amount below the carrying amount of the asset results into impairment loss.

Recognition

Impairment loss results into decrease in the carrying value of an existing asset that is in use since its initial recognition. The decrease is equal to the impairment loss as explained above. The impairment loss is recognized in the books of accounts as follows:

General Provisions

- Impairment loss is to be recognized separately for individual asset and not mixed with the impairment loss or revaluation profit of other assets.
- Impairment loss for group of assets should be recognized separately and not to be mixed with the impairment loss or revaluation profit of other assets.
- When impairment loss is more than the carrying amount of the asset to which it is related then it should be recognized as a liability if applicable as per other accounting standards.
- After the adjustment of impairment loss, the depreciable amount of the asset is to be amortized by the way of providing depreciation over the remaining useful life of the asset subject to estimated residual value.
- Deferred tax asset or deferred tax liability as may be applicable should also be adjusted subject to the changes in the amount of depreciation.

Specific Provisions

For the assets that have not been revalued earlier:

- Impairment loss is to be debited as a loss to profit and loss account for the year.

For the assets that have been revalued earlier:

- Impairment loss to the extent of revaluation profit as represented by revaluation reserve relating to the asset is to be adjusted against such reserve. Impairment loss in excess of this is recognized as a loss to the profit and loss account for the year.

INDICATORS OF IMPAIRMENT

Whether an asset is subject to impairment or not, the judgement is to be taken in accordance with the external information and internal information about impairment indicators as contained in the provisions of AS-28 and IAS-36.

External Sources of Information—External Indicators

(i) During the reporting period, the market value of the asset has declined significantly or likely to decline in future by more than what it was expected in normal business circumstances.
(ii) Economic, technological, legal or regulatory environment in which enterprise is operating has changed or is likely to change in the near future significantly and is likely to have an adverse impact on the enterprise and its operating results.
(iii) Market interest rate or the discount rate used for calculating the value in use has increased or likely to increase significantly.
(iv) The carrying amount of the net assets for the reporting period of the business enterprise is more than its market capitalization that leads to the overstatement of assets.

Internal Sources of Information—Internal Indicators

(i) There is significant evidence about physical damage of an asset or its obsolescence.
(ii) The manner and working conditions in which assets has been put to use have faced significant adverse changes or likely to have such change in the near future.
(iii) There is sufficient evidence about the deterioration in the economic condition of the business enterprise or such deterioration is likely to take place in near future.
(iv) There is a plan to discontinue the use of such asset.
(v) The cash flows associated with the operating of asset have changed or likely to change significantly in the near future.

These indicators are not exhaustive and there might exist many more reasons leading to such situations. Therefore, the recognition of impairment is the matter of accounting prudence and best managerial judgement.

Evidences Available from Internal Reporting

(i) Cash flows for acquiring the assets are significantly higher as compared to similar estimate made preciously.
(ii) Net cash flow or operating profits likely to flow from the use of asset have significantly decreased or likely to decrease in near future.
(iii) Cost of capital applied for the asset has increased significantly or likely to increase significantly resulting into an increase in the discount rate for calculating present value.

> Impairment loss exceeding the existing carrying amount is to be recognized as a liability if other accounting standards require so.

(iv) The expected residual value of the asset has decreased as compared to an earlier estimate of the expected residual value and such change is likely to affect recoverable value of the asset.

Example 12 As on April 1, 2009 the carrying amount of ATM (automated teller machine) of a bank is ₹ 9,00,000. By considering internal and external indicators, the company recognizes impairment loss. The net sales value is assessed at ₹ 7,15,000 and value in use is calculated as ₹ 6,80,000. Show how this ATM is to be impaired in the year 2009. What would be your answer if value in use of ATM is considered ₹ 9,20,000?

Solution Here we assume that this ATM machine has not been revalued in the past. The net recoverable amount is ₹ 7,15,000 higher than the net sales value or value in use. The impairment loss ₹ 1,85,000 (9,00,000 − 7,15,000) is to be debited to profit and loss account for the year ending 2009–10.

In case the value in use happens to be ₹ 9,20,000 then the net recoverable value should be ₹ 9,20,000. As this net recoverable value is more than the carrying amount of ATM, therefore, there is no impairment loss for this ATM.

CASH-GENERATING UNITS (CGU) AND IMPAIRMENT LOSS

Introduction

In the business process, an individual asset might fail to generate future economic benefits and cash inflows individually and independently. Usually, it is a group of assets that generates future economic benefits and cash flows, such group of assets as far as distinct from other group of assets is identified as **cash-generating unit (CGU)**. Therefore, it is a difficulty to estimate recoverable amount of an individual asset; rather it is to be estimated with reference to such CGU.

AS-28[1] defines a cash-generating unit as the smallest group of assets that includes the assets that generate cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets.

As a result of such identification, sometimes it is difficult to estimate recoverable amount of a particular individual asset. The prominent reason may be the *non-availability of net selling value of such individual asset*; therefore, such individual asset is not valued for the purpose of impairment but it is considered as a part of such group of assets with which it generates cash, i.e., it is a part of cash-generating unit.

A group of individual asset that cannot generate cash inflows independently are identified as **cash-generating unit** (CGU).

Basis of Classification as CGU

An individual asset is to be considered CGU only when

(i) 'Value in use' of the particular asset as an individual asset cannot be estimated close to its 'net sales value'.

(ii) The continuing use of the asset as in individual asset is not capable to generate cash inflows; rather it generates in synergy with other assets.

[1]Source AS-28 as specified by ICAI.

Recoverable Amount and Carrying Amount of Cash-Generating Unit (CGU)

Recoverable amount is the higher of the NSV andVIU of CGU being tested for impairment. NSV is the net amount likely to be realized if the group of assets is sold less disposal expenses. VIU is the present value of both (i) future cash flows to be generated if group of assets is put to use for the remaining useful life and (ii) salvage value to be realized at the end of useful life of group as a whole. The present value is calculated using appropriate discount rate as prevailing in the market subject to the adjustment for the risk as applicable for the type of group of assets. Certain liabilities that are incidental to the disposal, if any of a CGU, should be considered while arriving at the recoverable amount.

> **Recoverable amount of an asset** is higher of 'net selling value' or 'value in use'.

Carrying amount is the combined net book value of all the assets considered as a part of CGU and no other assets' net book value. The **net book value** is the combined gross value less accumulated depreciation and impairment losses recognized earlier with reference to such CGU under impairment test now.

Recognition of Impairment Loss of CGU

The impairment loss for CGU is calculated as it has been calculated for individual assets explained earlier. The amount of impairment loss as calculated needs to be recognized in the books of accounts by using the following provisions:

Common Principles

The amount of impairment loss should be recognized a loss to profit and loss account only when the amount of impairment loss exceeds the credit balance of revaluation reserve relating to the CGU after adjusting such impairment loss to the goodwill contained in CGU.

Allocation of Impairment Loss of CGU

Total amount of impairment loss should be used to reduce the carrying amount of CGU. Such reduction is to be carried in the following order:

(i) First, it is to be used to reduce the carrying cost of goodwill, if any contained in CGU.
(ii) Second, by using any practically feasible method to allocate the remaining loss to rest of the assets as if these were individual.
(iii) Third, if second step as discussed above is not possible, the remaining impairment loss after making adjustment to goodwill it to be allocated on pro-rate basis to the rest of the units of CGU.

While allocating impairment loss to an asset, the carrying amount of such asset should not fall below the highest of the following:

- Net selling value of such asset
- Value in use of such asset
- Zero

> **DISCOUNT RATE**
>
> **Common Practice**
>
> **Discount rate** is such rate that is used to calculate the present value of cash flows to be received in future. The discount rate for calculating VIU is arrived at by using an estimate about (i) interest rate prevailing in the industry that affects the return form business operations and (ii) the risk category as applicable for the company.

Practices Specific to Impairment Test

The estimation of discount rate for the purpose of impairment test, the following should be considered:

(i) The rate should reflect the pre-tax rate reflecting the current market assessment of time value of money adjusted for the asset-specific risk for the asset under test.

(ii) If asset-specific rate cannot be estimated then the best possible assessment of rate is to be made so as to arrive at the appropriate time value of the future cash flows from asset.

(iii) Normally, weighted average cost of capital, incremental borrowing rate or other borrowing rate that is the best assessment using accounting prudence should be used.

(iv) While arriving at the discount rate only the risk specific to the asset or project to which asset is put to use should be considered.

(v) The discount rate should be pre-tax rate.

CALCULATION OF PRESENT VALUE

When the cash flow are to be realized in future, the present value of such cash flows is calculated using appropriate discount rate for the time period at the end of which such cash flow is realized. It is calculated as follows:

Present value of lump sum amount: Lump sum amount is single amount.

Present value = Amount × $PVIF_{r,\,n}$

$PVIF_{r,n}$ = present value interest factor at discount rate (r) for n^{th} year (n). It is calculated as follows:

$PVIF_{r,n} = 1/(1 + r)^n$

Present value of an annuity: When same amount is received every year for a finite time duration, it is called an **annuity**. Its present value is calculated as follows:

Present value of an annuity = Annuity Amount × $PVIFA_{r,n}$

$PVIFA_{r,n}$ = present value interest factor for an annuity at discount rate (r) for n (n) years. It is calculated as follows:

$PVIFA_{r,n} = \{1 - 1/(1 + r)^n\}/r$

Example 13 A company is likely to receive ₹ 10,000, ₹ 12,000 and ₹ 8,000 at the end of next three years, respectively. Calculate the present value if discount rate is 10% per annum.

Solution

Year	Amount (₹)	$PVIF_{10\%,}n$	Present Value (₹)
1	10,000	0.909 ($1/1.10^1$)	9,090
2	12,000	0.826 ($1/1.1^2$)	9,912
3	8,000	0.751 ($1/1.1^3$)	6,008
Total			25,010

Net Selling Value (NSV) vs Value in Use (VIU)

Estimation of **net selling value** is to be done by considering the following facts:

- The bid price at which an assets can be transacted in an arm's length binding agreement between knowledgeable and willing buyer and seller.

- In case a binding agreement does not exist then the market price as available in the active market place for such asset is to be considered.
- Such bid price or market price should be adjusted for disposal cost, if any.
- If both bid price and active market price are not feasible then the price is to be calculated using the best information available for arriving at the net obtainable value of the asset on the date of balance sheet.

Estimation of '**value in use**' is to be done by considering the following facts:

- Estimation of **net cash inflow** likely to be generated by continuing use of the asset for remaining useful life and expected disposal value to be realized at the end of the useful life of the asset under consideration.
- Applying an appropriate discount rate for calculating present value.
- The discount rate should be pre-tax rate that reflects the level of risk as relevant for the asset under consideration.

EXAMPLE 14 A company is likely to receive ₹10,000 P.A. for next five years. Calculate the present value if discount rate is 10% per annum.

SOLUTION Here, it is an annuity of ₹ 10,000 per annum it is to be calculated using formulae for annuity.

Present value of an annuity = $10{,}000 \times \text{PVIFA}_{10\%,5}$

$\text{PVIFA}_{10\%,5} = \{1 - 1/(1+0.10)^5\}/0.10 = 3.790$

Present value of an annuity of ₹ 10,000 per annum = $10{,}000 \times 3.790 =$ ₹ 37,900

IMPAIRMENT OF CORPORATE ASSETS

Corporate assets include such assets and group of assets that do not generate economic benefits and cash inflows independently from other assets or group of assets. The prominent examples of corporate assets are headquarters building, building of information center, research and development cell and EDP (electronic data processing) cell. These are the assets to which none of the cash inflows can be attributed directly. Since these do not contribute in generating cash inflow from a particular CGU; therefore, these cannot be fully attributed to a particular CGU under impairment test.

Recoverable Amount of Corporate Asset

Assessment of recoverable amount of corporate asset cannot be done unless it is disposed, i.e., sold off. Therefore, net selling value of an asset should not be included in the recoverable value of a particular CGU unless there is sufficient evidence that such corporate asset will be disposed.

Allocation of Carrying Amount of Corporate Asset

The carrying amount of corporate asset is to be done by using either (i) 'bottom-up test' or (ii) 'top-down test' for the allocation of carrying cost among different CGUs. Both of these tests have been explained on next page.

IMPAIRMENT OF GOODWILL CONTAINED IN CGU

Goodwill as Part of CGU

Accounting standard does not permit the recognition of internally generated goodwill as an intangible asset. However, goodwill is recognized when amalgamation of companies takes place. In this case, the amount of goodwill is the excess of purchase consideration over the agreed net asset value of assets acquired by the acquirer. The goodwill come into existence along with rest of the assets; therefore, goodwill need not be considered as an individual asset rather it should be considered as a part of different CGUs coming into existence.

To allocate the goodwill. the carrying amount of goodwill is to be apportioned on some reasonable basis or on pro-rata basis among different CGUs resulting from an amalgamation.

Impairment of Goodwill—Indian GAAP

While testing a CGU for impairment test, a business enterprise should identify whether goodwill arising on account of amalgamation can be allocated to different cash-generating units (CGUs). For such allocation of goodwill, the following two tests may be performed:

- Bottom-up test
- Top-down test

Bottom-up Test

The business enterprise should identify the reasonable basis to allocate the whole amount of goodwill among each of the cash-generating units formed as a result of amalgamation. In case appropriate allocation of the goodwill among each of the CGU formed is possible then carrying amount of each of the CGU should contain relevant proportion of goodwill as allocated on judicious basis.

Each CGU should be put to impairment test by comparing the recoverable amount of CGU and carrying amount of CGU including the amount of goodwill allocated to such CGU.

If goodwill cannot be allocated by using bottom-up test then it is to be allocated using top-down test.

Top-down Test

If goodwill cannot be allocated by using 'bottom-up test' then the business enterprises should perform 'top-down test' for putting a smaller CGU to impairment test. For this purpose, the recoverable amount of a larger CGU to which smaller CGU under consideration belongs is compared against the carrying amount of larger CGU including the carrying amount of such goodwill. If impairment loss arises then it is first absorbed into such goodwill forming then the remaining impairment loss, if any is apportioned among rest of the assets comprised in the assets forming the part of large CGU including assets contained in smaller CGU ender consideration.

IMPAIRMENT IN CASE OF DISCONTINUING OPERATIONS

In case a business enterprise plans to discontinue all the business operations of a particular asset/CGU then such discontinuation plan once approved and announced requires recognition of impairment loss or reversal of impairment loss recognized earlier. The provisions of AS-28 require that on account of announcement of approved discontinuation plan assets getting affected on account of this should be tested for impairment loss or reversal of impairment loss as applicable. The following is applied with regards to it:

(i) If assets are disposed in group then impairment loss or reversal of impairment loss is recognized by considering the recoverable amount of the group and carrying amount of the group as a whole.

(ii) If assets are disposed in piecemeal approach by selling individual asset then the total recoverable amount of the whole group is allocated among the individual assets comprised in the group to arrive at the impairment loss or reversal of impairment loss.

REVERSAL OF AN IMPAIRMENT LOSS

Every business enterprise that has written off impairment loss in the prior accounting years should test such assets to identify whether the impairment loss recognized during prior accounting periods may no longer exist or might have decreased. If such indications exist then the impairment loss recognized earlier should be reversed by following the provisions of AS-28. Accordingly, when recoverable amount is more as compared to the carrying amount of asset under consideration, the **reversal of impairment loss** exists and should be applied.

Calculation of recoverable amount is to be calculated as explained earlier.

Reversal of impairment loss is like revaluation of an asset that had been impaired earlier.

Indicators of Reversal of Impairment Loss

Whether an asset is subject to reversal of impairment loss or not, the judgement is to be taken in accordance with the external information and internal information about impairment indicators as contained in the provisions of AS-28 and IAS-36.

External Sources of Information—External Indicators

(i) During the reporting period, the market value of the asset has improved significantly or likely to increase in future by more than what it was expected in normal business circumstances.
(ii) Economic, technological, legal or regulatory environment in which enterprise is operating has changed or is likely to change in the near future significantly and is likely to have a favourable impact on the enterprise and its operating results.
(iii) Market interest rate or the discount rate used for calculating the value in use has significantly decreased or likely to decrease significantly.
(iv) The carrying amount of the net assets for the reporting period of the business enterprise is less than its market capitalization that leads to the undervaluation of assets.

Internal Sources of Information—Internal Indicators

(i) There is a significant evidence about physical recovery of the damage recognized earlier or the incidences indicating obsolescence has reversed.
(ii) The manner and working conditions in which assets has been put to use have faced significant favourable changes or likely to have such change in the near future.
(iii) There is sufficient evidence about the improvement in the economic condition of the business enterprise or such improvement is likely to change in near future.
(iv) There is a plan to continue the operation of the assets beyond the original estimated time period.
(v) The cash flows associated with the operating of asset have increased significantly or likely to increase significantly in the near future.

These indicators are not exhaustive and there might exist many more reasons leading to such situation. Therefore, the recognition of reversal of impairment loss is the matter of accounting prudence and best managerial judgement.

Pieces of Evidence Available from Internal Reporting

(i) Cash flows for acquiring the assets are significantly lower as compared to similar estimate made preciously.
(ii) Net cash flow or operating profits likely to flow from the use of asset have significantly increased or likely to increase in near future.
(iii) Cost of capital applied for the asset has decreased significantly or likely to decrease significantly resulting into a decrease in the discount rate for calculating present value.
(iv) The expected residual value of the asset has increased as compared to an earlier estimate of the expected residual value and such change is likely to affect recoverable value of the asset.

Reversal of an Impairment Loss for an Individual Asset

Reversal of impairment loss relating to an individual asset is to be recognized as an income to be credited to profit and loss account for the year. However, the amount of impairment loss to be reversed to the extent of impairment loss recognized to revaluation reserve earlier should be credited to revaluation reserve. The sequence of reversal of impairment loss should be as explained here under

For the Assets That had not been Revalued Prior to Impairment

The total amount of impairment loss to be reversed should be credited to profit and loss account in the year in which such reversal is identified.

For the Assets That has been Revalued Prior to Impairment

(i) The amount equal to the amount of impairment loss written off to profit and loss account earlier should now be credited to profit and loss account in the current year.
(ii) The remaining amount of impairment loss, if any to be reversed after the adjustment (i) stated above should be credited to revaluation reserve account.

Reversal of Impairment Loss for Cash-Generating Unit (CGU)

Reversal of impairment loss relating to a CGU is to be reversed in the following order:

(i) First, to assets other than goodwill contained in CGU under consideration. The amount to be reversed is to be on pro-rata basis using carrying amount of such assets. The amount to be reversed shall not exceed the amount of impairment loss written off earlier.
(ii) Second, any surplus is to be allocated to goodwill forming the part of such CGU.

Reversal of Impairment Loss for Goodwill

The impairment loss recognized for goodwill should never be reversed in the subsequent period unless the following conditions are satisfied:

(i) The impairment loss recognized earlier was caused by an external factor, and effect of such factor is not likely to recur in future.
(ii) Certain more external factors have shown a favourable change that has significantly reversed the effect of earlier impairment in the goodwill.
(iii) AS-26 prohibits the recognition of internally generated goodwill, therefore, reversal of impairment of goodwill should not be considered unless it is supported by a favourable change in an external factor.
(iv) Provisions of AS-28 does not permit the reversal of impairment loss on account of improvement in the discount rate, net cash inflows or cash outflows relating to the CGU to which such goodwill relates.

EXAMPLE 15 A plant constructed at a cost of ₹ 30,00,000 in the year 2003 was considered for revaluation in the year 2006 and its net book value was enhanced by ₹ 2,50,000 resulting into revaluation reserve. In the year 2008, an impairment loss of ₹ 2,40,000 is recognized. How is such loss recognized in the books of accounts? Will your answer change if impairment loss is ₹ 2,80,000?

Solution (i) As the amount of impairment loss does not exceed the amount of revaluation reserve, total impairment loss of ₹ 2,40,000 is to be transferred to revaluation reserve account.

(ii) The impairment loss upto ₹ 2,50,000 is to be transferred to revaluation reserve account and surplus ₹ 30,000 to be expensed to profit and loss account.

CURRENT ASSETS

Assets held in cash form or likely to be converted into cash within a period of one accounting year—12 months or operating cycle are identified as current assets. These are the assets that come into existence on account of operating cycle of the business enterprise as well as keep the operating cycle moving. Operating cycle starts from the introduction of raw material and ends with the realization of cash from the sale of goods and services. For the purpose of measurement/valuation, the current assets are classified as **monetary current assets** and **non-monetary current assets**.

Monetary Current Assets

Current assets for which a pre-decided monetary amount is to be realized on the due date are called monetary current assets. *Example:* Debtors, accounts receivables, bills receivables, fixed deposits, advances are the prominent monetary current assets.

Recognition/Measurement of Monetary Current Assets

Monetary current assets, such as debtors or bills receivables should be recognized in the annual accounts at the net realizable amount. Like debtors should be recognized at the net realizable amount after adjusting bad debts, if any. Further to it, a provision for doubtful debts may also be created if business enterprise anticipates certain more bad debts and provision for discount on debtors likely to take place in the coming accounting years. The decision about the amount of provision for doubtful debts depends upon the past experience and industry practices.

(For details about recognition and valuation aspects, refer to Chapter 3 on Classification of Assets and Liabilities.)

Non-monetary Current Assets

Current asset for which amount to be recognized in future is subject to certain operating and financial activities and a definite monetary amount may not be realized.

Illustration Inventory (stock), short-term investment, marketable securities are the prominent non-monetary current assets.

Out of all the non-monetary current assets, inventory is the most prominent item covering a larger proportion of the total current assets. Inventory includes stock of the items, such as raw material, work-in-process, finished goods, spare parts, etc.

Recognition/Measurement of Inventory

The initial recognition of inventory items is to be done according to the provisions of accounting standard AS-2.

(For valuation of inventory as well as other aspects related to inventory, refer to Chapter 10 on Inventory.)

INVESTMENTS

Investments are represented by financial assets and investment property held by a business enterprise. Such investments are held not as a part of routine business activities; rather these are held to realize other income, such as interest, dividend and rental income. These are prominently classified as (i) financial assets and (ii) investment property.

As per international accounting standards, these are governed by the provisions of IAS-39, IAS- 40 and as per Indian GAAP, these are regulated by the provisions of AS-13 and AS-23.

(For recognition and valuation aspects, refer to Chapter 3 on Classification of Assets and Liabilities.)

KEY TERMS

Initial recognition	Subsequent recognition	Historical cost
Substituted cost	Revaluation of assets	Impairment of assets
Impairment loss	Reversal of impairment loss	Non-monetary consideration
Hire purchase	Assets held for sale	Internally generated goodwill
Cash-generating units	Goodwill	

FINAL RECAP

- **Capital expenditure** is the kind of expenditure that helps in acquiring a tangible or intangible item that is likely to generate utility over a ling time period beyond the current financial year.
- **Recognition** of property, plant and equipment—a fixed asset implies making a measurement of cost/value at which it has to be shown in the books of accounts.
- **Initial recognition** is the act of recognition of cost at the time of acquisition of fixed asset, or till the time asset becomes useable.
- **Construction costs** are the specific costs directly associated with the construction of property, plant and equipment—fixed asset.
- **Non-monetary consideration** is the consideration paid in the form of an asset/financial instrument other than cash.
- **Capitalization of cost** means adding a particular cost to the total cost of an asset.
- An asset the carrying cost of which is likely to get expensed on account of business use or obsolescence is called **depreciable asset**.
- **Foreign currency-denominated fixed assets** are the one that are purchased by making payment in a foreign currency.
- Income not relating to the core business activities is called **other income**.
- Purchase of an asset on **hire purchase** means making only down payment at the time of acquisition and rest is to be paid in installment. Upon the payment of last installment title is transferred.
- **Revaluation** always implies upward movement in the carrying amount, whereas **impairment** implies downward movement in the carrying amount.
- **Depreciation** results from business use of the asset, whereas **impairment loss** results from the decline in the recoverable amount of an asset below its carrying amount.
- **Historical cost** is the initially recognized cost, whereas substituted cost is the cost measured at the time of revaluation of the asset.
- **Residual value** is the value to be realized from the asset at the end of its useful life.
- **Depreciation** by straight line method can result into zero book value at the end by written down value method cannot result into zero book value.

- Most commonly used methods are **straight line method (SLM)** and **written down value (WDV) method.**
- IAS-16 provides for **prospective implementation** of change, if any in depreciation method but AS-6 requires **retrospective implementation** of change, if any in depreciation method.
- Assets abandoned permanently from use but not disposed immediately are to be disclosed as **assets held for sale**.
- **Internally generated goodwill,** such as brand equity, customer's loyalty, technical and professional skills of employees not protected through an agreement are not to be recognized as intangible assets.
- Although **research and development** are inseparable activities but for recognizing intangible assets these are separable.
- **Subsequent cost** resulting into enhancement of capacity/performance is to be **capitalized**.
- **Subsequent cost** incurred to maintain the capacity/performance is **not to be capitalized** rather expensed.
- In case of failure to estimate fair value of an asset it should be recognized subsequently at the cost only.
- **Amortization** is the process to spread cost of an asset over its useful life.
- Normally intangible assets other than goodwill should be amortized over a period not exceeding ten years and goodwill over a period not exceeding five years.
- An asset abandoned permanently from its use or disposed off should be **derecognized.**
- Lowering down of recoverable amount below the carrying amount of the asset results into **impairment loss**.
- A group of individual assets that cannot generate cash inflows independently are identified as **cash-generating unit (CGU).**
- **Recoverable amount** of an asset is higher of the 'net selling value' or 'value in use'.
- **Reversal of impairment loss** is like revaluation of an asset that had been impaired earlier.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Spares likely to be consumed over the useful life of a fixed asset are
   (a) To be capitalized (b) To be expensed (c) A subjective matter (d) None of these
2. Spares likely to be consumed for routine repairs and maintenance are
   (a) To be capitalized (b) To be expensed (c) A subjective matter (d) None of these
3. Safety equipment and environment protection tools do not generate any cash inflow, then these should be
   (a) Capitalized (b) Expensed (c) Recognized as deferred revenue expense
4. ₹ 50,000 was spent as routine administrative expenses and ₹ 45,000 as specially for the acquisition of a machine, the cost of machine acquired is ₹ 95,000. The machine is to be recognized initially at
   (a) ₹ 95,000 (b) ₹ 1,90,000 (c) ₹ 1,40,000 (d) ₹ 1,00,000
5. A plant was installed by paying ₹ 3,00,000 to a vendor. For this purpose, the company incurred pre-commissioning expenses of ₹ 75,000, of which 60% could have been avoided had this plant not been installed. The initially recognized value of plant is
   (a) ₹ 3,75,000 (b) ₹ 3,45,000 (c) ₹ 3,30,000 (d) ₹ 3,60,000
6. Land and development cost incurred by a company in constructing a project, which comprises certain land development expenses, is irrelevant even if such project is not commissioned. Then how should these be recognized?
   (a) It is to be capitalized. (b) It is to be expensed.
   (c) Either of these. (d) None of these.
7. A business enterprise obtaining fixed asset by the exchange of another fixed asset which has significant commercial substance should recognize the asset initial at
   (a) Fair value of asset given up (b) Replacement value
   (c) Carrying cost of asset given up (d) Fair value of asset acquired

8. A company running educational programs receives education set—an equipment at no cost from Government; under government grant it does not has active market value, it should be initially recognized at
   (a) Money spent by government (b) Active market value of similar item
   (c) Nominal value (d) None of these
9. According to AS-10, how foreign currency difference is accounted for
   (a) It is expensed (b) It is capitalized (c) Neither of these (d) Either of these
10. According to AS-16 how foreign currency difference is accounted for
   (a) It is expensed (b) It is capitalized (c) Neither of these (d) Either of these
11. How should the relocation cost incurred to safeguard the plant and machinery be recognized?
   (a) It is expensed (b) It is capitalized (c) Either of these (d) Neither of these
12. A company spends every year ₹ 2 crore for general skills enhancement of its employees and another ₹ 1 crore for specific skill enhancement with reference to a particular machine, how these should be recognized?
   (a) Both should be capitalized (b) Only ₹ 2 crore is to be capitalized.
   (c) Only ₹ 1 crore is to be capitalized. (d) Both are to be expensed.

Descriptive Questions

1. Write short notes on the following:
   (a) Pre-commissioning costs (b) Internally generated goodwill
   (c) Impairment of assets (d) Reversal of impairment loss
2. How is inventory valued as per AS-02? Discuss.
3. Explain the term ‘investment and investment property’. How is it recognized in the books of accounts?

Numerical Problems

1. The following facts have been extracted from the books of accounts of Rolta Enterprises Ltd (REL):
   The company acquired new plant and machinery costing ₹ 22,50,000 and spent ₹ 1,30,000 as carriage and ₹ 1,20,000 as installation charges to install it. To finance it company raised a loan of ₹ 17,00,000 on April 1, 2010 bearing a rate of interest 16% p.a. The plant and machinery was ready for commercial production on December 31, 2010. The loan was repaid on March 31, 2011 along with interest thereon. In the month of February 2011, ₹ 15,000 were spent for the routine inspection and ₹ 1,15,000 for annual maintenance contract (AMC) for 12 months.
   Show how these costs are to be recognized for the year ending March 31, 2011.
2. Zeta Ltd (ZL) has acquired a boiler on hire purchase scheme for this company paid ₹ 70,000 as down payment and rest of the amount is to be paid in 48 equal monthly installments of ₹ 10,000 each. The title to boiler will be transferred in the favour of ZL on the payment of last installment. The current cash price of this type of boiler is ₹ 4,20,000. The prevailing rate of interest for this industry is 18% per annum. Show how this boiler is to be recognized initially in the books of accounts.
3. On April 1, 2008 a machine was purchased for ₹ 170,000. Estimated useful life of machine is three years with an estimate of salvage value ₹ 17,000 at the end. If company provides depreciation as per straight line method then calculate the amount of depreciation for each of the three years.
4. On April 1, 2009 a transport company purchased ten truck tyres costing a total amount of ₹ 6,00,000 with an estimated total mileage from each of the tyre of 1,20,000 kilometres with a zero salvage value at the end. However, the company will spend ₹ 10,000 per tyre on repairs and maintenance after a running of 60,000 kilometres. During the year 2009–10 and 2010–11, each of the tyre was used for a total mileage of 28,000 and 30,000 kilometres, respectively. Show how depreciation and book value of the tyres is to be recognized in the annual accounts.

5. On April 1, 2007 a machine was purchased for ₹ 9,00,000. Estimated useful life of machine is six years with an estimate of zero salvage value at the end. Till the year 2008–09 depreciation was charged as per SLM and from the year 2009–10 the method of charging depreciation was changed to WDV method @ 20% per annum. Show how depreciation is to be showed in these years and how such change is to be effected as per AS-6 and IAS-16.
6. As on April 1, 2009 the carrying amount of ATM (automated teller machine) of a bank is ₹ 8,50,000. By considering internal and external indicators company recognizes impairment loss. The net sales value is assessed ₹ 5,25,000 and value in use is calculated as ₹ 6,80,000. Show how this ATM is to be impaired in the year 2009. What would be your answer if value in use of ATM is considered ₹ 4,20,000?
7. A plant constructed at a cost of ₹ 40,00,000 in the year 2003 was considered for revaluation in the year 2006 and its net book value was enhance by ₹ 4,10,000 resulting into revaluation reserve. In the year 2008, an impairment loss of ₹ 3,40,000 is recognized. How such loss is to be recognized in the books of accounts. Will your answer change if impairment loss is ₹ 4,80,000?

Answers

Multiple Choice Questions

1. (a), 2. (b), 3. (a), 4. (c), 5. (b), 6. (b), 7. (d), 8. (c), 9. (b), 10. (a), 11. (a), 12. (d)

Numerical Problems

1. ₹ 27,04,000 (22,50,000 + 1,30,000 + 1,20,000 + 2,04,000 interest is to be capitalized; rest is to be expensed).
2. ₹ 4,20,000
3. Depreciation ₹ 51,000 pa
4. Per kilometre depreciation on each tyre is ₹ 0.50 and the repairs and maintenance cost is to be expensed.
5. Opening books value in 2009–10 after change as per AS-6 ₹ 5,76,000 and as per IAS-16 ₹ 6,00,000.
6. Impairment loss ₹ 1,70,000 and ₹ 3,25,000
7. Impairment loss transferred to revaluation reserve ₹ 3,40,000; in second case, loss exceeding ₹ 4,10,000 is to be transferred to profit and loss account.

CASE

Recognition and Measurement of Assets

The balance sheet of Kismat Kytes Ltd comprises the following details:

Balance Sheet as on March 31, 2010

Liabilities		Amount (₹)	Assets		Amount (₹)
Capital	2,10,000		Plant		1,80,000
Add : Net profit	1,06,512		Building	1,00,00	
		3,16,512	Less : Provision		
			For depreciation	10,000	90,000
Revaluation Reserve for furniture		12,000	Furniture		40,000
Revaluation Reserve for plant		28,000	Goodwill		

(*Contd.*)

(*Contd.*)

Sundry creditors	10,000	Cash		16,000
Outstanding wages	2,000	*Stock*		
Unearned commission	500	Raw material		3,500
		Work-in-process		6,000
		Finished goods		4,000
		Pre-paid salary		1,000
		Sundry Debtors	30,000	
		Less : Provision for doubtful debts	1,200	
		Less : Provision for discount	288	
				28,512
	3,69,012			3,69,012

During the accounting year 2010–11, the following information has been extracted from the books of accounts and other documents

(i) External factors indicate that the value in use of plant is ₹ 1,17,000 and net sales value is ₹ 1,24,000.

(ii) A change in external factors indicates that the net recoverable value is ₹ 1,40,000. In the previous years, an impairment loss amounting to ₹ 80,000 had been recognized out of which ₹ 35,000 was debited to profit and loss account.

(iii) Goodwill is considered to be discarded as it is not likely to have any future economic benefits.

(iv) Market value of finished stock is ₹ 3,750.

(v) Out of net debtors ₹ 100 is confirmed bad debts.

Discussion Question

Carry the effect of the information on different items of asset and elaborate how these are to be recognized in the annual accounts.

The McGraw-Hill Companies

CHAPTER

12

Accounting for Liabilities

Learning Objectives

After reading this chapter, you will be able to

- Learn about recognition and measurement of financial liabilities
- Familiarize yourself with recognition, measurement and use of provisions
- Know the concept of contingent liabilities
- Have an idea about post-retirement employee benefits

Recognition of Post-Retirement Employee Benefits

In the year 2009–10, IMS Ltd introduced a post-retirement employee benefit plan—defined benefit plan. Financial accountant estimated obligation at the end of 10 years from now at ₹ 90 lakhs. The accountant instructs its subordinates to provide for ₹ 9 lakhs in each of the years to have ₹ 90 lakh sat the end of tenth year from now. While assessing the annual accounts for income tax assessment, the assessing officer disapproved of the provision of ₹ 9 lakhs for defined benefit plan as worked out by the financial accountant.

The assessing officer was of the opinion that the provision for this liability should be made with the help of actuarial method and time value of money. To verify the comment of assessing officer, the financial accountant reviewed Indian GAAP and reached at the conclusion to provide for the post-retirement employee benefits as per the provisions of accounting standard AS-15.

WHAT ARE LIABILITIES?

Liabilities are the sources through which assets of a business enterprise are financed. Liabilities come into existence by the enforcement of a law or when a contract requires the settlement of definite obligation to pay in future. Payment of direct tax, indirect tax, definite benefit plans for employees, legal compensation and penalties originate from the **enforcement of law**, whereas raising of funds by the issue of debentures, shares of a loan from a bank creates an obligation to pay a fix monetary amount in future are the example of **contractual obligation** resulting into a liability. Different liabilities have been discussed in Chapter 3. The brief introduction of these is given below.

Different liability items are primarily classified as current liabilities and non-current liabilities. **Current liabilities** are such liabilities that are to be paid off within one year from the date of balance sheet. These are sundry creditors, bills/accounts payables, outstanding expenses, unearned income, tax and dividend payables and certain items of non-current liabilities that are to be settled within a period of 12 months from the date of balance sheet. The common practice of presentation in the balance sheet is to display different provisions along with the current liabilities. **Provisions** are liabilities about to payment of an expense or to cover a loss that might take place in future the timing and amount of such expense/loss is not certain. Provisions for doubtful debts, provisions for repairs and renewal, etc. are created by debiting profit and loss account.

Rest of the liability items included in the balance sheet is identified as **non-current liabilities**. These are the liabilities that need to be settled beyond a period of 12 months from the date of balance sheet. These are also called **long-term liabilities**. Secured and unsecured loan, long-term mortgage loans are **external long-term liabilities**, whereas owners' funds—equity share capital, preference share capital, reserve and surplus called **retained earnings** are **internal long-term liabilities**. Internal long-term liabilities are also called **owner's funds** or **shareholders' net worth**.

> Owners' funds—equity share capital, preference share capital, reserve and surplus called **retained earnings** are **internal long-term liabilities.**

The current and non-current liabilities as discussed are disclosed in the balance sheet and monetary obligation about these is almost certain; whereas there are certain liabilities the obligation to pay for these is subject to the outcome of a future event, such as decision of a competent court or government order. As the obligation to pay is contingent upon the outcome of some future event, therefore, these are called **contingent liabilities**.

The provisions of accounting standards regarding presentation of financial statements provide that only the liabilities about which obligation to pay is certain and not contingent should be disclosed in the balance sheet. Therefore, *contingent liabilities are not presented in the balance sheet* but disclosed outside the balance sheet as foot note to balance sheet.

ILLUSTRATION Deepak Fertilizers and Pesticides Ltd paid corporate tax of ₹ 30 crore for the year 2009–10. The assessing authority challenged the tax calculation of the company and estimated the same for ₹ 43 crore, stating, thereby the short tax payment of ₹ 13 crore by the company. The company challenged the decision of assessing authority in the direct tax tribunal, if case is settled against the company then it will result into the payment of a tax liability of ₹ 13 crore apartfrom the earlier paid tax of ₹ 30 crore. This payment of ₹ 13 crore as additional tax is contingent subject to the decision of tribunal hence to be recognized as a contingent liability and reported outside the balance sheet.

FINANCIAL LIABILITY VS EQUITY INSTRUMENT

Financial liability is a contractual obligation to settle in cash that might result into the settlement of obligation in cash subject to definite unfavourable conditions likely to prevail in future. A financial liability is

(i) to be settled in cash or by the exchange of shares of own equity.

(ii) is non-derivative contract/instrument that is not required to be settled in cash but by the exchange of its own equity shares.

(iii) a derivative contract that is to be settled by the exchange of entity's own equity and not in cash, i.e., convertible debt instrument.

Equity instrument is any contract that evidences a residual interest in the assets of the business entity. An equity instrument includes the following:

(i) A non-contractual obligation on issuer to pay fixed cash or exchange its assets to another party holding the instrument.

(ii) A non-derivative obligation on issuer without any contractual obligation to exchange its own equity shares to settle the obligation.

(iii) A derivative contract that is settled by exchanging cash for the equity shares of the issuing entity such as equity options.

INITIAL RECOGNITION AND MEASUREMENT OF FINANCIAL LIABILITIES

A liability is to be recognized in the annual accounts only when the obligation to pay for such liability exists on the date of balance sheet. The obligation to pay might arise on account of a business transaction, enforcement of law or when the business enterprise is a party to a contract resulting into an obligation to pay.

Initial measurement of a liability should be done at the historical cost. The **historical cost** might be the value of consideration received for which obligation is to be settled by making a payment in future. In case the precise monetary value to be paid to settle the liability is not known then it is the **fair value** at which liability is to be measured initially.

Present value of future liabilities is called **fair value**.

Fair value of liability is the amount for which a liability can be settled between knowledgeable parties in an arm's length transaction.

IAS-39 specifies that all the financial liabilities should be recorded at historical cost or fair value of the consideration received for which liability originates, to this different transactions costs incurred in acquiring the asset/benefits for which this obligation to pay has originated are added.

ILLUSTRATIONS

1. Citcor Ltd (CL) purchased a machinery from XLO Ltd (XL) at a cash price of machine ₹ 15,00,000 for which payment is to be made after one month. XL also paid transportation cost ₹ 5,000 and installation charges ₹ 15,000 to be recovered from CL. Here CL should record the liability at ₹ 15,20,000 as the historical cost of the asset including transaction costs 20,000 to be paid along with the cash price of machinery.
2. Ding Dong Ltd (DDL) purchased an old building from Big Bang Ltd (BBL). There is no proper market for such type of building; however, certain government agencies have declared the value of such building as ₹ 70 lakhs. DDL and BBL agree for the deal at ₹ 65 lakhs to be paid by DDL at the end of one year without any interest; however, building is to be occupied by DDL right on the date of transaction. The cost of capital of DDL is 12% per annum.

Now if we consider that such payment terms are the part of normal industry practices, then DDL should record the liability at ₹ 65 lakhs, which is the historical cost of the transaction. On the contrary, if this payment term is unusual, then DDL should recognize the liability at its fair value. The fair value in this case will be the present value of ₹ 65 lakh calculated at a discount rate of 12% p.a. the present value will be ₹ 58.04 lakh and remaining ₹ 6.95 lakh to be recognized as interest payment @ 12 % p.a. for one year.

SUBSEQUENT MEASUREMENT OF FINANCIAL LIABILITIES

The normal convention is to carry out subsequent measurement of liabilities also at the historical cost or to continue to measure it at the initially measured value. However, IAS-39 provides that the financial liabilities should be measured subsequently at the amortized cost using effective interest rate method. Whereas, the measurement at amortized cost using effective rate is *not to be applied* in the following cases:

- Financial liabilities at fair value through profit and loss
- Derivatives liabilities that are quoted in the market
- Financial guarantee contracts for which subsequent measurement is done in accordance with IAS-37 and AS-29
- Commitment to provide a loan that is governed in accordance with IAS-37
- Repurchase obligation

Liabilities for which a fixed monetary claim is to be paid are called **monetary liabilities**.

Common Practice

Different financial liabilities are recognized as

- Financial liabilities 'held for trading'—'at fair value through profit or loss'
- Monetary financial liabilities—not classified 'at fair value through profit or loss'

The common practice is to show all the financial liabilities at the monetary value, i.e., the contractual amount to be paid to discharge the liability. However, financial liabilities held for trading are the derivative instruments. These are measured by using the method of **amortization using effective interest rate**.

Amortization is the process to spread a particular cost/ asset over its useful life.

(This method of amortization has also been discussed in Chapter 3.)

Liabilities, such as **retirement benefits** are affected by the changing interest rate scenario, these are valued at the discounted value of the expected monetary benefits payable on maturity. The discounted value is the present value of the estimated retirement benefits to be paid in monetary terms to discharge the liability on due date. The present value of such liabilities is calculated by considering the appropriate discount rate.

EXAMPLE 1 DXL Ltd issued 10% bonds of face value ₹ 50,000 on April 1, 2006 at a market price of ₹ 46,960. DXL Ltd categorized these bonds to be 'held-till-maturity'. Show how the difference between maturity value of ₹ 50,000 and the issue price will be amortized over the holding period.

SOLUTION First, we need to work out internal rate of return (IRR) using issue price and the redemption value. IRR is such discount rate at which present value of cash inflow is equal to the present value of outflow. Here inflow for the company is ₹ 46,960 and outflow is ₹ 5,000 in every year for four years and in addition, ₹ 50,000 as the redemption amount in fourth year. The mechanism to calculate IRR is as follows:

$$46{,}960 = 5{,}000/(1 + r)^1 + 5{,}000/(1 + r)^2 + 5{,}000/(1 + r)^3 + 55{,}000/(1 + r)^4$$

(i) By making trial @ 10% the present value of outflow is = ₹ 49,995
(ii) By making trial @ 12% the present value of outflow is = ₹ 46,960
Therefore, IRR is 12% that can be considered as effective rate of interest.
The difference between the issue price of ₹ 46,960 and the maturity value of ₹ 50,000 is the discount and to be amortized to profit and loss account by the following effective interest rate method of amortization. The discount to be amortized over the holding period of four years will be as follows:

Year	Year Opening Carrying Amount (₹)	Interest @ 12% on Opening Carrying Amount	Discount to be Amortized	Year End Carrying Amount (₹)
2006–07	46,960	5,635	635[1]	47,610
2007–08	47,610	5,714	714	48,300
2008–09	48,300	5,796	796	49,115
2009–10	49,115	5,895	895	50,000
			3,040	

Note: Year end carrying amount is the present value of interest to be paid in coming years and P.V. of maturity value.

Total discount to be amortized over the holding period of four years is ₹ 3,040 the difference of interest received from the company and the amount of interest calculated on the opening carrying amount using effective interest rate of 12%.

Presentation in balance sheet

Here bonds are to be shown in the liability side at ₹ 50,000 from first till fourth year. The discount on issue of bonds ₹ 3,040 to be amortized over the period of four years is as shown in the table above.

Year	Carrying Amount of Bond (₹)	Discount to be shown in the Balance Sheet	Discount to be Amortized	Net Liability(₹)
2006–07	50,000	2,405 (3,040 − 635)	635	47,955 (50,000 − 2,405)
2007–08	50,000	1,691 (2,045 − 714)	714	48,309(50,000 − 1,691)
2008–09	50,000	895(1,691 − 796)	796	49,105(50,000 − 895)
2009–10	50,000	nil	895	50,000
			3,040	

The above table shows that gradually year after year, the discount on issue of debentures is to be written off; by doing so every year effective value of the liability (bonds) will rise to ₹ 50,000 by the end of fourth year.

DERECOGNITION OF FINANCIAL LIABILITIES

Derecognition

Financial liabilities should be derecognized, i.e., eliminated from the balance sheet only when these have been paid off, discharged or obligation to pay does not exist any more.

[1]Difference between the interest amount to be paid by the company, i.e., ₹ 5,000 and interest calculated @12% on the opening carrying amount of the bonds.

ILLUSTRATIONS 1. On April 1, 2009 balance sheet showed bonds of face value ₹ 1,00,000 to be redeemed at par in January 2010. The company redeemed the bonds on due date; therefore, on March 31, 2010 there is no liability with respect to the bond payable; hence, on March 31, 2010 bonds are to be derecognized as a liability.

2. On April 1, 2009 balance sheet showed a liability for derivative contract of ₹ 34,000 the derivative contract expired in July 2009 as the derivative contract expired without being exercised by the holder. Now this liability is not to be disclosed in the balance for the year 2009–10 as there is no more obligation to pay for it.

Gain or Loss upon Derecognition

When the amount paid to discharge an existing liability is different from the carrying amount of such liability it results into a profit or loss upon derecogniton. Such profit or loss is to be transferred to profit and loss account, except for the liability of hedging nature.

EXAMPLE 2 The balance sheet of DXI Ltd for the year 2009–10 disclosed ₹ 5,60,000 as liability for derivative contract expiring in next six months from the date of balance sheet. In the next financial year, i.e., 2010–11 the liability for the derivative contract was discharged at ₹ 5,45,000. Show how this is to be recognized in the books of accounts.

SOLUTION In the balance sheet for the year 2009–10, the liability is to be disclosed at ₹ 5,60,000. In the year 2010–11, the actual payment of ₹ 5,45,000 is to be debited to liability and the surplus ₹ 15,000 is to be credited to profit and loss account as excess provision written back.

PROVISIONS—INTRODUCTION, INITIAL RECOGNITION AND MEASUREMENT

Provisions are the items relating to a known item of liability that may arise in future depending upon certain circumstances. The timing and amount of this as a liability is more uncertain as compared to the timing and amount of liabilities. *Illustration* Provision for repairs and renewals of machinery, provision for tax, provision for dividend, etc. are the items for which timing and amount of liability can not be assessed with precision; hence, these are provided in the balance sheet by using an expert opinion or an estimate depending upon the past experience of business enterprises.

> Few of the provisions are shown separately under the broad heading of current liability, such as provision for tax, provision for dividend.

Initial Recognition

According to IAS-37 and AS-29, a provision is to be recognized on balance sheet date only when the following conditions are met:

- The enterprise has a present obligation on account of a past event.
- It is most likely that an outflow of monetary resources will be required to settle the obligation.
- A reliable estimate of such obligation can be made.

These provisions imply that the provision is made for such liabilities that are not the liabilities on the date of balance sheet but it is most likely and not contingent that a past event will generate an obligation to pay in future.

Indicators—Initial Recognition

To make a provision for a particular liability, the following should be considered:

Present obligation When present obligation is recognized as a result of a past event, such obligation is not contingent upon the result of certain future outcome but it is most likely, the only fact is that the exact timing and exact amount is not know. Therefore, a provision is to be recognized on the date of balance sheet.

An **obligating event** is such past event that is likely to have monetary obligation in future.

Past event The event—activity, agreement or contract that has been executed in the past and is not related to future business operation is called **obligating event** resulting into present obligation. To provide for such obligation, provision is made. However, to recognize provision the event ought to have taken place by the date of balance sheet, no provision is to be made for the event that is likely to take place in future.

ILLUSTRATIONS

1. Employment agreement of a company with its employees provides for the payment of gratuity and retirement benefits. Here, the employment agreement is the **past event** but the amount of gratuity payment and retirement benefits is not know with precision at the same time exact timing for payment is also not know. The only known fact is that it has to be paid in future—an **obligation**. Therefore, accounting standards provide that the company should make a provision for these.
2. Company makes a provision for discount to be allowed to customers as it has sold the goods on credit with one of the condition for customer to avail discount if payment is made by them in rebate period. Similarly, depending upon the past experience, a business enterprise makes a provision for doubtful debts.
3. A company takes a coal mine on lease, on of the provisions of the lease agreement is that the company is most likely to pay mine clean up charges to mine owner at the end when lease agreement is terminated. The payment of these charges in not provided in the agreement but the prevailing law and business practices provide for such payment. Here the company should make provision for termination cleanup charges to be paid.

Probable Outflow

It is estimated that the probability of monetary outflow is more as compared to the probability of no monetary outflow. Hence provision is to be recognized in the balance sheet.

Reliable Estimation

For a provision to be recognized as a liability in the balance sheet, a reliable estimate of liability is necessary; therefore, the amount of provision to be created for a probable and most likely liability a reliable estimate is to be made while making provision.

Initial Measurement

An item of provision once recognized is to be maintained at the appropriate monetary value by using best estimate about such probable liability. Therefore, the provision should be based on the best possible estimate on the reporting date about the claim or expenditure to be settled on a future date. The best estimate implies the amount to be settled by negotiation or enforcement of laws as it ought to have been settled under normal course of business activities under the operating conditions of the industry.

Example 3 The manufacturer of automatic gear scooters gives a warranty of three years on every scooter for the repair or replacement of the scooters that fail to perform as per the specification. The past experience reveals that on an average 7% of the scooters require repair costing ₹ 4,000 each and another 3% require replacement costing ₹ 7,000 each. During the year 2009–10, the company sold 26,000 scooters. Show how provision is to be recognized in the annual accounts.

Solution As per the provisions of warranty 7% of 26,000, i.e., 1,820 scooters might need repairs costing ₹ 4,000 each and another 3% of 26,000, i.e., 780 scooters might need replacement costing ₹ 7,000 each. Therefore, provisioning requirement is ₹ 1,27,40,000 as 'provision for repairs/replacement warranties' to be debited to profit and loss account for the year 2009–10 and same is to be disclosed as provision in the balance sheet for the year 2009–10.

> Provision for bad debts is created by using past estimates about bad debts.

PROVISIONS—SUBSEQUENT MEASUREMENT AND USE

Subsequent Measurement

Provisions are to be reviewed at the end of every financial year. The purpose of such review is to have adequate coverage for the payment of probable liability most likely to take place in future. Provisions should be measured as follows:

- If there is sufficient evidence that a particular provision is no more required then the existing provision is to be reversed by crediting profit and loss account.
- If there is sufficient evidence that the existing provision is not sufficient to provide full coverage to most likely liability to be settled in future than the amount of provision is to be increase by debiting profit and loss account.

> Amount not likely to be used out of the existing provision is to be transferred to profit and loss account.

Use of Provision

A provision is to be used to provide for the liability or expenditure for which it has been created and not for any other liability or expenditure. Using a particular provision for some other liability or expenditure will result in concealing the material facts.

Example 4 Continuing with Example 3. If in case the each scooter can raise only one claim during the period of three year. During the year 2010–11, 350 scooters were repaired at a cost of ₹ 2,700 each and another 150 were replaced at a cost of ₹ 6,200 each. Show how subsequent measurement of these provisions should be made in the year 2010–11.

Solution The existing provision for the repair of 350 scooters is ₹ 14,00,000 (350 × 4,000) and provision for the replacement of 150 scooters is ₹ 10,50,000 (150 × 7,000). Both of these amounts are included in the provision for repairs/replacement for warranties created in the year 2009–10. Out of this, ₹ 18,75,000 (350 × 2,700 + 150 × 6,200) has been used; therefore, the unused amount ₹ 5,75,000 (14,00,000 + 10,50,000 – 18,75,000) on account of these is to be written back to profit and loss account for the reporting period 2010–11. The carrying amount of provision for the reporting year 2010–11 will be ₹ 1,02,90,000.

SPECIAL ISSUES ABOUT PROVISIONS

Reimbursement

Certain provisions for expense or liability may be subject to recovery of loss or reimbursement by another party, such as an insurance agency or government. An insurance company will indemnify the company for the actual loss on account of environment clean-up charge when covered through the comprehensive insurance policy. Such reimbursement is to be recognized as an asset only when it is certain to receive the claim from insurance company.

Illustration A transport company takes a comprehensive policy for its transport vehicles covering for the damage of vehicles and reimbursement of compensation to be paid to third party by the company subject to the incidence of an accident. The past experience of the company reveals that not all the expenses/compensations are reimbursed by the insurance company. Therefore, the company makes a provision for accident compensation every year.

Here provision made every year is to be shown as a liability. If some accident takes place the compensation paid to third party and expenses to repair damaged vehicles are to be debited to provision account. The amount of claim admitted by the insurance company is to be recognized as an asset in the balance sheet only when company is sure to receive the claim.

Accounting Effect

The accounting effect when reimbursement is to be received is elaborated below.

(i) Amount of reimbursement is to be recognized as an asset only when the company is sure to get the reimbursement from an external agency, such as insurance company/government.

(ii) The provision to be debited to profit and loss account should be net of reimbursement.

(iii) The actual loss to be adjusted to provision account should be net of reimbursement.

(iv) Balance of provision after the adjustment of loss net of reimbursement, if not required any more is to be credited to profit and loss account.

Risk and Uncertainties

Timing and amount of liability relating to provision is subject to risk and uncertainty. Therefore, initial and subsequent measurement of provisions is to be done by considering the element creating risk and uncertainties. Risk adjustment may either increase or decrease the amount at which a particular liability is measured. Therefore, a timely judgement is required while making provision. The purpose is to make a fair estimation of profit and loss for the year and not to have either overstatement or understatement of assets/liabilities in the balance sheet. However*, a deliberate overstatement of provision is to be avoided.*

Future Operating Losses

Future operating losses do not fall in the ambit of provisions; therefore, no provision is to be made for future operating losses. Similarly, none of the provision is to be revised in view of the future operating losses. The apparent logic is that these losses are subject to the happening of certain future event and not as a result of past event, i.e., obligating event. When an estimate about future event is likely to result into the change in the carrying amount of asses then it should be provided as per the **provisions of AS-28 dealing with the *impairment of assets.***

In none of the cases, future gains to be considered to readjust the amount of provision.

Time Value of Money and Provisions—Discounting Provisions

When an expenditure concerning a particular provision is likely to be paid in distant future, i.e., after a long time period such provision is to be disclosed in the annual account at the present value of the expected amount of liability. The accounting prudence and provisions of **IAS-37** require that the discount rate for the calculation of present value should be either (i) cost of capital, or (ii) opportunity of cost of capital, or (iii) best estimate about the prevailing rate of interest for such liability.

By following this principle provision for asset retirement obligation (ARO) is provided at the present value of such obligation.

Incomplete Construction Contracts

These are the contracts that do not get completed during the current financial year and might be completed in future. The provisions of accounting standards provide for provision for such incomplete contracts. The provision is governed by the rules provided under **AS-7**.

Executory vs Onerous Contracts

Executory contracts are the contracts in which penalty for default is equal for both the parties. The executory contract becomes **onerous** when the cost to complete the contract is more as compared to the economic benefits to be realized from the completion of contract. *The provisions of AS-7 do not cover the provision for onerous contracts but international accounting standards permit the provision for loss on account of onerous contracts*.

Recap 1

So far, we have discussed the following topics:

- Initial Recognition and Measurement of Financial Liabilities
- Subsequent Measurement of Financial Liabilities
- Derecognition of Financial Liabilities
- Provisions—Introduction , Initial Recognition and Measurement
- Provisions—Subsequent Measurement and Use
- Special Issues About Provisions

Self-assessment

1. Explain the concept of financial liabilities.
2. How are provisions recognized and measured?

The following topics will be delved into next:

Restructuring
- Disclosure
- Contingent Liability
- Post-Retirement Employee Benefits—Measurement of Liability —Accounting Standard AS-15
- Recognition and Measurement of Liability – Post-Retirement Employee Benefits
- Comparison Between IAS -37 and AS-29

RESTRUCTURING

Restructuring implies making an alteration, modification, discontinuation or relocation of business operations. According to the provisions of **AS-29**, the following activities are classified as **restructuring**:

- Sale or termination of a strategic business unit, i.e., a line of business.
- Closure or relocation of business operation.
- Change in management structure resulting into re-organization most likely to have an impact on the operations of the business enterprise.

Restructuring Provision

The provision for restructuring cost is to be made only when it meet the criterion of recognition of provision as explained earlier are met, otherwise provision is not to be made. Such restructuring provision should be made by considering the following:

- Direct expenditures arising from the restructuring activities.
- Routine expenditures not related to restructuring activities need not be covered.

USEFUL INFO

Costs not to be Covered In Provision for Restructuring:
The following are not the part of restructuring exercise, therefore, not to be considered while making provision for restructuring:
(i) Retraining or relocation cost
(ii) Marketing
(iii) Investment in new system as a result of closure or relocation
(iv) Operating expenses relating to future course of business activities not related to restructuring activities
(v) Identifiable future losses

DISCLOSURE

Notes to accounts forming the part of balance sheet should disclose the following about each provision separately:

- Opening carrying amount, and closing carrying amount.
- Addition to provision during the year.
- Use of provision in meeting liability for which it is intended.
- Unused amount reversed to profit and loss account.
- Provision for restructuring should be disclosed separately.
- If certain provisions have been altered (increased or decreased) by considering risks and uncertainties then this should be disclosed properly.

The purpose of such disclosure is to have true and fair presentation of annual accounts.

CONTINGENT LIABILITY

Contingent liability is a probable obligation to pay resulting from some events/transactions of the past the outcome of which is dependent on the happening of one or more future events.

Illustration Payment of compensation to a supplier or customer who has filled a case in the court against the business enterprise. Neither the timing nor the amount of this obligation can be assessed precisely it completely depends upon the judgement of court; therefore, it is a contingent liability on the balance sheet date.

Such liabilities are not shown in the balance sheet but shown out side the balance sheet while making disclosure to final accounts.

Provision for Contingent Liability

Provision for contingent liability is to be recognized in the annual accounts only when it is probable, i.e., most likely that an obligation will arise depending upon a future outcome, such as decision of a lawsuit, court case or enforcement of a new law. The provision is to be made only when

- the outflow of resources embodying economic benefits is most likely
- contingent liability may develop and at present it meet the criterion set for the recognition of provision under IAS-37 and AS-29.

Contingent liabilities are not disclosed in the balance sheet but provision for such liabilities is disclosed.

Contingent Liabilities and Annual Accounts

Contingent liabilities should not be disclosed in the balance sheet but as a foot note to balance sheet by giving sufficient details. However, provision for contingent liability recognized and measured as per the provisions of accounting standards is to be included in the balance sheet.

Example 5 XY bank gives guarantee in the favour of MM bank for loan taken by MM of ₹ 20 lakh. As on 2007–08 the financial position of MM is sound and there is not internal or external indicator indicating default by MM. During the year 2008–09, MM suffered heavy loss on account of sub-prime crisis and it has applied to court for bankruptcy the matter is under consideration of court by the end of 2008–09. The management of XY foresees that it is probable that MM will default in paying off about 30% of its liabilities. Show how this is to be recognized in the books of XY bank.

Solution Here XY bank is the guarantor for the loan taken by MM bank. As on 2007–08 the financial position of MM is strong. Therefore, there is no probability of XY will be required to meet the guarantee; hence, there is no requirement for the provision as on 2007–08. As on 2008–09, it is most likely that XY will be required to pay ₹ 6 lakh (30% of 20 lakh). Therefore, XY should make a provision for contingent liability in its books of accounts in this year.

POST-RETIREMENT EMPLOYEE BENEFITS—MEASUREMENT OF LIABILITY—ACCOUNTING STANDARD AS-15

Post-retirement benefits, also known as **post-employment benefit plan**, are the one in which the employer has the obligation to provide benefits to its employee once they have left the job or retired from the service of the employer. These are provided either on account of contractual obligation, or enforcement of law, or as a matter of social obligation business enterprises provide post-retirement benefits to their employees these might be

- Gratuity, leave encashment and pension.
- Post-employment medical expenses of retired employees, post-employment insurance facilities.

Arrangement for these benefits is to be recognized whether an external agency is involved or not involved for the payment of such benefits to employees. These plans are also called post-employment employee benefits plans**.**

Post-employment employee benefit plans are sometimes made mandatory by the execution of law/statute.

Classification of Post-retirement Employee Benefit Plans

Post-retirement employee benefit plans are classified into the following categories:

- Defined contribution plans
- Defined benefit plans
- Multiple employer plans
- State plans
- Termination benefits plans
- Insured benefits plan

Defined Contribution Plans

Defined contribution plans are the one in which the employer has the obligation to make a fixed contribution to an external agency or entity for making the payment of post-retirement benefits to its employees. The business enterprise has the obligation to pay a fixed contribution irrespective of the fact whether such external agency has sufficient corpus to pay for the post-retirement benefits or not. This implies that the actuarial risk and investment risk fall on employees, such as pension plan fund or contributory provident fund—in this, the employer has the obligation to make a fixed percentage of the salary (basic pay plus dearness allowance) towards provident fund account. Both the employee and the employer are required to contribute the amount to this fund account either maintained with some government agency or private agency. On attaining superannuation, the employee receives the benefit from the agency with whom the fund is maintained without any recourse to the employer.

After providing for this contribution, the employer has no obligation to make any more contribution for providing these benefits at the time of retirement of employee. Therefore, there is no requirement for making provision for any liability in the balance sheet.

Defined Benefit Plans

Defined benefit plans are the one in which the business enterprise (employer) has the obligation to provide a defined benefit to its employees when they happen to leave the job or attain the age of superannuation. These are the plans in which the obligation to pay the retirement benefit is definite but the amount of benefit of such benefits depend upon certain future outcome.

Here the actuarial risk and investment risk fall on the employer so as to provide sufficient coverage for the payment of defined benefit plan.

ILLUSTRATION Payment of **gratuity** is definite but the amount of gratuity depends upon the pay of employee at the time of retirement. Here calculation of accurate amount of gratuity to be paid can not be assessed precisely. The provision for this is made on estimated basis so that the accumulated amount is sufficient for the payment of gratuity to employees.

The estimation of amount to be contributed for gratuity can be made with the help of actuarial valuation method. Under **actuarial valuation method**, the life expectancy of employees and the rate of escalation of future claim are used to estimate future amount of liability. This future amount of liability is discounted at the prevailing rate of interest to find out the amount to be provided every year as provision of gratuity. The amount so provided every year is shown as liability in the balance sheet.

Multiple Employer Plans

These plans are either defined contribution plans or defined benefit plans for which more than one entity makes a contribution to the pool of assets under common control and supervision. The assets (monetary contribution) so pooled are to be used to provide the post-employment benefits to the employees of more than one entity. The amount of benefit to be paid is not affect by the entity to which an employee belongs rather it is based on certain other factors, such as pay scale, age and risk factors.

State Plans

State plans are like multi-employer plans, except the difference that these are managed and controlled by either national/state government or an agency of these governments. The employer has the obligation to pay the contribution at the defined rate, such as in case of defined contribution plan. The payment of post-retirement benefits is the obligation of the agency maintaining the fund/corpus, such as **statutory provident fund**.

Termination Benefits Plans

Terminal benefits to employees are payable only when

(a) the business enterprise decides to terminate the services of an employee before the pre-decided retirement age or contractual employment period.

(b) the employee is offered and accepts voluntary retirement scheme.

> **Voluntary retirement plan** is a special type of post-retirement employee benefit plan coming into existence very recently.

Insured Benefits Plans

These are the plans in which an employer contributes a defined amount as insurance premium to an external agency, i.e., insurance company. In these plans, the employer has the obligation to contribute a defined amount for the post-employment benefits to be paid to its employees. Usually, the insurance agency has the obligation to meet the obligation of defined benefits. These plans may be

(i) Once the business enterprise has contributed to insured benefits plan then it has no obligation to contribute in the defined benefits to be paid to its employees. Such plan is like **defined contribution plans** and to be measured accordingly.

(ii) The business enterprise has no obligation to participate in the payment of post-employment benefits to its employees if the insurer does not pay all future employee benefits. Such plans are like **defined benefits plans** and to be measured accordingly.

> **Group gratuity plans** of insurance companies are the example of insured benefit plans.

RECOGNITION AND MEASUREMENT OF LIABILITY— POST-RETIREMENT EMPLOYEE BENEFITS

Defined Contribution Plans

When an employee has rendered the service and salary including the contribution to post-retirement employee benefits has become due then as per the provisions of accounting standard AS-15 it should be recognized as follows:

(i) The amount relevant for the current accounting year should be expensed as a part of salary or employee costs.

(ii) The amount due but not paid is to be shown as outstanding expense in the balance sheet.

(iii) The amount paid in advance for the next accounting period should be recognized as pre-paid expenses to be shown as current asset on the reporting date.

The accounting entry for the employer's contribution to provident/pension fund scheme

Entry when salary bill is raised

Salary a/c Dr. (with the amount of employer's share in provident fund)
To Employee Provident Fund or Pension Plan Fund a/c

When this share is deposited with provident fund agency

Employee Provident Funds or Pension Plan Fund a/c Dr.
To Bank a/c

If the contribution to a plan does not fall due within 12 months from the date of balance sheet then such obligation to pay should be recognized after considering the time value of money.

Defined Benefits Plans

Defined benefits plans are classified as

- Unfunded
- Wholly or partly unfunded

Unfunded plans are the one in which the employer or his/her employees are not required to participate in funding the benefits to be received in future. An example of unfunded plan is state or national pension plan in which the employee or employer is not required to make the contribution.

Wholly or partly unfunded plans are the one in which either the employer or employee contributes to the fund or corpus through which post-retirement benefits are to be paid. Such fund may be legally separate from the reporting enterprise or managed by the enterprise itself. Under these plans, the actuarial risk and investment risk fall on the employer as well. In case the corpus of the funds managed falls short in meeting the obligation to pay for post-employment benefits then the employer is required to contribute more amount apart from the contribution made in past.

Recognition and Measurement

Recognition and **measurement** for these plans in the annual accounts on the reporting date is complex as compared to defined contribution plans. The recognition and measurement is subject to actuarial risk and investment risk. The obligation to pay is measured at the discounted value, i.e., by considering time value of money using appropriate discount rate.

The accounting for these involves the following:

- Estimation of benefits that has been earned by the employees for the service rendered by them in the past as well as in the current year.
- Estimation of benefits under plan to be paid to employee as post-retirement benefit, such estimation is carried out by using actuarial method, such as demographic variable of employee—age, mortality rate, etc.
- Estimation of present value of the obligation to settle the claim of the employee.

The estimation of obligation to pay is based on actuarial method as well as projected unit credit method that entails the recognition of increased liability on account of changes in the salary and related allowances that are the base for the payment of post-retirement benefits. Apart from determining the liability under the plan, the plan assets, if any should be recognized.

Accounting

The amount recognized as defined benefit liability should be shown in the balance sheet as liability net of fair value of plan assets, if any. The obligation should be disclosed at the present value using appropriate discount rate.

Example 6 The average age of employees of a company is 55 years the retirement age is 60 years. The defined benefit plan introduced in the current year envisages payment of extra-retirement benefit equal to 10% of the last salary drawn for each of year of service put in by the employee from the date of commencement of scheme till the date of retirement. The present salary bill of the company is ₹ 100 lakh per annum that is likely to increase to ₹ 150 lakh by the end of five years from now. The appropriate discount rate is 8% p.a. Show how this is to be recognized as liability in the annual accounts during this period.

Solution Here last salary bill expected is ₹ 150 lakh the defined benefit as per the policy will be ₹ 15 for five years remaining till the retirement age. The amount to be contributed is displayed in the following table as current service cost.

Table showing closing balance of defined contribution plan in the balance sheet

	Year 1	Year 2	Year 3	Year 4	Year 5
Opening obligation	–	11.03	23.82	38.58	55.55
Interest @ 8%	–	0.88	1.90	3.08	4.45
Current service cost	11.03	11.91	12.86	13.89	15.00
Closing	11.03	23.82	38.58	55.55	75.00

Here current service cost is the present value @ 8% of nominal amount for each of the year, i.e., ₹ 15 lakhs. This amount is to be debited to profit and loss account in the respective year. The amount of interest realized on the investment is to be recognized as defined contribution plan asset and closing obligation as defined contribution plan liability in the balance sheet.

Comparison Between IAS-37 And AS-29

Although both of these accounting standards provide for allmost similar coverage for provisions but still there are certain differences between these two standards, such as:

Discounting of Provisions

IAS-37 requires when there is a significant effect of time value of money on the expenditure concerning future liabilities for which provision is being made, then such provision should be disclosed at the discounted value as required to settled the future obligation; whereas **AS-29** does not provide for the discounting of provisions. The reason for not discounting is that according to Indian GAAP annual accounts are presented at the historical cost and not at the present value concept.

Constructive Obligation and Restructuring

A constructive obligation arises only when a restructuring plan has been recognized by the business enterprise at an early stage. IAS-37 requires that if management has a formal restructuring plan that is likely to be executed then a provision is to be made while preparing annual accounts. However, AS-29 does recognize it for the purpose of provisioning because such constructive obligation is a matter of judgement and needs a detailed justification for provisioning requirement.

Provision for incomplete contracts or onerous contracts

IAS-37 provides for the provision to be made for both the type of contracts but Indian GAAP—AS-29 provides for the provision only for incomplete contracts and not for onerous contracts.

KEY TERMS

Executory vs onerous contracts
Insured plans
Restructuring reimbursement
Multiple employer plans
State plans

FINAL RECAP

- A **liability** is to be recognized in the annual accounts only when the obligation to pay for such liability exists on the date of balance sheet.
- **Initial measurement** of a liability should be done at the historical cost.
- In case precise monetary value to be paid to settle the liability is not known then it is the **fair value** at which liability is to be measured initially.
- Financial liabilities should be **derecognized,** i.e., eliminated from the balance sheet only when these have been paid off, discharged or obligation to pay does not exist any more.
- When the amount paid to discharge an existing liability is different from the carrying amount of such liability it results into a **profit** or **loss upon derecognition**.
- **Provisions** are the items relating to a known item of liability that may arise in future depending upon certain circumstances.
- The event—activity, agreement or contract that has been executed in the past and is not related to future business operation is called **obligating event,** resulting into present obligation.
- **Restructuring** implies making an alteration, modification, discontinuation or relocation of business operations.
- **Contingent liability** is a probable obligation to pay resulting from some events/transactions of the past the outcome of which is dependent on the happening of one or more future events.
- **Provision for contingent liability** is to be recognized in the annual accounts only when it is probable, i.e., most likely that an obligation will arise depending upon a future outcome, such as decision of a lawsuit, court case or enforcement of a new law.
- **Post-retirement benefits** also known as post-employment benefit plan are the one in which employer has the obligation to provide benefits to its employee once they have left the job or retired from the service of the employer.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. When obligation to pay is binding on account of a past event, it is recognized as
   (a) Contingent liability　(b) Liability at historical cost
   (c) Liability at fair value　(d) None of these
2. Financial liabilities held for trading are to be measured
   (a) By using the method of amortization using effective interest rate'.
   (b) At fair value

(c) At historical cost
(d) At prospective value using actuarial method

3. Which one of the following is applicable for provisions?
   (a) Present obligation is recognized as a result of a past event
   (b) The event—activity, agreement or contract that has been executed in the past.
   (c) Monetary outflow is more probable.
   (d) None of these
   (e) All of these
4. Using a particular provision for some other liability or expenditure is
   (a) Allowed under IAS-37 (b) Allowed under AS-29
   (c) Allowed under both of these (d) Not allowed under both of these
5. A company should make provision for which one of the following?
   (a) Present obligation on account of obligating events
   (b) For future operating expenses (c) For future contracts
   (d) All of these (e) None of these
6. Which of the following should not be considered as restructuring costs?
   (a) Retraining or relocation cost. (b) Marketing
   (c) Investment in new system as a result of closure or relocation.
   (d) None of these (e) All of these

Descriptive Questions

1. Differentiate between the following:
   (a) Defined contribution plan vs defined benefit plan
   (b) Provision vs contingent liability
2. Discuss different types of post-retirement employee benefit plans.

Numerical Problems

1. The balance sheet of DXI Ltd for the year 2009–10 disclosed ₹ 8,20,000 as liability for derivative contract expiring in next six months from the date of balance sheet. In the next financial year, i.e., 2010–11 the liability for the derivative contract was discharged at ₹ 9,42,000. Show how this is to be recognized in the books of accounts.
2. The manufacturer of automatic gear scooters gives a warranty of three years on every scooter for the repair or replacement of the scooters that fail to perform as per the specification. Past experience reveal that on an average 5% of the scooters require repair costing ₹ 2,000 each and another 1% requires replacement costing ₹ 5,000 each. During the year 2009–10, the company sold 16,000 scooters. Show how provision is to be recognized in the annual accounts.
3. By taking the data of question 2, if in case each scooter can raise only one claim during the period of three year. During the year 2010-11, 50 scooters were repaired at a cost of ₹ 1,700 each and another 50 were replaced at a cost of ₹ 3,200 each. Show how subsequent measurement of these provisions should be made in the year 2010–11.
4. Average age of employees of a company is 56 years the retirement age is 60 years. Defined benefit plan introduced in the current year envisages payment of extra retirement benefit equal to 5% of the last salary drawn for each year of service put in by the employee from the date of commencement of scheme till the date of retirement. The present salary bill of the company is ₹ 20 lakh per annum, which is likely to increase to ₹ 40 lakhs by the end of four years from now. The appropriate discount rate is 10% p.a. Show how this is to be recognized as liability in the annual accounts during this period.

Answers

Multiple Choice Questions

1 (b), 2 (a), 3 (e), 4 (d), 5 (a), 6 (e)

Numerical Problems

1. Loss on account of short provisioning of ₹ 1,22,000 debited to profit and loss account.
2. Provision to be made: ₹ 24,00,000.
3. Amount used out of provision: ₹ 2,45,000 amount not required any more ₹ 1,05,000 to be credited to profit and loss account.
4. Current service cost: 1.5, 1.65, 1.82 and 2 at the end of each of the next four years respectively. Interest to be recognized: nil, 0.15, 0.33 and 0.55 in each of the next four years respectively.

CASE

Recognizing Gratuity as Liability

Till the year 2001, there was no regulatory obligation on a company to provide for defined retirement plan, namely the gratuity payment, by private colleges. From the year 2001, it was made compulsory for each private college to provide for gratuity to each employee and also recognize it as liability in the annual accounts. The scheme is as follows:

(i) Each employee is to be paid gratuity equal to half months salary for each completed year of service.

(ii) Salary (basic pay plus dearness allowance only) for this purpose shall be the last salary drawn by the employee retiring from the service.

(iii) Maximum gratuity to each employee shall not exceed ₹ 10 lac.

(iv) The appropriate discount rate for the calculation should be 8% per annum

BGS College has 20 staff members who are eligible for the payment of gratuity at the end of 2011, i.e., after 10 years with maximum amount as specified above to each of the employee. The college wants to provide for the gratuity payment as liability in the annual accounts from the year 2001 onwards. The salary bill for these twenty employees is ₹ 1.5 crore per annum at present that is likely to rise to ₹ 5 crore per annum by the end of 2011.

Discussion Question

1. You are an expert and have been roped in by BGS College to help the college. Show how gratuity should be recognized during all the accounting years as liability for post-retirement employee benefits as provided in accounting standards. Show all the working.

CHAPTER

13

Accounting Issues for Financial Instruments and Foreign Exchange Transaction

LEARNING OBJECTIVES

After reading this chapter, you will be able to

- Understand recognition and measurement of financial assets and financial liabilities
- Know about recognition of profit and loss relating to financial assets and financial liabilities
- Gain an insight into the derecognition of financial assets and financial liabilities
- Identify recognition and measurement of derivatives
- Define recognition of foreign currency transactions
- Comprehend recognition of profit and loss due to changes in exchange rate

FINANCIAL ENGINEERING

Financial engineering refers to the innovation in the field of finance specially the aspects related to capital market. Compound financial instruments, such as optionally convertible debentures, triple option convertible debentures issued by Reliance Petrochemicals Limited (RPL), zero coupon debentures issued by ICICI, IFCI and others are the result of financial engineering.

Derivatives—option contract, futures, forwards and others are used in both primary market as well as in secondary market. Financial engineering has not only helped in widening the scope of capital market activities but also motivated the accounting professionals to devise new accounting standards, such as AS-30, AS-31, IAS-39 and IAS-32 to deal with the accounting issues related to these new generation financial instruments. The main focus of these accounting standards is to have a true and fair presentation of annual accounts with full transparency and disclosure.

INTRODUCTION

A **financial instrument** is a document in written or electronic form used by one entity to arrange finance and for another party is a medium to invest his/her funds. It is like an explicit or implicit contract between two parties resulting into rights and obligations of parties' entry into such contract. In the past, these instruments used to be plain and simple instruments, such as equity shares, preference shares, debentures, company fixed deposit schemes, certificate of deposit and commercial papers. These instruments are without any add-on condition or features attached thereto; therefore, these are sometimes called **plain vanilla financial instruments** or **traditional financial instruments.**

Recently, as a result of financial engineering, some more financial instruments with exotic condition or features have come in practice.

Employee stock option plan (ESOP) is to offer an option to employees to subscribe for the equity shares of the company on a future date at a pre-determined price.

ILLUSTRATION Convertible preference shares, convertible debentures, option contracts, futures and forward contracts, swaps, securitized instruments, collateralized debt obligations, index base debentures, employee stock options plans (ESOP) and many more. These financial instruments have additional features apart from the features of traditional financial instruments. Therefore, these are called **exotic financial instruments**.

Accounting for Financial Instruments

In the past accounting, for traditional financial instruments was much easier. Therefore, accounting standard setters never felt the need for having specific accounting standard for the accounting of these instruments. But the introduction of exotic financial instruments has forced the standard setters not only in India but globally also to either introduce the amendments in the existing accounting standards or introduce new accounting standards so as to have proper recognition, measurement and presentation of exotic financial instruments in the annual accounts. In view of these changes, Indian GAAP, in the form of Indian accounting standards and international accounting standards have been amended suitably.

Indian GAAP—AS-30 and AS-31

AS-30—financial instruments: recognition and measurement and AS-31—financial instruments: presentation provide sufficient coverage for proper accounting and presentation of traditional as well exotic financial instruments. Both of these have been made effective in recommendatory form in respect of the accounting period commencing from April 1, 2009, whereas these have been made mandatory from the accounting period commencing from April 1, 2011.

International Accounting Standard—IAS- 32 and IAS-39

These accounting standards were made effective much earlier, dating back to year 2005 onwards and are applicable for the enterprises maintaining books of accounts as per international accounting standards.

FINANCIAL INSTRUMENTS—FINANICAL ASSETS, FINANCIAL LIABILITIES AND EQUITY: AS- 30, AS-31 AND IAS-32

Different financial instruments and related terminology has been defined as follows:

Financial Instrument

Financial instrument is any contract that gives rise to financial asset for one part and a financial liability or equity instrument of another party to such contract that may be implicit or explicit. Therefore, financial instrument is

- Contractual right or obligation.
- To be settled in cash or in exchange for some other asset or liability.
- Does not generate economic benefits for future.

Being contractual right or obligation is the first and foremost pre-condition to be called a financial instrument.

Financial Asset

Financial assets include (i) cash, (ii) equity instruments of other entity, (iii) a contractual right to receive cash or any other financial asset or to exchange financial assets or liabilities, (iv) a derivative or non-derivative contract that will be settled in the entity's own equity instruments.

Financial Liability

Financial liabilities include (i) a contractual obligation to deliver cash or any other financial assets to another party or to exchange with another party the financial assets or financial liabilities to settle the obligation (ii) a non-derivative or derivative contract that will be settled in the entity's own equity instruments.

EXAMPLE 1 Aman Limited (AL) purchased goods worth ₹ 3,20,000 and ₹ 1,80,000 from Rajiv Limited (RL) on cash and for one-month credit, respectively. AL accepted a bill of exchange of two months' duration for ₹ 2,00,000 in favour of Dilip Limited (DL). Do these transactions result in financial assets and liabilities?

SOLUTION (i) AL should recognize goods purchased of ₹ 5,00,000 as a current asset but it is not a financial instrument. (ii) For credit purchase, AL should recognize a financial liability—creditors for ₹ 1,80,000. (iii) For credit sale, RL should recognize a financial asset—debtors for ₹ 1,80,000 (iv) Bill accepted in favour of DL is a financial liability—bills payable for AL and it is a financial asset—bills receivable for DL.

Equity Instrument

An **equity instrument** is any contract that envisages a residual interest in the income and assets of an entity after adjusting all of its liabilities.

WHICH ASSET IS NOT A FINANCIAL INSTRUMENT?

Any asset that is not likely to be settled by the exchange of cash or other financial assets is not a financial instrument. Physical assets—property, plant, building, premises, land, furniture, inventory, pre-paid expenses, accrued income, intangible assets—patents, goodwill, trademark, etc. The apparent reason is that these do not get exchanged for cash or in exchange for other assets; rather the use of these assets generates economic benefits (monetary as well as non-monetary) present as well as economic benefits for future too.

Similarly, the liabilities and assets that are not contractual, such as income tax, sales tax and exercise are not the contractual obligations but these result from the imposition of statute or law.

EXAMPLE 2 Sunshine Limited (SL) invited application for the issue of 1,00,00,000 equity shares of face value ₹ 10 each issued at par for cash all the shares were subscribed for and issued as per the rules. Another 50,000 equity shares of ₹ 10 were issued to the vendors of machinery. Show how financial assets, financial liabilities and equity instrument should be recognized.

SOLUTION Shares issued for cash or for consideration other than cash should be recognized equity share capital. Therefore, SL should recognize equity share capital with ₹ 10,05,00,000 (10 × 1,00,50,000). It should recognize cash of ₹ 10,00,00,000 as a financial asset and machinery is to be recognized as fixed asset.

Financial Assets, Financial Liabilities and Equity—Practical Aspects

Financial assets, financial liabilities and equity should be reported in the financial statement so as to provide a true and fair view of the financial position of the company. To have uniformity in presentation, uniform accounting practices should be adopted in presenting these items.

Financial Assets

The assets that result into a right to receive for one party with corresponding obligation for another part are financial assets.

Cash Balance is a prominent example of financial asset as these can be exchanged or used to settle and obligation.

Bank Balance is the amount of cash deposited in a bank account held either in savings/current/fixed deposit account results into a financial asset for the depositor, whereas a financial liability for the bank or financial institution with whom such deposit is made.

Contractual Rights is a legal and binding right to receive cash or a financial instrument. It includes accounts receivables, notes receivables, sundry debtors, loans and advances to be settled in cash or in the exchange of some other asset. A **chain of contractual rights**, such as lease or hire purchase agreement, results into a right to receive lease payment or hire purchase installment.

Lease is an agreement between the owner (lessor) of an asset and user (lessee) of the asset to use the asset in return for a pre-decided lease rentals.

Financial Liabilities

The liabilities that result into an obligation to pay in future for one party with a corresponding right to receive for another party are financial liabilities.

Bank Overdraft is the amount of extra cash withdrawn by the account holder from his/her current account subject to the rules and regulation of bank. This results into an obligation to pay cash in future for the account holder. And for bank it a financial asset.

Contractual Obligation is a legal and binding obligation to pay cash. This is represented by accounts payables, notes payables, promissory notes, sundry creditors for which the firm has the obligation to pay these in future. A **chain of contractual obligations**, such as lease payments and hire purchase payments are considered financial liabilities. Debentures or loan to be settled in cash or by the exchange of own equity shares of the company.

Contractual obligation under lease is a financial liability.

Equity Instrument

An **equity instrument** is the one that entitles residual claim for equity shareholder. It includes the following:

- A non-puttable equity shares
- Warrants or written call options envisaging the right for the holder to subscribe for a fixed number of non-puttable equity shares of the issuing company in exchange for cash.

Puttable financial instrument is the one in which holder of the instrument has the right to claim the maturity payment before the original maturity period.

DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments are such financial rights and obligations that derive their value from an underlying asset, such as a share of a company. Derivative financial instruments create a right to receive a particular number of underlying shares for one party in exchange for cash or some other financial asset and for the another party it creates an obligation to deliver particular number of underlying shares in exchange for cash or other financial asset. Derivative contracts, such as option contract and futures contract forward contract are the prominent derivative financial instruments.

Prominent Derivative Financial Instruments

Certain derivative instruments are used purely as hedging instruments, whereas others are used for hedging as well as for the maximization of gains or to avoid losses.

Option Contract/Transaction

An **option contract** entitles the buyer (also called **holder of the option**) with the right to buy or sell particular number of underlying shares in exchange for the agreed exercise price on or by the expiry of the contract. To obtain this right, the buyer of the option makes an upfront payment of mutually negotiated option premium to the seller of the option contract. The seller of the option also identified as **writer of the option** contract has only the obligation without any rights to deliver or receive particular number of underlying shares in exchange for cash on or by the expiry of the contract. A **call option** gives the holder right to buy the underlying shares, whereas a **put option** gives the holder right to sell the underlying shares.

A **derivative contract** is the one that derives its value from the underlying asset such as share, debenture, commodity, currency, etc.

Futures Contract/Transaction

Futures contract is a contract in which both the parties have the rights as well as obligation to buy or sell the underlying shares in exchange for pre-decided strike price by the end of expiry period of the contract. Here both the buyer and the seller of futures have rights as well as obligation to settle the transaction. A futures contract is a **standardized contract** (derivative product) because parameters, such as expiry date, lot size and availability of a particular underlying asset are regulated by the exchange where such futures contracts are traded.

Futures contract is a standardized contract, whereas forward is a customized contract.

Forward Contract/Transaction

Forward contract is a contract in which both the parties have the rights as well as obligation to buy or sell the underlying shares in exchange for pre-decided strike price by the end of expiry period of the contract.

Here both the buyer and the seller of forward contract have rights as well as obligation to settle the transaction. A **forward contract** is a **customized contract** (derivative product) because parameters, such as expiry date, lot size and availability of a particular underlying asset are not regulated by the exchange but mutually decided by both the parties.

Futures and forward contracts result into right as well as obligation for both the buyer and the seller. But in an **option** contract buyer has all the rights without any obligation and seller has all the obligations without any rights.

Example 3 On February 14, 2011, Deepak Limited (DL) entered into a contract for buying two lot of call option with product series 'CA, Tata Motors (1700), 1200, April 2011, 30' and sold one lot of put option with product series 'PA, Maruti Suzuki (800), 1450, April 2011, 40'. It also entered into a forward contract to buy 20,000 10% Bonds (series 2012) @ ₹ 102 per bond for settlement in two months. Show how these are to be recognized.

Solution (i) DL should recognize call option as a financial asset as it has the right to buy the shares of Tata Motors at the initial cost, i.e., ₹ 51,000 (total premium paid, i.e., 1700 × 30). (ii) Put option sold to be recognized as financial liability with ₹ 32,000 (total premium received 800 × 40) and cash received for premium is a financial asset. (iii) Forward contract generates both a right and obligation as well. Therefore, it should recognize financial asset and financial liability with ₹ 20,40,000.

Special Issues in Derivative Financial Instruments

Contracts to buy or sell non-financial assets/items (settled through physical delivery): not recognized as financial assets/liabilities

A **contract,** particularly a derivative contract to buy or sell non-financial asset, such as a commodity *does not qualify for recognition* as a financial instrument. The implied logic is that both the parties to such contract are interested to buy or sell a commodity or physical asset that does not result into any type of financial right or obligation as it should be in a financial instrument.

(i) Commodity derivatives—options, futures or forward contracts.
(ii) A contract to buy or sell physical asset, such as inventory item or machinery.

Contracts to buy or sell non-financial assets/items (settled through cash difference): recognized as financial assets/liabilities

Contracts to buy or sell commodities or physical assets that are eventually to be settled through cash difference are *recognized as financial instrument*. The implied logic is that the parties are not intended to buy or sell the commodity or physical asset; rather to settle by giving or taking the cash difference equal to the difference between exercise/strike price and spot price prevailing on settlement/value date.

Contract to exchange non-financial asset for financial asset

Certain contracts have the provision for the exchange of non-financial asset/liability against the financial asset/liability is to be recognized as financial instrument.

Illustration Oil bonds entitle the oil company or the holder to either receive fixed amount of cash or to receive a fixed amount of oil on maturity. Party holding the bond will exercise the option to get either cash or oil on maturity will completely depend upon the comparative economic benefits from cash and oil. Therefore, it is recognized as a financial instrument.

FINANCIAL INSTRUMENTS—PRESENTATION

AS-31 and IAS-32 provide for the grounds on the basis of which different contractual items are classified as **financial instruments**, **financial liabilities** and **equity instrument**. The prominent differentiating feature to distinguish between a financial liability and an equity instrument is the contractual obligation. While making initial recognition and presentation, the substance over legal form has a greater role.

Convertible debentures and **convertible preference shares** are compound financial instruments.

Settlement in the Entity's Own Equity Instrument

Recognition of financial instruments that results in the delivery of entity's own equity shares in exchange of such instrument can be either recognized as an equity instrument or as a financial liability depending upon the fact about the number of own equity shares to be exchanged to settle such financial instrument.

Exchange of Fixed Number of Own Equity Shares—Recognized as Equity Instrument

Such instrument is to be recognized as an equity item when number of own equity shares to be exchanged to settle such instrument is fixed, i.e., pre-decided and does not depend upon the outcome of certain other event.

Exchange of Variable Number of Own Equity Shares—Recognized as Financial Liability

When number of own equity shares to be exchanged to settle the obligation under a financial instrument is not fixed; rather depends upon the outcome of certain other event then such financial instrument is to be recognized as a financial liability.

SUBSTANCE OVER LEGAL FORM

General

Generally substance and legal form are consistent with each other; however, sometimes substance becomes more important as compared to legal form. Some of the financial instruments take the legal form of equity but these are not recognized as an equity item but as a financial liability. Therefore, the substance should be given more importance while recognizing an instrument as a financial liability or an equity item.

Redeemable Preference Shares

When preference are compulsorily redeemable on a pre-decided future date wherein the issuing company has a contractual obligation to settle the claim in cash are included as **financial liability**.

Perpetual Preference Shares

These preference shares result into a conditional claim arising only when the company is liquidated; Therefore, these should be recognized as an **equity item**.

Puttable Instruments

A financial instrument that entitles its holder to claim cash or financial assets any time in future. **Units of mutual funds** that have a provision for the holders to exchange these into cash or some other financial asset are to be recognized as a **financial liability** and not as an equity items. **Optionally Convertible Preference Shares** is the prominent instruments in this category.

Conditional Right vs Unconditional Right

Conditional Rights

The instruments with **conditional rights** of the issuer to avoid settlement in cash or by the exchange of another financial asset to a contractual obligation make an instrument *ineligible for recognition as a financial liability*.

Members' contribution in a co-operative society with conditional right to avoid refund

Members' contribution in a co-operative society in which condition for refund entitle the society to avoid the refund of members' contribution or such refund can be avoided by the execution of an existing law or statute is to be *recognized as an equity item* and not a financial liability.

Unconditional Rights

An instrument should be recognized as a *financial liability* only when the issuer does not have an **unconditional right** to avoid the settlement in cash or by the exchange of another financial asset to a contractual obligation.

Members' contribution in a co-operative society without unconditional right to avoid refund

Members' contribution in a cooperative society in which society has the obligation to refund the contribution without holding any condition with respect to such refund is considered a **financial liability.**

Exception An exception to this is that certain refunds of this kind are prohibited by the execution of law or statute, such as number of members or amount of capital should not fall below certain minimum limit then the amount upto such limit is to be recognized as equity item and the amount over and above such minimum limit to be recognized as financial liability.

Example 4 TTKS Limited issued (i) 30,000, 12% redeemable preference shares of face value ₹ 100 each at 10% premium, (ii) 50,000, 14% non-redeemable preference shares of face value ₹ 10 each at a premium of ₹ 20 each, (iii) 25,000, 3 years, 9% redeemable debentures amounting to ₹ 25,00,000, (iv) 10,000, 8% convertible debentures of face value ₹ 10 each with conversion into 20,000 equity shares after 12 months from the date of issue, (v) 15,000, 10% convertible preference shares amounting to 15,00,000 with the provision to conversion into adequate number of equity shares by considering the market price of the equity shares that might prevail after 24 months. Show how these items should be recognized.

Solution (i) Redeemable preference shares create a definite liability; therefore, its face value ₹ 30,00,000 should be recognized as a financial liability but the security premium ₹ 3,00,000 is the part of equity net worth. (ii) Non-redeemable preference shares including securities premium on these should be recognized as equity as these do not create any liability to pay during the lifetime of the company. (iii) Redeemable debentures create a definite liability to be settled in cash. Therefore, it is to be recognized as a financial liability. (iv) This is the case of compound financial instrument certain part is financial liability and rest is equity item. Here number of equity shares to be issued on conversion is pre-decided. Therefore, it should be recognized (a) financial liability at the fair value of debt amount and (b) fair value of similar call as equity component. (v) Here the number of equity shares to be issued on conversion is not definite and to be decided at the time of conversion; hence, it should be recognized as financial liability.

Compound Financial Instruments

A **non-derivative financial instrument** that combines the features of equity as well that of a financial liability should be recognized by classifying it into two, namely (i) financial liability and (ii) equity component. The prominent example is the convertible debentures that have a provision for conversion into definite number of entity's own equity in future, and till the date of conversion there is a provision to pay the interest as per the terms and condition of issue of such debentures.

Compound financial instruments, such as optionally convertible debentures entitle the debenture holders with a right without any obligation for conversion.

EXAMPLE 5 XL Limited (XXL) has issued 20,000 10% debentures of face value ₹ 100 each, each debenture is convertible into two equity shares after 12 months from the date of issue of debenture. Rate of interest on similar debentures without conversion option is 12% per annum. Show how it is to be recognized.

SOLUTION This is compound instrument as it generates an obligation to pay the interest for one year and after one year each debenture is to be converted into two shares. (i) Debt obligation is to be recognized as financial liability at the discounted value of future cash flow associated with the debentures of similar risk category without the provision for conversion. The discounting should be done using interest rate as applicable to the risk category of debt instrument. Here the redemption amount of ₹ 20,00,000 and one year's interest ₹ 2,00,000 is to be discounted at 12% and recognized as financial liability—debt at ₹ 19,64,600 [22,00,000 $\times$ $\{1/(1.12)^1\}$] (ii) Option to issue equity shares should be recognized as an equity component at the difference between the issue price of debenture and the present value calculated in (i). Therefore, the equity component is to be recognized at ₹ 35,400.

Treasury Shares

Repurchase of own equity shares by an entity are called **treasury shares**. The shares held like this should not be recognized as a financial asset; rather to be deducted from the equity component—similarly, any gain or loss arising from such purchase or sale of shares should be adjusted in reserves. Such own equity shares might be held either directly by the entity or indirectly through the other members of the consolidated group.

Treasury shares once purchased can be sold back by the company.

Interest, Dividends, Losses and Gains

Interest, dividend, loss and gains associated with a financial instrument that has been classified as **financial liability** should be expensed to profit and loss account; whereas dividend distributed on equity instruments is not to be expensed; rather to be deducted directly from the equity account, i.e., adjusted in the reserve and surplus.

Interest on debt instrument is a contractual and legal obligation of the issuer but dividend is the appropriation of profits.

Costs in Issuing or Acquiring Its Own Equity Instruments

Certain transaction costs are incurred in issuing or in buying and selling own shares. Such cost includes printing and advertising cost, legal fee, registration fee, etc. These costs should not be expensed; rather these should be directly adjusted to the equity account but only to the extent of incremental costs that could have been avoided had such transaction not been undertaken.

Transaction cost relating to the issue or transaction in compound financial instrument should be appropriated as the cost relating to financial liability and to be expensed to profit and loss account and the cost relating to equity component to be adjusted to equity account.

Offsetting a Financial Asset and a Financial Liability

When an entity has the right to receive or pay a single net amount in place of separately recognized financial asset and financial liability then such assets and liabilities should not be presented as separate items; rather to be presented at the net amount. However, subsequent gain or loss on both of these items is to be recognized and adjusted in the net carrying amount. Such offsetting is to be done only when

- The entity has a contractual or legal right to offset financial assets against corresponding financial liabilities.
- The entity intends to settle the financial assets and financial liabilities on net basis.
- The entity intends to sell the asset and settle the liability.

The items of such financial assets and financial liabilities should be disclosed properly in the annual accounts.

USEFUL INFO

Categories of financial instruments under AS-31 and IAS-39
Provisions of both of these accounting standards describe the following classification of financial instruments:

- Financial assets and financial liabilities held for trading at fair value through profit and loss account
- Investments held till maturity
- Loans and Receivables
- Financial assets available-for-sale

(For details regarding recognition, and measurement of these, refer to Chapter 3.)

RECOGNITION AND MEASUREMENT OF FINANCIAL INSTRUMENTS—IAS-39

Recognition

A **financial asset** or **financial liability** is to be recognized only when the entity (business enterprise) becomes party to such contract and it results into a claim of the entity or obligation of the entity with respect to the financial instrument under consideration.

Initial Measurement of Financial Assets and Financial Liabilities

Initial measurement of financial assets and financial liabilities should be carried out as follows:

- A financial asset or financial liabilities at fair value through profit and loss to be measured at fair value on the date of acquisition.
- Short-term receivables and payables should be measured at the original invoice amount unless the discount charges are significant.
- Other financial assets and financial liabilities should be measured at fair value by adjusting transaction cost directly or indirectly attributable to these items.

Subsequent Measurement of Financial Assets and Financial Liabilities

The subsequent measurement of financial assets and financial liabilities should be carried out as follows:

- Financial assets and financial liabilities that are through profit and loss should be measured at fair value.

- Loans, receivables and payables as well as held to maturity at amortized cost using effective interest method when effect of discounting is significant/material.
- Loans, receivables and payables at the invoice cost when effect of discounting is immaterial.
- Unquoted investments at cost and quoted investment at their fair value.

(For details on these, refer to Chapters 3, 11 and 12.)

FINANCIAL INSTRUMENTS—DISCLOSURE—INDIAN GAAP (AS-32) AND IAS-32

Transactions in financial instruments are subject to risk. Risk means chances of having fluctuation in the value of financial instrument or income from such financial instrument under consideration. The risk of different financial instruments should be disclosed exclusively while presenting annual accounts. Common categories of risk are as follows:

- Market risk
- Credit risk
- Liquidity risk
- Cash flow interest rate risk

Apart from the type of risk to which financial instruments are exposed to, the entity should also disclose (a) terms and conditions concerning different financial instruments, (b) fair value, amortized cost and other related values for each class of financial instrument, (c) risk management policies and hedging strategies used to manage risk.

> **Risk** means probability of having a loss or less amount of profit as compared to the expectation.

Market Risk

Market risk is the risk on account of market wise factors that are likely to have an impact on the fair value or recoverable value of financial instruments. Such effect may be favourable or unfavourable. Market risk comprises the following:

Currency Risk

Exchange rate between the currencies of two countries keeps on fluctuating on daily basis; therefore, the financial instruments denominated or convertible into foreign currency are always subject to currency risk.

Fair Value Risk Due to Interest Rate Risk

The fair value of debt instruments or bonds is affected by the changes in the general interest rate prevailing in the market. The fair value, i.e., market value or recoverable value of bond has an inverse correlation with general rate of interest. An increase in general interest will result into a decrease in the fair value of bond and vice versa.

> **Interest rate** is the function of time premium, inflation premium and risk premium.

Price Risk

Market price of different financial instruments that are regularly quoted in the market is subject to fluctuation apart from the reasons discussed above. Such fluctuation in the market price may be on account of changes in economic scenario, government policies, demand and supply conditions specific to the financial instrument, inflation and others.

Systematic vs Non-systematic Risk

The total risk to which a financial instrument is exposed to is classified as systematic and non-systematic risk.

Systematic Risk

The risk on account of economy wide factors or global factors that create risk for all the financial instruments is called **systematic risk.** Factors of systematic risk are, such as currency risk, general interest rate risk, political risk, inflation risk, risk on account of global or national economic and political events and happenings. These factors affect all the financial instruments; hence, it cannot be eliminated so long as investment is held in financial instruments. Therefore, it is also called **unavoidable risk/non-diversifiable risk;** whereas risk on account of company-specific or issuer-specific factors is called **non-systematic risk**.

Non-systematic Risk

Such component of risk that relates specifically to the issuing company or the party having obligation with respect to a financial instrument is called **non-systematic risk.** Factors, such as default risk, issuer-specific liquidity risk, operating risk and company-specific government policies/national/global events. Such component of risk can be avoided or diversified by the process of proper diversification; therefore, it is called **avoidable/diversifiable risk.**

Diversification means adding manageable number of financial instruments in the portfolio. This offsets negative performance of one against the positive performance of others.

Credit Risk

Risk on account of deterioration in the credit worthiness of the issuer or party having obligation with reference to a financial instrument is called **credit risk**. Such risk results into default by the obligating party in servicing the financial instrument or in the repayment of financial instrument. Due to this, it is also called **default risk**.

Default risk might arise on account of poor financial position or due to the recession in the market.

Illustration Issuer of debenture has the obligation to pay interest and repayment of principle amount on maturity. If the issuer defaults in making either or both of these then it is identified as credit risk.

Liquidity Risk

Liquidity implies the convenience and the speed with which a financial instrument can be converted into cash that too without much of the decline in the fair value of the financial instrument under consideration. When liquidity of a financial instrument is at stake due to either market wide factors or factors specific to the issuer, it becomes difficult to realize the fair value of such instrument and holder of such instrument suffers a loss in fair value.

Liquidity does not mean profitability and profitability does not mean liquidity.

Cash Flow Interest Rate Risk

Floating rate debentures or index-linked debentures/bonds create a fluctuation in the cash flow on account of interest payment for such debentures/bonds. A rise in the linked interest rate parameter or linked index will result into increased cash outflow on account of interest payment on these bonds. Such fluctuation in the cash flow on account of interest payment is identified as **cash flow interest rate risk**.

Index-linked debentures offer a floor rate that is linked to certain index of the market or interest rate index.

DERECOGNITION OF FINANCAL INSTRUMENTS—AS-30 AND IAS-39

Different financial instruments either held as an asset or as a liability should be derecognized as per the provisions of AS-30 and IAS-39 as applicable.

Derecognition of Financial Assets

When significant part of all the risk and rewards of ownership of the financial asset have been transferred the asset should be **derecognized**. An item of financial asset is to be derecognized when (a) the contractual right to receive the economic benefits or cash flows from the financial asset have expired, or (b) the financial assets is not likely to generate economic benefits, or (c) it has been transferred by the entity for consideration or otherwise.

Transfer

Transfer of financial assets results only when all or any of the following conditions are met:

- Entity transfers the contractual rights to receive the cash flows associated with the financial asset for consideration or by the execution of law/statute, or
- Retain the right to receive the cash flow associated with the financial asset but has a corresponding obligation to pass on such cash flows in favour of another party.

RETAINING CONTRACTUAL RIGHT TO RECEIVE WITH A CORRESPONDING CONTRACTUAL OBLIGATION TO PAY

When an entity holds the contractual right to receive the benefits associated with a particular financial asset but it has generated corresponding contractual obligation to pass on to another party (eventual recipient) the benefits so collected it shall qualify as a **transfer** of the financial asset only when all the following conditions are met:

(i) The entity has no obligation to pay to eventual recipient any amount unless it is collected from the original financial asset; however, the entity might have extended short advances to eventual recipient to be adjusted against the benefits accruing to eventual recipient.

(ii) The entity is not allowed to pledge or hypothecate the original asset, other than as a collateral to eventual recipient.

(iii) The entity cannot delay the remittance of the collected benefits to eventual recipient and neither benefits so collected be invested at the sole discretion of the entity.

Extent of Transfer and Derecognition

A financial asset should be derecognized by considering the extent to which it has transferred the risk and reward of ownership of the financial asset under consideration as follows:

- When significant part of all the risk and rewards of ownership of the financial asset have been transferred, the asset should be **derecognized**.
- When significant part of all the risk and rewards of ownership of the financial asset have not been transferred, the asset should *not be derecognized.*
- If significant part of all the risk and rewards of ownership have neither been transferred nor retained, then the decision about derecognition is to be taken by considering the **control of entity** over the financial asset under consideration.

- If the entity does not hold the control over the asset under consideration, then it should be derecognized.
- If the entity holds the partial control over the asset, then it should be recognized only to the extent it holds the control, and rest of the part is to be derecognized.

If as a result of these provisions, a separate financial asset or financial liability comes into existence then such asset/liability is to be recognized separately.

Financial assets and liabilities should be derecognized as soon as right to receive for asset and obligation to pay for liability ceases.

Transfer of Risk and Reward

Transfer of risk and reward associated with a financial asset is evaluated by comparing pre-transfer and post-transfer exposure of the entity with respect to the asset under consideration. When there is as a significant variability between pre-transfer and post-transfer amount and timing of cash flow from the asset, it is to be derecognized; whereas when variability between pre-transfer amount and timing of cash flow is insignificant then such financial asset should not be derecognized.

Control

Whether the transferor retains the control over the financial asset transferred depends upon the extent to which the transferee to the financial assets can exercise the control with respect to the financial asset under consideration. When the transferee has the practical ability to sell the asset without the assistance or intervention by transferor, the entity has not retained the control. Otherwise it is considered that the entity has retained the control.

Surrender of Control

Surrender of control implies that the purchaser of the financial asset has independent and irrevocable entitlement to sell, pledge or assign the financial asset to mobilize resources. Such control of purchaser is not hampered in the event of bankruptcy of the transferor. The surrender of control has the following implications:

- The transferee is independent with respect to the use of financial asset transferred.
- The transferee is independent with respect to transfer the financial asset to some one else.

Special Issues in Transfer of Financial Assets

Transfers that Qualify for Derecognition

If an entity transfers a financial asset that is considered for derecognition completely but the entity continues to retain the right to service the financial asset so transferred then either a servicing asset or servicing liability is to be recognized in the books of accounts. If servicing fee to be received is less than the cost of servicing then the difference should be recognized as a **servicing liability valued at its fair value.** On the contrary, when servicing fee to be received is more as compared to the cost in servicing the asset the difference should be recognized as a **servicing asset at its fair value.**

Partial Transfers that Qualify for Derecognition

If an entity transfers only a separable and individually valued part of a larger financial asset then *such part should be derecognized* and profit or loss on such transfer should be transferred to profit and loss account. The remaining part of the larger asset is to be valued at the proportionate carrying amount belonging only to the part that has not been transferred.

Accounting Effect of Derecognition

Profit or loss on the derecognition of a financial asset or a part of it that has been transferred should be *transferred to profit and loss account*. The profit or loss is the difference between the consideration received (duly adjusted for any cumulative gain or loss that might have been adjusted to equity account in the form of revaluation reserve in the past) and the carrying amount.

Transfers that do not Qualify for Derecognition

If the entity has not transferred significant risk and reward related to the financial asset under consideration then it *should not be derecognized*. And any consideration received by the entity for the transaction related to the financial asset should be recognized as a financial liability.

Accounting Effect

The income received or expense incurred relating to such financial asset should be transferred to profit and loss account with due adjustment for any obligation against such transfer.

Continuing Involvement in Transferred Assets

When an entity neither transferred nor retained significant risk and reward relating to the ownership of a financial asset but it retains the control over the asset so transferred then **complete derecognition** is not suggested. The entity should continue to recognize the financial asset only to the extent of its continuing involvement in the asset. The transferring entity is exposed to the extent it results into the variability in the value of asset transferred.

CONTINUING INVOLVEMENT IN TRANSFERRED ASSET AND ACCOUNTING EFFECT

Forms of Continuing Involvement in Transferred Asset

Continuing involvement in transferred asset may be in the form of a guarantee or an option. The accounting effect for these is as follows:

Guarantee as Continuing Involvement

When continuing involvement of the entity is in the form of guarantee then the extent of continuing involvement is the lower of (i) carrying amount of the asset and (ii) the maximum amount of the consideration received that the entity would be required to repay to meet the guarantee.

Option as Continuing Involvement

If a call option is purchased on the asset so transferred then the continuing involvement of the entity is up to the amount of the asset that it might purchase upon the exercise of the option. If a put option is purchased then the amount for valuing continuing involvement is lower of (i) fair value of transferred asset and (ii) exercise price of option.

Sale of investment covered through the purchase of put option results into continuing involvement in the transferred asset.

Accounting for Continuing Involvement in Transferred Asset

Measurement of Financial Assets and Financial Liabilities

(i) The entity should continue to recognize the asset so transferred at the amount discussed above

(ii) The associated liability is to be recognized and measured as follows:

- It should be measured at the amortized cost of the rights and obligations retained by the entity if the asset transferred was maintained at the amortized cost.

- It should be measured at the fair value of the rights and obligations retained if the asset transferred was maintained at the fair value.

Recognition of Income and Expense

The entity should recognize the income, if any and expense, if any to the extent of its continuing involvement in the transferred asset.

Recognition of Gain or Loss

Gain and losses related to changes in the carrying amount of financial liabilities should be recognized as income or expenses in the profit and loss account.

ACCOUNTING FOR NON-CASH COLLATERAL IN A TRANSFER OF FINANCIAL ASSET

While obtaining a loan from a bank or financial institution the borrower is required to pledge its asset as a collateral security to bank or financial institution. The purpose of such collateral is to provide the safety net against borrower's default or bankruptcy. When collateral is offered in the form of shares or debentures it is termed as **non-cash collateral**. Both transferor (borrower) and transferee (lender) should recognize it as follows:

> **Collateral** means providing a particular asset as a security for the borrowed amount.

Common Practice

The common practice is that the transferor should continue to recognize the asset as its asset but marked exclusively under the heading pledged assets. The transferee should not recognize the asset so received in its balance sheet.

Exceptional Cases

Certain cases with respect to non-cash collateral should be dealt with as follows:

(i) In case transferee has the contractual right or right envisaged by some law/statute or by industry practices to sell or re-pledge such asset then transferee is required to reclassify that asset in its balance sheet. By specifying it as a loaned asset or asset pledged to secure the loan.

(ii) If transferee sells the asset pledged to it but has the obligation to return the asset eventually then it should recognize it as a liability at fair value for the returnable collateral.

(iii) If transferor has defaulted with respect to the loan taken then it should derecognize such collateral asset in its balance sheet.

(iv) Upon default by transferor the transferee recognize the collateral asset received as an asset at initial fair value, if the transferee has already sold such asset and recognized the corresponding liability for returnable collateral then such liability should be derecognized by transferee.

DERECOGNITION OF FINANCIAL LIABILITIES—AS-30 AND IAS-39

Derecognition

A financial liability should be derecognized, i.e., eliminated from the balance sheet of the entity as soon as the liability is discharged or it ceases to exist by the imposition of a low/statute or market practices.

Accounting Implication

Recognition of profit or loss as well as recognition of certain other financial liability or derecognition of financial/other asset, if any on account of derecognition should be provided as follows:

Effect on Liabilities and Assets

(i) If an existing financial liability is settled by the exchange of some other financial asset then asset given up should be derecognized as per the provisions applicable for such asset.

(ii) If an existing financial liability is settled by the exchange of a new financial liability, for example issue of new debentures to discharge the old debentures. In this case, existing financial liability should be derecognized and new financial liability so issued or assumed should be recognized as per the provisions applicable for now assumed financial liability.

Effect on Profit and Loss

(i) The difference between the carrying amount of the liability derecognized and the net amount of cash paid to settle the liability is to be transferred to profit and loss account.

(ii) The difference between the carrying amount of the liability derecognized and the asset given up in exchange for such derecognition is to be transferred to profit and loss account only after making an adjustment to revaluation reserve related to asset given up.

(iii) The difference between the carrying amount of liability derecognized and the initial recognized value of new liability assumed should be transferred to profit and loss account.

USEFUL INFO

Partial Derecognition of Financial Liability

If a financial liability is not derecognized completely but only a part of it is derecognized then the carrying amount of the whole financial liability should be adjusted for the amount related to the part so derecognized. Similarly, the profit or loss related to the derecognized part is to be transferred to profit and loss account.

Example 6 On April 1, 2000 Simplox Limited (SL) issued 10% convertible debentures of face value ₹ 200 each. Each debenture is convertible into four equity shares after five years from the date of issue. Had SL issued redeemable debentures then it would have offered an interest rate of 11% on these debentures. Show how it is to be recognized initially. At the end of three years' market price of these debentures is ₹ 250 and company offer to debenture holder to accept ₹ 250 per debenture as redemption amount. If debenture holders accept the offer, then how should it be provided in the books of accounts?

Solution ***Initial recognition***

The debt portion is to be recognized at the present value @ 11% per annum of future interest payment and notional maturity value had it been a redeemable debenture.

(i) Financial liability: debt obligation at ₹ 192.52 (73.92 + 118.60) per debenture Present value of interest payments of ₹ 20 per annum per debenture over five years using 11% rate of interest is ₹ 73.92 per debenture and present value of notional redemption value is ₹ 118.60.

(ii) Equity component: ₹ 7.48 per instrument

Recognition after three years

Here financial liability and equity component recognized earlier are to be derecognized as company is repaying the claim for both the components.

Carrying amount (also the settlement amount) of financial liability, i.e., per debenture at the end of three years.

Present value of remaining two interests and hypothetical redemption amount, i.e., repayment of face value. It will be ₹ 196.66 ($20 \times 1.713 + 200 \times 0.812$)

Carrying amount of each equity instrument attached to each debenture ₹ 7.48

The total payment of ₹ 250 per debenture is to be allocated as ₹ 196.66 for the redemption of debt component and ₹ 53.34 as relinquishing of equity component. The journal entries would be as follows:

Debt component a/c	Dr.	192.52	
Profit and Loss a/c	Dr.	4.14	
To Bank a/c			196.66

[derecognition of debt the difference (196.66 − 192.52) between carrying amount and settlement amount is the debt settlement expenses recognized to profit and loss account]

Equity component a/c	Dr.	7.48	
Reserve and Surplus a/c	Dr.	45.86	
To Bank a/c			53.34

[The difference between the carrying amount and settlement amount ₹ 45.85 (53.34 − 7.48) has been recognized as loss to equity funds by debiting to reserve and surplus.]

RECLASSIFICATION OF FINANCIAL ASSET AND FINANCIAL LIABILITY

Introduction

Initially these assets and liabilities are classified by putting these into different categories like (i) at fair value through profit and loss, (ii) held for sale (iii) held till maturity, and (iv) loans and receivables. Normally, once a financial instrument classified should not be reclassified but there are certain exceptional cases when reclassification is required either by law/statute or by practice or by change in the accounting policies. These cases of reclassification are discussed as follows.

Reclassification Conditions

(i) Due to change in the intention/ability of the entity a financial instrument may be reclassified as held for sale from the previous classification as held till maturity. Such change is to be effected only when it is justified for proper presentation/measurement.

(ii) Whenever for the complete financial instrument or separately identifiable part of it recognized as held to maturity but now fails to meet the conditions for such classification then it should be reclassified as held for sale or at fair value through profit and loss, whichever may be applicable.

(iii) Now if a reliable measure of fair value is available for a financial instrument then such instrument should be classified as financial instrument at fair value; however, such instrument might have been recognized earlier at carrying cost.

(iv) When due to certain reasons a reliable measurement of fair value of a financial instrument is not available continuously during two preceding financial years then such financial instrument should be reclassified as financial instrument at amortized cost.

EXAMPLE 7 On April 1, 2010 a co-operative society has 300 members each contributing 200 units of face value ₹ 10 each. The bye-laws of the society provide that on account of redemption of units number of members shall not fall below 120 with each contributing minimum 200 units. On April 1, 2011 society makes an amendment in its bye-laws thereby increase all time minimum number of members to 200 with each contributing minimum 200 units. Show how these are to be recognized and reclassified.

SOLUTION (i) On April 1, 2010 total value of units is Rs 6,00,000 (60,000 of ₹ 10 each) out of which 24,000 units (120 × 200 of ₹ 10 each) amounting to ₹ 2,40,000 is to be recognized as equity component because it represents residual claim. Rest of the amount of ₹ 3,60,000 is to be recognized as financial liability. (ii) On April 1, 2011 initial recognition as discussed in (i) should be re-classified. Now ₹ 4,00,000 (40,000 units of ₹ 10 each) should be recognized as equity component and remaining ₹ 2,00,000 as financial liability.

Measurement of Financial Instruments and Gain or Loss on Reclassification

Gain or loss on account of reclassification as discussed above should be accounted for as follows:

When Fair Value Asset Becomes Asset Held to Maturity

When an instrument earlier classified at fair value and now it is classified at amortized cost (held to maturity) then its present carrying cost should be the current amortized cost. Previous gain or loss already adjusted to equity account should be accounted for as follows:

- The gain or loss should be amortized using effective interest rate method over the remaining life till maturity.
- At the time of impairment of such financial instrument gain or loss, if any already adjusted in the equity account (revaluation reserve) should be transferred to profit and loss account.

When Maturity of the Asset Now Reclassified is not Measurable

In this case, gain or loss already adjusted to equity account (revaluation reserve) should be continued as it was done previously, till the time it is sold or impaired. The gain or loss at the time of impairment or derecognition should be transferred to profit and loss account including the gain or loss previously adjusted in equity account.

GAINS AND LOSSES FROM FINANCIAL INSTRUMENTS

The following provisions are applicable for the gains and losses relating to all the financial instruments, *except* instrument with **hedging** relationship:

(i) Profit or loss relating to a financial instrument 'held at fair value through profit or loss' should be transferred to profit and loss account.

(ii) A gain or loss on financial instrument 'held-for-sale' should be directly recognized to equity account; however, gain or loss at the time of derecognition or impairment should be transferred to profit and loss account including accumulated gain or loss already recognized in the equity account.

(iii) A financial instrument maintained at 'amortized cost' should be amortized through profit and loss account using effective interest rate method, and gain or loss arising on account of derecognition/impairment should be recognized to profit and loss account.

(iv) For financial instruments recognized using settlement date accounting the change in the fair value of the asset during the transaction date and settlement date should not be recognized.

Example 8 On January 1, 2010 Subodh Limited (SL) purchased a futures with quantity 200 shares of XYZ @ 120 per share with twelve months to expiry. On March 31, 2010 market spot market price of XYS is ₹ 140 per share. Show how this futures is to be recognized.

Solution The initial recognition of futures contract is to be done as financial asset namely 'futures bought' and 'obligation to futures contract' with at ₹ 24,000 (200 × 120) each. On March 31, 2010, profit of ₹ 20 per share on futures is to be recognized as an asset by showing variation in the initial margin account with corresponding credit to reserve and surplus for profit on futures contract.

IMPAIRMENT AND UNCOLLECTIBILITY OF FINANCIAL ASSETS

Recognition

Impairment of a financial asset should be recognized at each balance sheet date by evaluating the evidences leading to the impairment. The evidences leading to impairment may be as follows:

(i) A default or breach of contract by the issuer/obligator to financial instrument including significant deterioration in the financial position of the issuer/obligator.

(ii) A grant of irrevocable concession by the holder of financial asset (lender) to the obligator (borrower) to financial asset.

(iii) Most likely bankruptcy or financial reorganization of the obligator to financial instrument.

(iv) Due to financial difficulties, an active market for the financial asset under consideration no longer exists.

(v) The data observed for the identification of objective evidences for impairment indicate a measurable decline in the estimated future cash flows from the financial assets (individually or as a group) since the initial recognition of such assets; however, such decline might not have been recognized yet, the indicator include:

(a) Adverse change in the repayment capacity of the borrower/obligator.

(b) National or local economic conditions making an association with the default on the asset under consideration.

USEFUL INFO

Pieces of Evidence That do not Lead to Impairment

Impairment of financial assets should not be considered if the following things are observed

(i) If active market no longer exists for the instrument under consideration because of the fact that its trading has been ceased in the market.

(ii) A downgrade of credit rating of obligating entity to financial asset/instrument.

(iii) A decline in the fair value of a financial asset below its cost.

(iv) Decline in the fair value of debt instruments on account of interest rate risk.

Accounting for Impairment Loss

Upon recognition of impairment of a financial asset the loss for different categories of financial assets should be considered as follows:

Financial Assets Carried at Amortized Cost—Loans and Receivables and Assets Held to Maturity

For these assets, the difference between the carrying amount and the present value of estimated future cash flows discounted at the original effective interest rate initially used for discounting the same asset should be recognized in the profit and loss account. If objective evidence about the impairment is not observed but only a part of the whole asset may be at risk then an adequate amount of provision should be made by debiting profit and loss account. Provision so created should be used to write off impairment loss that might take place eventually.

At a subsequent date, an evidence is observe about the reversal or decrease of impairment loss recognized earlier then previously recognized loss should be reversed directly or through an allowance account. Such reversal of impairment loss should not result into an increase in the carrying cost of the financial asset under consideration more than the total amount of impairment loss recognized till date.

Short-term Receivables Carried at Original Invoice Amount—Accounts Receivables

These are the assets that are recognized at the undiscounted value, i.e., at the monetary value recognized at the time of initial recognition of financial asset. The impairment loss is to be recognized by comparing current carrying cost and undiscounted amount of future cash inflow. Such loss is to be debited to profit and loss account directly or through an allowance account.

Subsequently, when evidences support the reversal of impairment loss recognized earlier then the accumulated impairment loss recognized till the date should be reversed directly or through allowance account to profit and loss account.

Financial Assets Carried at Cost—Unquoted Equity Instrument

Subject to the existence of impairment evidence the impairment loss is equal to the difference between the current carrying cost and the present value of estimated future cash flow resulting from similar financial assets should be recognized as a loss to profit and loss account. *Impairment loss once recognized should not be reversed subsequently.*

Financial Assets Available-for-Sale

Upon recognizing the impairment after observing objective evidences the accumulated amount of loss, if any recognized to equity account should be transferred from equity account to profit and loss account. The amount of accumulated loss now to be transferred from equity account to profit and loss account should not exceed the difference between the acquisition cost and fair value measured at present after adjusting the losses previously transferred to profit and loss account.

The impairment loss relating to an **equity instrument** recognized to profit and loss account should *not be reversed* through the profit and loss account, the implied reasons for not reversing such loss is because it gets recognized spontaneously in the fair value of the equity instrument at the subsequent measurement date.

The impairment loss relating to **debt instrument** recognized to profit and loss account *should be revered* only to the extent of loss recognized to profit and loss account previously.

Recap 1

So far, we have discussed the following topics:

- Financial Instruments.
- Recognition, Measurement and Derecognition of Financial Assets
- Recognition, Measurement and Derecognition of Financial Liabilities
- Classification and Re-Classification of Financial Assets and Financial Liabilities

Self-assessment

1. Explain the concept of compound financial instrument.
2. Discuss when and how financial assets and financial liabilities should be derecognized.
3. Discuss how profit/loss on subsequent valuation of financial assets and financial liabilities is accounted for in books of accounts.

The following topics will be delved into next:

- Derivatives—Option, Futures and Forward
- Hedging
- Securitization
- Foreign Exchange Transactions
- Recognition of Profit/Loss on Account of Exchange Rate Difference
- Case

ACCOUTING FOR FUTURES CONTRACTS/TRANSACTIONS

A **futures contract** is a transaction between two parties to buy or sell the underlying asset for which all the parameters are decided on the date of transaction for settlement to be executed on pre-decided future date. Both the buyer and the seller of the futures contract have rights as well as obligation with respect to the settlement of the transaction on pre-decided value date. The **underlying asset** may be an equity share, debenture, commodity, bullion—gold and silver, currency, or an index.

As certain parameters, such as underlying asset, lot size, value month and value date, margin deposit and mode of settlement are *regulated by the exchange* under whose control such futures transaction is traded; therefore, a futures transaction is a **standardized transaction**.

Features

A futures contract has the following features:

Exchange Regulated Features

- Underlying asset—exchange announces the list of underlying asset for futures.
- Lot size—the minimum quantity and its multiple for trading and settlement.
- Value month and value date – The duration of futures contract and the expiry date
- Margin deposit—security deposit with the exchange by both the parties.
- Mode of settlement—physical or cash difference settlement on value date.

Mutually Negotiated Features

- Strike price—price at which settlement is to be done for buying/selling the underlying asset.
- Selection of underlying asset and number of lots—as agreed by both the parties.
- Selection of value month and value date—as per the requirement of both the parties.

Illustrations 1. On Feb. 4, 2011, DD Ltd (DDL) enters into a futures contract with XL Ltd (XLL) to buy one lot (200 shares) on equity shares of Tata Motors with strike price ₹ 1,200 per share for the month of May 2011 through a broker on the trading system of BSE. As per the current rules, the value date is the last Thursday of the value (expiry) month and in this case it will the last Thursday of May 2011. Here DDL has the right as well as obligation to buy 200 shares of Tata Motors from XXL limited on the value date by making a payment of ₹ 1,200 per share. Similarly, XXL has the right as well as obligation to deliver 200 shares of Tata Motors by receiving ₹ 1,200 per share on the value date. Here both the parties are required to deposit initial margin with the exchange that is adjusted for mark-to-market losses/profits on daily basis.

Margin Deposit—Safety Net for Counter Party Default Risk

Transactions in shares, debentures and derivatives, such as futures and options are executed on a recognized stock exchange to avoid counter party default risk. The transactions on a recognized stock exchange are executed through the members of exchange called **brokers**. To ensure the coverage of counter party default exchange makes the rules for margin deposit by each party to his/her broker and in turn broker deposits the margin money to stock exchange. Subsequently, if any of the parties makes a default in the settlement of the transaction the margin deposit maintained by the defaulting party is used to cover such losses. The unutilized margin amount is returned back to respective parties depositing the margin money.

Initial Margin Deposit

Both the parties to futures transaction are required to deposit initial margin equal to certain percentage of the contract value. In Indian stock exchange, it is 20% of the transaction value recognized initially.

Mark-to-Market Margin

The initial margin account of each of the party is adjusted for hypothetical loss or profit on daily basis. The hypothetical loss/profit is recognized as if every day is the settlement day and if parties default in meeting their obligation then what will be loss or profit for the parties. The **hypothetical loss** or **profit** is calculated by taking the difference between the strike price and the daily closing spot price of the underlying asset. If it is a loss for one party the similar is the profit for another party. Party whose margin account is adjusted for loss is required to replenish the amount in its margin account to maintain it equal to the initial margin amount.

2. **Initial Margin** In the previous example of futures contract, the initial transaction value is ₹ 2,40,000 (1,200 × 200) both DDL and XXL are required to deposit ₹ 48,000 (20% of 2,40,000) each with their respective brokers and in turn brokers will maintain this margin money in their respective margin account maintained with the stock exchange. Now on daily basis margin account of DDL and XXL will be adjusted for hypothetical loss/profit. This will be called **mark-to-market margin**.

3. **Mark-to-Market Margin** It will be calculated by considering every day's spot closing price of Tata Motors. Mark-to-market margin is calculated as follows:

Date	Spot market Price (₹)	Profit/loss for buyer (₹)	Adjustment in margin account of buyer (₹)	Mark-to-market margin for buyer's account (₹)	Adjustment in margin account of seller (₹)	Mark-to-market margin for seller (₹)
07/02/11	1240	+ 40((1240 −1200)	8,000 (40 × 200)	Nil	−8,000	8,000
08/02/11	1256	+16 (1256 − 1240)	3,200 (16 × 200)	Nil	−3,200	3,200
09/02/11	1210	− 46(1210 − 1256)	−9,200 (−46 × 200)	Nil; still there is overall profit	+9,200	Nil
10/01/11	1160	− 50 (1160 − 1210)	−10,000(−50 × 200)	8,000	+10,000	Nil

Explanation

1. Here after every adjustment of profit/loss the balance in respective margin account must be maintained equal to initial margin deposit.
2. Profit for buyer means loss for seller and vice versa.

Accounting for Futures Contracts

Accounting for futures contracts is done by adopting the following principles:

Principle 1

The initial recognization and measurement of a futures contract should be done at the transaction value (lost size × strike price) as an asset with corresponding liability in the books of both the buyer and the seller.

Principle 2

Subsequent measurement for open contracts on the reporting date is to be done by recognizing profit/loss or by creating reserve/provision account for the hypothetical profit or loss as applicable. This is done by showing adjustment for mark-to-market margin account also.

Principle 3

On the value date, i.e., expiry date profit or loss is recognized by transferring the net gain or net loss to profit and loss account.

ACCOUNTING FOR OPTION CONTRACTS

Meaning

An option contract entitles the buyer of the option to buy or sell the underlying asset at the pre-decided exercise price on or before the expiry date. Buyer of the option also called **option holder** makes upfront payment of premium—price of the option to obtain the right to exercise the option without any obligation. Seller of the option also called **option writer** has all the obligations without any right. All the parameters of the option contract, such as underlying asset, exercise price, expiry month and premium are decided on the date of contract. An option contract may be a call option or a put option. When buyer of the option has the right to buy the underlying asset it is a **call option**. On the contrary, when buyer of the option has the right to sell the underlying asset it is a **put option**. When the option is 'in the water' (in case of call option spot price is greater than exercise price and in case of put option spot price is less than exercise price), the buyer of option will exercise the option. Otherwise, the option contract expires by the end of expiry date.

An option contact may be American option or European option. An **American option** can be exercised on any day up to the expiry date, whereas **European option** can be exercised only on the expiry date. Every option contract is recognized as a product or contract series, which is as follows:

Contract Series—Contract Specification of Option Contract

Different specifications of an option contract include the following parameters:

Type of option Call American (CA), Put American (PA), Call European (CE), Put European (PE)

Underlying asset The share on which option contract is taken.

Lot size Minimum quantity and its multiple for which contract can be executed.

Expiry The expiry month and date at the end of which the buyer's right expires.

Exercise price The price at which the buyer of the option can exercise his/her right. It is also called **strike price**.

Premium It is the price of the option contract paid upfront by the buyer of the option to the seller of the option.

Margin deposit The seller of the option deposits the initial margin that is subject to mark-to-market margin.

Product series is written as—type of option, underlying asset (lot size), expiry, exercise price.

Margin Deposit

Under an option contract, the buyer of the option has all the rights without any obligation. Therefore, there is no default risk on his/her part and he/she is not required to deposit any margin money. The seller of the option has all the obligations without any rights. Therefore, there might be a loss due to his/her default and he/she is required to deposit the margin money.

> **Margin deposit** is a safety net to cover counter party default risk.

Initial Margin

The seller of the option is required to deposit initial margin that is equal to 20% of the transaction value. The **transaction value** of one lot is calculated by multiplying lot quantity with the exercise price.

Mark-to-Market Margin

Seller's margin account is adjusted for hypothetical profit or loss on daily basis by considering the price of the option—premium. If the premium is increased as compared to the initial premium then it is a loss for the seller of the option and he/she is required to deposit it as 'mark-to-market' margin. But when the premium decreases as compared to the initial premium then it is a profit for the seller of the option and credited to his/her margin account.

> **Mark-to-market margin** is like daily settlement of open position in derivatives.

Accounting Effect

For Open Contracts

In the books of buyer of the option

- The premium paid is recognized as cost of the option and initially it is recognized at the amount of premium paid for it.
- At the end of the year, the loss or profit on open option contracts is recognized in profit and loss account.
- The option account is shown as a current asset at the initial cost after adjusting profit or loss, if any to it.

Open interest (position) in futures and option means such transaction that has neither been squared up nor expired.

In the books of seller of the option

- The premium received is recognized as a liability and initially it is recognized at the amount of premium received.
- At the end of the year loss or profit on open option contracts is recognized in profit and loss account.
- The option account is shown as a current liability at the initial cost after adjusting profit or loss, if any to it.
- Margin deposit is shown as an asset.

A **futures contract** never expires without generating any value but an **option contract** might expire without generating any value.

On Expiry Date

- For the buyer of the option, it results into a profit if premium on the expiry is more than the premium paid by him/her; otherwise, it is a loss.
- Profit for the buyer means a loss for the seller and vice versa.
- Both the buyer and the seller transfer the profit or loss as the case may be to profit and loss account.

Example 9 Sachkhand Enterprises (SE) buys the following option contract on Feb. 4, 2011 from Naam Enterprises (NE):

(i) CA, RIL (300), April 2011, 1,050, @ ₹ 29.

(ii) PA, Tata Motor (500), April 2011, 1,250, @ ₹ 40. He makes the payment of premium for both the option contracts. On March 31, 2011 at the time of annual closing the premium for these options was ₹ 60 and ₹ 12, respectively. Show how accounting entry will be executed in the books of accounts.

Solution

In the books of SE

Feb. 4, 2011	Call option a/c	Dr.	8,700	
	To Bank a/c			8,700
	(purchase of call option—CA, RIL (300), April 2011, 1,050, @ ₹ 29)			
Feb. 4, 2011	Put option a/c	Dr.	20,000	
	To Bank a/c			20,000
	(purchase of put option—PA, Tata Motor (500), April 2011, 1,250, @ ₹ 40)			
March 31, 2011	Call option a/c	Dr.	9,300	
	To Profit on call option			9,300
	(being gain {(60 – 29) × 300}on call option)			

March 31, 2011	Loss on put option a/c	Dr.	14,000	
	To Put option a/c			14,000
	(being loss {(12 – 40) × 500} on put option)			

Explanation On March 31, 2011, the premium on call option has increased to ₹ 60 resulting into a profit of ₹ 31 per share; whereas on put option, the premium has decreased to ₹ 12 resulting into a loss of ₹ 28 per share.

Both profit and loss should be transferred to profit and loss account. Call option account with ₹ 18,000 (8,700 + 9,300) and put option account with ₹ 6,000 (20,000 – 14,000) are to be shown as a current asset in the balance sheet.

In the books of NE

Feb. 4, 2011	Bank a/c	Dr.	8,700	
	To Call option a/c			8,700
	(sale of call option—CA, RIL (300), April 2011, 1,050, 29)			
Feb. 4, 2011	Bank a/c	Dr.	20,000	
	To Put option a/c			20,000
	(sale of put option—PA, Tata Motor (500), April 2011, 1,250, 40)			
March 31, 2011	Loss on call option a/c	Dr.	9,300	
	To Call option a/c			9,300
	(being loss {(29 – 60) × 300}on call option)			
March 31, 2011	Put option a/c	Dr.	14,000	
	To Profit on put option a/c			14,000
	(being profit {(40 – 12) × 500} on put option)			

Explanation On March 31, 2011, the premium on call option has increased to ₹ 60 resulting into a loss of ₹ 31 per share; whereas on put option, the premium has decreased to ₹ 12 resulting into a profit of ₹ 28 per share.

Both profit and loss are to be transferred to profit and loss account. Call option account with ₹ 18,000 (8,700 + 9,300) and put option account with ₹ 6,000 (20,000 – 14,000) are to be shown as a current asset in the balance sheet.

Note: Margin deposit is to be shown as current asset.

SECURITIZATION

Securitization is the process to issue debt instruments—debentures by pooling particular type of assets, such as receivables or loan accounts. The debentures so issued are secured against the cash flow likely to be generated from the pooled assets. The routine servicing of the debt instrument issued is done by the regular cash inflow (interest and loan installment) from the pooled assets. In the event of default by the obligating party to pooled asset, the amount realized from by selling the pooled asset is used to repay the amount due on debentures.

The assets that are usually pooled are the accounts receivables, loan portfolio of a bank, credit card receivables. The party that pooled these assets and assigns to an external agency for the purpose of issuing securitized debt instruments is called **originator**. In these cases, the seller and the bank are the originators.

Process

The mechanism to issue securitized debt instruments is as follows:

Step One

The originator assigns the pooled assets to an agency called **special purpose vehicle** (SPV).

Step Two

SPV issues debentures to public against the security of the pooled assets.

Step Three

Interest realized from the pooled assets is used to service the debentures.

Step Four

The maturity amount realized from the pooled assets is used to redeem the debentures.

Step Five (in case of default)

When due amount from the pooled assets cannot be recovered, the SPV has the right to sell the relevant property covered under the pooled asset and the amount so realized is used to service the debenture and for the redemption of debenture.

Securitization is the mechanism to issue debt instruments on the pool of receivables or a loan portfolio.

Types of Securitized Debt Instruments

Securitized debt instrument, also called **securitized debt obligation,** issued against the pooled asset can be of the following types:

Collateralized Pass through Debt Obligation

These debt instruments are secured only against the security of the pooled assets and do not carry any other security.

Collateralized Backed Debt Obligation

These debt instruments are secured primarily against the security of the pooled assets; in the event of any shortfall, the shortfall is like unsecured debt for the originator.

Accounting Effect

Indian GAAP as well as IAS does not provide for any specific guidelines for the recognition, measurement and derecognition of securitized assets. However, accounting practices indicate that if securitization is considered as sale of pooled asset then it should be derecognized as per the provisions of derecognition of assets under IAS-39 and AS-30. If securitization is not considered as sale of pooled assets then the debentures so issued should be recognized as **secured debt obligation**.

ACCOUNTING FOR HEDGING

To hedge implies minimization or elimination of risk associated with certain financial asset or financial liability. **Hedging** can be defined as a strategy to counter balance or eliminate risk related to a hedged item, such as portfolio of shares, debentures or commodity, loan portfolio and others. Hedging is usually done with the help of a derivative contracts—-options, futures, forwards or swaps. Hedging strategy might result into a perfect hedge or partial hedge against the risk. The commonly used strategies are as follows:

- Hedging through stock option and stock futures.
- Hedging through index futures and index options.

Depending upon the nature of hedged item, there can be **short hedge** or **long hedge**.

Accounting for Hedging

IAS-39 and AS-30 contain the provisions concerning recognition, measurement and derecognition of hedging instruments and related hedged items.

Hedging is the process of counter balancing the risk arising from a liability/ asset.

Types of Hedge

Fair Value Hedge

A **fair value hedge** item is the one the fair value of which changes on account of changes in certain parameters, such as interest rate, inflation rate or exchange rate. Such as a bond portfolio the fair value of which has an inverse relationship with the interest rate or prevailing yield curve in the market. An entity holding such hedge items can use interest rate floors and caps to hedge the risk related to hedge item.

Cash Flow Hedge

A **cash flow hedge** item is the floating rate or fixed rate loan that is subject to changes in the interest rate. The cash flow related to this loan portfolio can be hedged with by entering into interest rate swap, interest rate caps or floors. By entering into such hedging strategy, the cash flow relating to the loan portfolio can be hedged. Similarly, a foreign currency loan portfolio is subject to currency risk and cash flow resulting from such loan portfolio can be hedged by entering into **currency swap** or **loan swap**.

FULL HEDGE VS PARTIAL HEDGE

Full Hedge: A hedging strategy that provides 100 percent coverage against the expected variation in the value of hedged item is called **full hedge.** Under this, the quantity of hedging instrument exactly equals the quantity of hedged item.

Illustration: An entity holding 100 shares of Infosys buys put option contract on Infosys for a contract size of 100 shares will result into full hedge.

Partial Hedge: A hedging strategy that provides less than 100 percent coverage against the expected variation in the value of hedged item is called **partial hedge.** Under this, the quantity of hedging instrument is less than the quantity of hedged item.

Illustration: If an entity holding 300 shares of Tata Motors Ltd buys put option on Tata Motors Ltd for 200 shares, then this will be a partial hedge.

Initial Measurement

- Fair value hedge is measured initially at the market value—quoted or unquoted at the time of entering into the hedging arrangement.
- Cash flow hedge is measured initially at the present value of future cash flows using effective interest rate.

USEFUL INFO

Effectiveness vs Ineffectiveness of Hedge
A hedge is effective if it provides a complete off-setting against the variation in the future cash flow relating to hedge item. If a hedge does not provide complete off-setting against the variation in the future cash flow relating to hedge item then the proportion against which hedging is provided is called **effective hedge** and the uncovered proportion against which no hedge is provided is termed **ineffective hedge.**

Recognition of Profit or Loss on Hedge

For Fair Value Hedge

- Profit or loss at the time of subsequent measurement is to be transferred to profit and loss account at each measurement date.
- The carrying amount of hedged items is adjusted for the profit or loss.

For Cash Flow Hedge

- The proportion of profit or loss relating to effective portion of the hedge should be recognized in the comprehensive income and not in the profit and loss account.
- The proportion of profit or loss relating to ineffective portion of the hedge should be recognized in the profit and loss account.

ACCOUNTING FOR OPTION CONTRACTS, FUTURES CONTRACTS AND HEDGING—INDIAN GAAP

Accounting standard AS-30 provides the provisions for the recognition, measurement, derecognition and accounting for option contract, futures contracts and hedging instruments, such as interest rate swaps, interest rate caps and floors.

FINANCIAL INSTRUMENTS AND FOREIGN EXCHANGE RATES

In the recent past, there existed no direct linkage between different financial instruments as discussed in the previous section and foreign exchange rate. But in the present scenario when whole world has become a global village and companies frequently issue different financial instrument that are either denominated in foreign currency or issued in foreign country. At the same time, every company is entering into global market; therefore, it becomes important for every business executive, specially accounts executives to know about the changes in foreign exchange rates.

CHANGES IN FOREIGN EXCHANGE RATES

A business entity may carry certain activities involving foreign exchange in two different ways—first, it may have business transaction in foreign currency; second, it may have business operations abroad. Both of these activities either involve flow of foreign currency or require the settlement of the claim in foreign currency. To incorporate these transactions in the annual accounts, these should be translated into reporting currency of business entity.

The main issue in accounting for these transaction and business operation is the decision about the exchange rate to be used to convert foreign currency-denominated transactions into reporting currency and recognition of financial effect of changes in exchange rates.

FUNCTIONAL CURRENCY, REPORTING CURRENCY AND FOREIGN CURRENCY

Functional Currency: It is the currency of the primary economic environment within which the business entity performs its business activities. This is also called **measurement currency**. Here primary economic environment is the one that generates cash flow on account of foreign business operations. Therefore, the **functional currency** is the currency in which sales prices of goods and services are denominated and settled also.

Reporting Currency: It is the currency in which financial statements are presented. It is also called **presentation currency**.

Foreign Currency: The currency other than the functional currency of the business enterprise.

Foreign Currency Transactions—Initial Recognition

Introduction

A **foreign currency transaction** is that business transaction that is denominated in a foreign currency or requires settlement of the transaction in a foreign currency. These include the following:

- Buys and sells foreign currency denominated goods/services
- Borrowing/lending of funds payable or receivable in foreign currency
- Acquires or disposes assets and settles liabilities denominated in foreign currency
- Becomes directly or indirectly a party to foreign currency denominated contract.

EXAMPLE 10 Sunshine Hotels Limited (SHL) extends boarding and lodging facility to the business executives of multinational companies for which it receives payment in the US dollar ($). On January 1, 2011 it raised a bill for $ 30,000 to one of its customers. On this date, the exchange rate for Indian rupee and US $ was ₹ 45.10 per $. It immediately receives a credit of ₹ 13,53,000 (30,000 × 45.10) its account through online payment. Had it extended a credit facility of two months and exchange rate on March 1, 2011 moved down to ₹ 44.90 per $ then what changes would have happened.

SOLUTION Here if payment is settled on January 1, 2011 then there is no risk on account of exchange rate fluctuation. But in the later case SHL would realize only ₹ 13,47,000 instead of ₹ 13,53,000. This results into a loss of ₹ 6,000 due to exchange rate fluctuation. Such loss if hedged through derivatives can be covered.

Initial Recognition

Initial recognition of a foreign currency transaction should be done by translating the transaction into the reporting currency using exchange rate applicable between foreign currency and reporting currency on the date of transaction. If an exchange rate that does not fluctuate widely an average rate for all the transaction taking place during a week or month can be used for the purpose of translation. However, an exchange rate that fluctuates very frequently then translation should be done by taking as far as possible actual exchange rate applicable for the date of transaction.

Foreign Currency Transaction—Measurement and Reporting at Subsequent Balance Sheet Date

At each balance sheet, measurement of foreign currency transaction is to be reviewed by considering the following provisions:

Monetary Items

Items, such as cash, receivables and payables are prominent monetary items. The carrying amount of these items is measured by using the accounting standards applicable for the recognition of these items. Translation into reporting currency is done as follows:

- These items should be measured and reported in presentation currency using the closing rate as on the date of balance sheet.
- If due to the circumstances, such as unrealistic exchange rate or difficulty in measurement of precise exchange rate the closing rate as mentioned above does not result into the reasonably accurate amount required to settle or to be realized from the monetary item under consideration then some difference rate should be used so as to have a near accurate amount of the monetary item.

Non-Monetary Items

Fixed assets, inventory items, investments are **non-monetary items**. Carrying amount of these items is measured by using the accounting standards applicable for the recognition of these items. Translation into reporting currency is done as follows:

- The items that are carried at the historical cost should be reported using the exchange rate that is applicable for the date of the transaction.
- The items that are carried at the fair value or similar type of valuation mechanism should be reported using the rate applicable for the valuation date.

Integral vs Non-integral Foreign Operation

A foreign business operation that is an extension of the business activities of the reporting entity is called **integral foreign operation**. Such as a foreign branch or franchise that sells goods that are supplied by the reporting entity and remits all the cash flow directly to reporting entity. This type of foreign operation has direct impact on the cash flow of reporting entity. The consequences of these operations on the reporting entity are that a change in the exchange rate affects the individual monetary items instead net investment in foreign operations.

In case of **non-integral foreign operation** of a business entity, the business establishment operating in the foreign country accumulates cash flow, monetary items, incurs expenses, generates cash flow, and even arranges funds for financing its operations in the local currency of the country of such non-integral foreign operation. In such case, the change in the exchange rate does not has direct impact on the cash flows; rather it affects net investment in non-integral operations.

Example 11 Diamond Jewellers Limited (DJL) has its foreign business operation in USA. The foreign business division disclosed jewellery costing US $ 10,000 as closing stock. The exchange rate on the date of purchase of these items was ₹ 46 per US $ on balance sheet date recoverable value of closing stock is US $ 9,900 and exchange rate is ₹ 45.50 per US $. Show how DJL should recognize it in the reporting currency.

Solution Initially, the item should be recognized at cost that is ₹ 4,60,000 (46 × 10,000) but on the balance sheet date its recoverable value is US $ 9,900; therefore, it should be recognized at US $ 9,900 and exchange rate ₹ 45.50 per US $ should be applied to convert the closing stock; therefore, the stock to be presented in the balance sheet at ₹ 4,50,450 (9,900 × 45.50).

RECOGNITION OF EXCHANGE DIFFERENCES

Translation of monetary and non-monetary items from functional currency to reporting currency results into a difference in the previously reported amount and the amount now reported or used to settle the transaction. Such exchange difference is to be recognized as follows:

For Monetary Items

- Exchange difference arising at the time of settlement of the monetary item should be transferred to profit and loss account for the period during which settlement is done.
- Exchange difference arising on account of reporting the item at a rate different from the rate used at the time of previous recognition/measurement should be recognized as an income or an expense in the period in which such difference arises.

Example 12 Taking the data of Example 10, show how exchange difference is to be recognized.

Solution The receivables to be recognized on January 1, 2011 stands at ₹ 13,53,000. On March 1, 2011, the amount realized in the account happens to be ₹ 13,47,000. The difference of ₹ 6,000 is to be recognized as loss to profit and loss account on this date.

Net Investment in a Non-integral Foreign Operation

Integral Foreign Operations

The individual items appearing in the financial statement of foreign operations should be translated as if all these transactions were executed by the reporting enterprise itself. Therefore, the provisions as applicable for monetary and non-monetary items as discussed earlier should be applied for these integral foreign operations.

Non-integral Foreign Operations

- Monetary as well as non-monetary assets and liabilities should be translated at the closing rate applicable for the accounting year.
- Income and expense items should be translated at the exchange rate on the date of transaction. The most practical rate is the average rate for the year is used.
- The amount of exchange rate difference should be accumulated in a foreign currency translation reserve till the time net investment in foreign investment is disposed.

Example 13 Convert the following trial balance of New York branch (NYB) of B Limited (BL) in Mumbai. Closing stock with the branch was \$ 600 B Limited showed NYB's account with Rs. 40,000 debit balance. In the books of BL branch, furniture appeared at ₹ 11,500. The exchange rate on March 31, 2010 was 46 and on March 31, 2011 it was 44, whereas average rate for the year was 45 per dollar.

Trial Balance as on March 31, 2011

Particulars	Debit Amount (\$)	Credit Amount (\$)
Opening stock	500	
Purchase and sales	2,050	4,000
Debtors and creditors	750	500
Bills receivables	225	
Bills payables		200
Wages and salary	150	
Office rent	200	
General expenses	250	
Furniture	300	
Cash at bank	1,475	
Account of B Limited, Mumbai		1,200
	5,900	5,900

Solution

Trial Balance as on March 31, 2011

Particulars	Exchange Rate ₹ per \$	Debit Amount (₹)	Credit Amount (₹)
Opening stock	46	23,000	
Purchase and sales	45	92,250	1,80,000
Debtors and creditors	44	33,000	22,000
Bills receivables	44	9,000	
Bills payables	44		8,800
Wages and salary	45	6,750	
Office rent	45	9,000	
General expenses	45	11,250	
Furniture	given	11,500	
Cash at bank	44	64,900	
Account of B Limited	given		40,000
Exchange difference reserve (balancing figure)			9,850
		2,60,650	2,60,650

Closing stock value at ₹ 44 per \$ the converted amount ₹ 26,400.

Example 14 On April 1, 2009 Wizex Limited (WL) issued foreign currency denominated debentures worth 1,00,000 US \$ the debentures with initial exchange rate ₹ 45 per dollar, these are redeemable in four equal installments at an interval of six months. The exchange rate on the respective redemption date was as follows:

On September 30, 2009, ₹ 46 per dollar; on March 31, 2010 ₹ 45.50 per dollar; on September 30, 2010 ₹ 45.25 per dollar and on March 31, 2011 ₹ 45.60 per dollar. Apart from the principle amount interest is to be paid @ 9% per annum at six-monthly interval.

Show how financial liability and exchange difference is to be recognized.

Solution (i) WL should recognize financial liability on April 1, 2009 at ₹ 45,00,000 (1,00,000 × 45). (ii) On subsequent dates

Date	Initial measurement of financial liability (₹)	Subsequent measurement on the date (₹)	Accounting effect	Exchange difference (₹) profit (+) and loss (-)
April 1, 2009		45,00,000 (45 × 1,00,000)	Initial carrying amount of financial liability Rs 45,00,000	nil
September 30, 2009	45,00,000	34,50,000 (46 × 75,000)	Repayment ₹ 11,50,000 (46 × 25,000)	−1,00,000 (45,00,00 − 34,50,000 − 11,50,000)
March 31, 2010	34,50,000	22,75,000 (50,000 × 45.50)	Repayment ₹ 11,37,500 (45.50 × 25,000)	+37,500 (34,50,000 − 22,75,000 − 11,37,500)
September 30, 2010	22,75,000	11,31,250 (45.25 × 25,000)	Repayment ₹ 11,31,250 (45.25 × 25,000)	+12,500 (22,75,000 − 11,31,250 − 11,31,250)
March 31, 2011	11,31,250	Financial liability derecognized	Repayment ₹ 11,40,000 (45.60 × 25,000)	− 8,750 (11,31,250 − 11,40,000)

Exchange difference (i) on September 30, 2009 ₹ 25,000 (45 − 46) × 25,000; (ii) on March 31, 2010 ₹ 12,500 (45 − 45.50); (iii) on September 30, 2010 ₹ 6,250 (45 − 45.25) × 25,000; and (iv) on March 31, 2011 ₹ 15,000 (45 − 45.60) × 25,000. Hence, total exchange difference over two years' period is ₹ 58,750.

This total amount is to be allocated over these two financial years as follows:

For 2009–2010: ₹ 62,500 (−1,00,000 + 37,500) expense in the profit and loss account.
For 2010–2011: ₹ 3,750 (12,500 − 8,750) revenue in the profit and loss account.

Disposal of Foreign Operation

Disposal of foreign operation is to be considered when a business entity has either sold, liquidated, redeemed the share capital or abandoned all or a separately identified part of foreign business operation. However, distribution of dividend out of the routine profits is not to be considered at par with disposal, but distribution of dividend out of pre-acquisition profits is to be recognized as partial disposal.

A write down of the carrying amount of the non-integral operation should not be considered as a disposal. Therefore, gain or loss on such write down should not be recognized to profit and loss account.

At the time of disposal of net investment in foreign operations, the accumulated amount of exchange differences recognized so far is to be transferred to profit and loss account in the year in which such disposal is carried out.

FORWARD EXCHANGE CONTRACTS

Foreign currency transactions are always subject to currency risk, i.e., the risk on account of fluctuation in the exchange rate between functional currency and reporting currency. **Forward exchange contracts** are executed to hedge such currency risk. The accounting for forward contract executed for **hedging** purpose should be done as follows:

Premium or Discount at the Inception of the Forward Contract

- The premium or discount recognized at the time of inception of the forward transaction should be amortized as an expense or income over the duration of the forward contract.

Exchange Difference

- The exchange difference resulting from the translation of these transactions should be recognized directly to profit and loss account in the period in which such difference arises.
- Any profit or loss arising at the time of cancellation or roll-over of the forward contract should be recognized to profit and loss account in the same period itself.
- If a forward contract is not for hedging purpose but it is for **trading purpose** then the premium or discount at the inception is to be ignored and the forward contract account should be mark-to-market at each balance sheet date and profit or loss should be recognized to profit and loss account for the period.

USE OF A PRESENTATION CURRECNY OTHER THAN THE FUNCTIONAL CURRENCY

A business entity is free to present its financial statements in any currency. If the presentation currency is different from the functional currency of the entity then it translates its financial results and financial position into the presentation currency. The example may be that a multinational company has business operations in different countries. Here there will be more than one functional currency but the business entity would like to present all its foreign business operations in the currency in which it is domiciled. There the presentation currency will be different from the functional currency.

- Monetary as well as non-monetary assets and liabilities should be translated at the closing rate applicable for the accounting year.
- Income and expense items should be translated at the exchange rate on the date of transaction. The most practical rate is the **average rate** for the year is used.
- The amount of exchange rate difference should be accumulated in a foreign currency translation reserve till the time net investment in foreign investment is disposed.

In this case, the exchange difference might arise on account of the following:

- Due to use of different rates for income, expenses, assets and liabilities.
- Due to the difference in the opening exchange rate and closing exchange rate.

CONSOLIDATION OF A FOREIGN OPERATION

While incorporating the financial statements in the annual accounts of reporting business entity intra-group balances and transaction should be eliminated as it is applied while preparing consolidated financial statement of group companies. Due care is to be given while performing such elimination. Across the group elimination should not be done. This implies that the exchange difference arising from intra group balance or transaction relating to one group should not be adjusted or eliminated against the exchange difference arising from the intra group balance of another group.

As a result of this provision, the exchange difference will continue to exist in the consolidated financial statement also.

If reporting date of the foreign operations is different from the reporting date of the reporting business entity then the financial statement of foreign operations should include a statement showing the financial result and financial position as on the date adopted by reporting business entity.

Minority Interest and Goodwill

When a business entity does not own a foreign business operation completely; rather has a partial ownership stake in the foreign operation then it is recognized as **minority interest** in the foreign operation. Accordingly, foreign currency translation reserve attributed to such minority interest should be reported as minority interest in the balance sheet.

Goodwill might arise when a foreign business is acquired or some adjustment might be executed in the carrying amount of assets and liabilities relating to foreign operations. Such items should be recognized initially in the functional currency and subsequently on the balance sheet date should be translated into reporting currency. Such translation is to be executed by the following the provisions explained earlier.

Different Reporting Dates

Sometimes reporting date of the reporting enterprises and that of non-integral foreign operation do not coincide in such situation the financial statement of foreign operation should be prepared as on the date that coincides with the reporting date of reporting enterprise. If due to operational reasons it is not possible to draw the statement on the reporting date of reporting enterprises then the assets and liabilities should be translated at the date of balance sheet of foreign operation. Such balance sheet should be adjusted for exchange difference at a later date.

TAX EFFECTS OF EXCHANGE DIFFERENCES

Gain or loss resulting from the exchange difference relating to foreign operations might have implication from taxation viewpoint. The taxation effect should be dealt as per the provisions of AS-22, accounting for taxes on income.

FORWARD EXCHANGE DISCLOSURE—FOREIGN CURRENCY TRANSACTION

A business entity should disclose the following facts in its annual accounts:

- The amount of exchange difference recognized to profit and loss account as profit or loss for the period.
- The amount of exchange difference recognized in exchange difference reserve to be shown separately along with the equity funds.
- Any change in the reporting currency should be disclosed along with the reasons for such change.
- If financial statements are presented in the currency other than the home currency of the business entity, the reason for adopting such currency should be disclosed.
- Change in the classification of foreign business operations and its impact on equity shareholders' fund should be disclosed. The effect of such change on the profit or loss of prior period should also be disclosed as if the change would have been effected earlier.

EFFECT OF CHANGES IN FOREIGN EXCHANGE RATES—INDIAN GAAP VS IAS

Under Indian GAAP, the effect of changes in foreign exchange rates is dealt under the provisions of AS-11 where IAS-21 deals with these items. The prominent differences between these two are as follows:

- AS-11 covers forwards contracts of both hedging nature and trading/speculative nature, whereas IAS-21 covers forward contracts of hedging nature only.
- AS-11 provides for the recognition of profit or loss on account of exchange rate difference in the year in which it is recognized, the same accounting effect has been provided in the provisions of IAS-21. However, when such exchange difference is due to severe devaluation of the currency then IAS-21 provides for the recognition of such difference in the carrying amount of the asset or liability but AS-11 does not allow for this.

SOLVED EXAMPLES

Example 15 Ding Dong Limited (DDL) buys a call option to buy a fix number of its own shares on expiry of the option. It also buys a call option to buy a share of its subsidiary on expiry of the option. Show how these are to be recognized.

Solution (i) DDL should recognize the first option as a deduction from its equity with the amount of premium paid for the option as a derivative contract resulting into the purchase of own equity shares of the entity is not to be recognized as a financial asset; rather as a deduction from equity instrument. (ii) Here DDL has the right to buy the equity shares of its subsidiary that is a separate entity; therefore, it should be recognized as a financial asset with the amount of premium paid.

Example 16 Show how financial liabilities, equity or financial asset is to be recognized in each of the following cases:

(i) A co-operative society has 500 members each holding 100 units of ₹ 10 each. The statute of co-operative society provides for the redemption of units at the initiation of members but in none of the cases total number of members shall fall below 450.

(ii) A mutual fund has 1,00,000 units of ₹ 10 each, the mutual fund is an open-ended fund the redemption is subject to NAV (net asset value) based price at the option of unit-holders.

(iii) A co-operative society has 1500 members each holding 100 units of ₹ 10 each. The statute of co-operative society provides for the redemption of units at the initiation of members without any condition.

Solution (i) Here membership contribution equal to 450 members, i.e., ₹ 4,50,000 should be recognized as equity because it is the residual claim. As the remaining contribution of 50 members, i.e., ₹ 50,000 can be demanded by members at any time; therefore, it should be recognized as financial liability. (ii) Mutual funds units of open-ended scheme without any condition to avoid redemption should be recognized as financial liability. (iii) Here, co-operative society cannot avoid redemption of the members' contribution. Therefore, it should be recognized as financial liability.

Example 17 On April 1, 2000 Simplox Limited (SL) issued 10% convertible debentures of face value ₹ 200 each. Each debenture is convertible into four equity shares after five years from the date of issue. Had SL issued redeemable debentures then it would have offered an interest rate of 11% on these debentures. Show how it is to be recognized.

Solution The debt portion is to be recognized at the present value @ 11% per annum of future interest payment and notional maturity value had it been a redeemable debenture.

(i) Financial liability—debt obligation at ₹ 192.52 (73.92 + 118.60) per debenture.

Present value of interest payments of ₹ 20 per annum per debenture over five years using 11% rate of interest is ₹ 73.92 per debenture and present value of notional redemption value is ₹ 118.60.

(i) Equity component ₹ 7.48 per instrument.

Example 18 Taking the data of Example 9, if on the expiry, i.e., on last Thursday April 28, 2011 premium is ₹ 75 and ₹ 8, respectively. Then accounting will be as follows:

In the books of SE

April 28, 2011	Call option a/c	Dr.	4,500	
	To Profit on call option			4,500
	(being gain {(75 – 60) × 300}on call option)			
April 28, 2001	Bank a/c	Dr.	22,500	
	To Call option a/c			22,500
	(sale of call option @ ₹ 75)			
April 28, 2011	Loss on put option a/c	Dr.	2,000	
	To Put option a/c			2,000
	(being loss {(8 – 12) × 500} on put option)			
April 28, 2011	Loss on put option a/c	Dr.	4,000	
	To Put option a/c			4,000
	(balance of expired option recognized as loss)			

Explanation: On March 28, 2011 the premium on call option has increased to ₹ 75 resulting into a profit of ₹ 15 (75 − 60) per share, whereas on put option the premium has decreased to ₹ 8 resulting into a loss of ₹ 4 (8 –12) per share.

Both profit and loss are to be transferred to profit and loss account.

In the books of NE

April 28, 2011	Loss on call option a/c	Dr.	4,500	
	To call option a/c			4,500
	(being loss {(60 − 75) × 300}on call option)			
April 28, 2011	Call option a/c	Dr.	22,500	
	To Bank a/c			22,500
	(settlement of ‘in the money’ call option)			
April 28, 2011	Put option a/c	Dr.	2,000	
	To Profit on put option a/c			2,000
	(being profit {(12 – 8) × 500} on put option)			
April 28, 2011	Put option a/c	Dr.	4,000	
	To Profit on put option a/c			4,000
	(terminal gain on put option recognized)			

Explanation: On April 28, 2011, the premium on call option has increased to ₹ 75 resulting into a loss of ₹ 15 (60 − 75) per share, whereas on put option the premium has decreased to ₹ 8 resulting into a profit of ₹ 4 (12 − 8) per share.

Both profit and loss should be transferred to profit and loss account.

Key Terms

Financial instruments	Financial assets	Financial liabilities
Equity instrument	Puttable instrument	Derivative contracts
Hedging	Monetary item	Non-monetary item
Integral foreign operations	Non-integral foreign operations	Functional currency
Reporting currency	Presentation currency	Foreign currency

Final Recap

- A **financial instrument** is a document in written or electronic from used by one entity to arrange finance and for another party is a medium to invest his/her funds.
- **Financial assets** include (i) cash, (ii) equity instruments of other entity, (iii) a contractual right to receive cash or any other financial asset or to exchange financial assets or liabilities, (iv) a derivative or non-derivative contract that will be settled in the entity's own equity instruments.
- **Financial liabilities** include (i) a contractual obligation to deliver cash or any other financial assets to another party or to exchange with another party the financial assets or financial liabilities to settle the obligation (ii) a non-derivative or derivative contract that will be settled in the entity's own equity instruments.
- An **equity instrument** is any contract that envisages a residual interest in the income and assets of an entity after adjusting all of its liabilities.
- **Puttable financial** instrument is the one in which holder of the instrument has the right to claim the maturity payment before the original maturity period.
- A **derivative contract** is the one that derives its value from the underlying asset such share, debenture, commodity, currency, etc.
- **Securitization** is the mechanism to issue debt instruments on the pool of receivables or a loan portfolio.
- **Functional Currency:** It is the currency of the primary economic environment within which the business entity performs its business activities.
- **Reporting Currency:** It is the currency in which financial statements are presented. It is also called **presentation currency**.
- **Foreign Currency:** The currency other than the functional currency of the business enterprise.
- **Initial recognition of a foreign currency transaction** should be done by translating the transaction into the reporting currency using exchange rate applicable between foreign currency and reporting currency on the date of transaction.
- **Monetary items** should be measured and reported in presentation currency using the closing rate as on the date of balance sheet.
- **Non-monetary items** should be recognized at the historical cost or fair value as applicable.
- A foreign business operation that is an extension of the business activities of the reporting entity is called **integral foreign operation**.
- In case of **non-integral foreign operation** of a business entity, the business establishment operating in the foreign country accumulates cash flow, monetary items, incurs expenses, generates cash flow and even arranges funds for financing its operations in the local currency of the country of such non-integral foreign operation.

Review Questions

Multiple Choice Questions

1. Who among the following is required to deposit initial margin for a futures contract?
   (a) Buyer only (b) Seller only (c) Both of these (d) Neither of these

2. Who among the following is required to deposit initial margin for an option contract?
   (a) Buyer only (b) Seller only (c) Both of these (d) Neither of these
3. Which of the following parameters is not regulated by the exchange in a futures contract?
   (a) Strike price (b) Underlying asset (c) Lot size (d) All of these
4. Which of the following parameters is regulated by the exchange in an option contract?
   (a) Exercise price (b) Lot size (c) Premium (d) All of these

Descriptive Questions

1. Write short notes on the following:
   (a) Financial assets (b) Financial liabilities
   (c) Residual claim (d) Compound financial instruments
2. Discuss the provisions of converting different assets, liabilities, expenses and revenue items of non-integral foreign operations

Numerical Problems

1. Alok Limited (AL) purchased goods worth ₹ 3,00,000 and ₹ 2,80,000 from Ramesh Limited (RL) on cash and for one month credit, respectively. AL accepted a bill of exchange of two months duration for ₹ 5,00,000 in the favour of Dilip Limited (DL). Do these transactions result in financial assets and liabilities? AL also received an acceptance from Mukesh Limited (ML) of ₹ 3,50,000. Show how these are to be recognized.
2. Sunslife Limited (SL) invited application for the issue of 1,00,000 equity shares of face value ₹ 10 each issued at a premium of 10% for cash all the shares were subscribed for and issued as per the rules. Another 50,000 equity shares of ₹ 10 were issued to the vendors of machinery. Show how financial assets, financial liabilities and equity instrument should be recognized.
3. On February 10, 2011 Dinesh Limited (DL) entered into a contract for buying two lot of call option with product series 'CA, Tata Steel (800), 600, April 2011, @ ₹ 30' and sold one lot of put option with product series 'PA, Ranbaxy (500), 560, April 2011, @ ₹ 40'. It also entered into a forward contract to buy 10,000 12% Bonds (series 2015) @ Rs 98 per bond for settlement in two months. Show how these are to be recognized.
4. On April 1, 2000 Sport Limited (SL) issued 10% convertible debentures of face value ₹ 100 each. Each debenture is convertible into four equity shares after five years from the date of issue. Had SL issued redeemable debentures then it would have offered an interest rate of 12% on these debentures. Show how it is to be recognized initially. At the end of three years, the market price of these debentures is ₹ 140 and company offer to debenture holder to accept ₹ 140 per debenture as redemption amount. If debenture holders accept the offer then how should it be provided in the books of accounts?

Answers

Multiple Choice Questions

1. (c) 2. (b) 3. (a) 4. (b)

Numerical Problems

1. Financial liability ₹ 7,80,000, Financial asset ₹ 3,50,000.
2. Equity component ₹ 15 lakh paid-up capital and Rs 1 lakh securities premium.
3. Financial asset—call option ₹ 24,000, Financial liability—put option ₹ 20,000, futures contract asset ₹ 9,80,000, obligation for futures contract ₹ 9,80,000.

4. Initial value of debt instrument ₹ 92.78 and of equity ₹ 7.22. After three years discounted value of debenture is ₹ 96.62, resulting into a loss of ₹ 3.84 (96.62 − 92.78) on account of derecognition of debenture should be transferred to profit and loss account. The value of equity component at the end of third year is ₹ 43.38 (140 − 96.62) resulting into a loss on derecognition of ₹ 36.16 (43.38 − 7.22).

CASE

Using Apt Accounting Practice

On April 1, 2000, K.K. Industries (KKI) issued 10-year debentures carrying 12% coupon rate on the total face value of US$ 1,00,000. These are redeemable after 10 years at par. Interest is payable every year in $. At the time of issue of debentures, the rupee–US dollar exchange rate is ₹ 39 per dollar. Exchange rate during the intervening period was as follows:

Date	₹ per dollar	Date	₹ per dollar
31-03-2001	39.40	31-03-2006	40.10
31-03-2002	39.50	31-03-2007	40.00
31-03-2003	39.90	31-03-2008	42.25
31-03-2004	39.70	31-03-2009	44.35
31-03-2005	40.00	31-03-2010	45.00

Debenture interest was paid on respective due dates and accounted for in the books of accounts. The debentures were redeemed on March 31, 2010 for which the company paid ₹ 45,00,000 to buy 1,00,000 US$ for the purpose of redemption. The company transferred a total loss of ₹ 6,00,000 (45,00,000 − 39,00,000) as loss on account of exchange rate difference on March 31, 2010.

Discussion Question

1. Analyse the case and comment on the accounting practice followed by the company.

CHAPTER

14

Accounts of Limited Liability Companies: Shares and Debentures

Learning Objectives

After reading this chapter, you will be able to

- Understand the issue of shares and debentures
- Comprehend redemption of preference shares and debentures
- Know how to go about buy back of shares
- Identify accounting mechanism about issue and redemption of shares and debentures

Issue of Securities

A limited liability company (LLC) can issue different type of **securities**, such as equity shares, preference share and debenture. Out of these, equity shares and preference shares are grouped as owner's funds and debentures as borrowed funds. These securities can be issued through any of the **modes of issue**, such as fixed price public issue, public issue through book-building, private placement and rights issue. Equity shares can even be issued by way of capitalization of reserves such issue of shares is called bonus issue of shares. **Bonus shares** are issued free of cost to existing equity shareholders in the proportion of their share holding.

INTRODUCTION

A limited liability company (LLC) by shares is the one that raises the capital by the issue of shares to different group of entities, such as general public, mutual funds, banks, financial institutions, promoters, employees and others. The liability of the shareholder buying the shares is limited to the value of shares purchased by them. Apart from issuing shares—equity shares and preference shares an LLC can raise the funds by the issue of debentures also. All of these instruments are collectively called securities and can be issued through any of the modes such as public issue, private placement, rights issue or bonus issue.

CAPITAL OF A COMPANY

Total capital employed in a company comprises owners' equity and borrowed capital. The **owner's equity** is the sum total of capital contributed by the shareholders by subscribing to the shares issued by the company as well as the retained profits; whereas **borrowed capital**—external liabilities includes long-term loan, debentures and current liabilities. Promoters contribute the initial capital of a company before the registration of the company. Such contribution is also made in the form of shares of the company. Once registration of the company is done, it can issue the shares to public that too by completing certain legal requirements. At present, a company is required to comply with Disclosure and Investors Protection (DIP) guidelines of SEBI at the time of raising capital. When a public limited company issues the shares through public issue then it is mandatory for the company to get these shares listed on a recognized stock exchange. **Listing of shares** means including the shares in the list of shares to be traded on the floor of the stock exchange, i.e., through the intermediation of the stock exchange. To obtain the listing, a company is required to comply with the provision laid down by the following laws:

> A recognized stock exchange is a stock exchange that has been set up as per the provisions of SCRA and SEBI Acts and has been granted the recognition by SEBI under Section 4 of SCRA.

- Securities and Contracts Regulation Act (SCRA), 1956
- Companies Act, 1956
- Securities and Exchange Board of India (SEBI) Act, 1992

Apart from these laws there are several other provisions that are applicable, such as RBI rules in case a bank issues the shares.

USEFUL INFO

Intermediaries for Public Issue:
- Merchant banker
- Banker to the issue
- Broker to the issue
- Underwriter
- Registrar to the issue
- Book running lead manager

Description of Capital

A limited liability company always gets registered by specifying certain amount of capital represented by shares. A share is the smallest unit in which the capital of a company is divided into. Usually, the registered capital also called **authorized capital** of the company is represented by two type of shares—equity shares and preference shares. Both of these shares are classified as **owner's capital**, out of this equity share capital is termed as risk capital as it absorbs the risk of carrying out the business and has a residual claim in the assets of the company. Apart from owner's capital, a company uses **borrowed capital called** as **borrowed funds.** This is arranged by issuing debentures or raising a loan. On the borrowed capital, the company has the obligation to pay interest at a fixed percentage even when the company has losses, whereas on the owner's capital the company pays the dividend subject to the availability of sufficient profits.

Equity Shares

These are the shares that represent the real ownership of the company as the holders of these shares have the voting right through which the strategic decisions of the company are influenced. The shareholders have the voting right exactly in the proportion of shares held by them. Despite being the real owner of the company, the shareholders have the residual claim on the earning and assets of the company.

Most recent practice about equity instruments is that the companies have started issuing equity shares with differential rights. Such differentiation is either with regards to voting right or entitlement for dividend on equity shares. But every equity share has a residual claim.

Preference Shares

These are such shares on which the company promises to pay a fix percentage of dividend, of course subject to the availability of sufficient profits. At the time of distribution of profits and distribution of assets while closing down the company, the preference shareholders are accorded preference over the equity shareholders.

Types of Preference Shares

A company can issue different types of preference shares. These are as follows:

Redeemable Preference Shares: The preference share that have a fixed maturity at the end of which the company repays the principal amount to preference holders.

Non-redeemable Preference Shares: The preference shares that do not have a fixed maturity rather these continue till the survival of the company. There is no provision for the redemption of these preference shares during the lifetime of the company.

Cumulative vs Non-cumulative Preference Shares: On cumulative preference shares, there is a provision for the accumulation of unpaid dividend to be paid in the subsequent years, whereas in case of non-cumulative preference shares, the unpaid dividend of one financial year cannot be accumulated and carried to next financial year.

Convertible vs Non-convertible Preference Shares: Convertible preference shares are the one that have the provision for conversion into definite number of equity shares of the company on a pre-specified future date; whereas non-convertible preference shares are the one that are not convertible into the equity shares of the company—these may be redeemable or non-redeemable.

After amendments in the Companies Act, 1956 in the year 1971, the companies now cannot issue non-redeemable preference shares. These are also called **perpetual preference shares**. Similarly, after the implementation of SEBI Act, 1992, the conversion of preference shares in the equity shares on the date of conversion is optional at the option of preference shareholders.

Participating Preference Shares: On these preference shares, there is provision of making the payment of an additional dividend subject to the availability of extra profits.

Debentures—Debt/Borrowed Capital

A **debenture** is a debt instrument through which a limited liability company raises funds. On these, the issuing company has the obligation to make the payment of interest at a fixed rate as per the terms and conditions specified at the time of issue of debentures. Debentureholders are not entitled for a voting right or any extra benefits, such as profit sharing. Debentures have an over-riding preference over preference shares and equity shares at the time of liquidation of the company.

Types of Debentures

A company can issue different type of debentures. These are as follows:

Redeemable Debenture: Debentures that have a fixed maturity at the end of which the company repays the principal amount to debenture holder.

Perpetual Debenture: These debentures do not have the provision for redemption rather continue as debenture till the company survives.

Convertible vs Non-convertible Debentures: Convertible debentures are the one that have the provision for conversion into definite number of equity shares of the company on a pre-specified future date; whereas non-convertible debentures are the one that are not convertible into the equity shares of the company, these may be redeemable or non-redeemable.

Floating Rate Debentures: On these debentures, a minimum floor rate is promised with a provision for an upward revision subject to the movement in the linked parameter.

Debentures with Option: These debentures are embedded with an option for premature redemption to be exercised either by the company or by debenture holders.

Debentures with Warrants: These debentures are accompanied with an additional warrant that can be exercised by the warrant holder to get it converted into the equity shares of the company by making a specified payment for the shares on pre-specified future date.

Index Linked Debentures: Rate of interest on these debentures is linked to the index of stock market. But in none of the cases rate of interest falls below the floor rate specified at the time of issue of these debentures.

Residual claim means having the last claim. The equity shareholders always have a residual claim on the profits and assets of the company. At the same time, the *plight of equity shareholders* is that despite of being the real owner through voting rights, they cannot demand the distribution of profits, i.e., dividend. The dividend to these shareholders is only when it is proposed by the board of directors and approved in the AGM.

LAYERS OF CAPITAL

The capital of a company can be classified into different layers. These are as follows:

- Authorized capital
- Subscribed capital
- Issued capital
- Called-up capital
- Paid-up capital
- Reserve capital

Authorized Capital

It is the maximum amount of capital that can be raised by the company by issuing shares during its lifetime. In normal course of working, a company cannot issue the shares for more than this amount. However, it can be amended (increased/decreased) by passing a resolution in the meeting of shareholders of the company. As a company gets registered with this amount of capital, therefore, it is also called **registered capital**. The total authorized capital is represented by two types of shares—equity shares and preference shares. Each share has a face value and the company has the freedom to issue shares at par, at premium or at a discount.

A company is registered with an authorized capital of ₹ 2,000 crore further represented by 150 crore equity shares of face value ₹ 10 each and 5 crore 12% preference shares of face value ₹ 100 each.

Issued Capital

This is such portion out of the authorized capital for which the company has invited the application for subscription. A company cannot issue the shares in excess of the issued amount, even if there happens to be an over subscription for the issue. Earlier, the companies were allowed **green shoe option**—retaining the oversubscribed portion to a certain limit and making an allotment in excess of the issued amount. Now SEBI rules do not allow the exercise of green shoe option. In case of under subscription, the allotment can be made only when the company has received the subscription for at least 90% of the issued amount.

A company issues the notification/advertisement to issue 50 crore equity shares of face value ₹ 10 out of the total authorized capital as mentioned above, and company receives the application for 75 crore shares then the allotment can be made for 50 crore shares only, the application in excess of this are rejected and application money is refunded to respective applicants.

Subscribed Capital

The proportion of capital for which the company finally makes the allotment is identified as subscribed capital. In case of over subscription, the subscribed capital equals the issued capital and in case of under subscription it can be less than the issued capital. Subscribed capital can be less than or equal to issued capital, but it can never exceed the issued capital. When shares have been forfeited and not re-issued then the subscribed capital will be less than the issued capital.

Called-up Capital

In certain cases, the companies ask for partial payment on application for the shares being subscribed by the investors/public. The remaining amount might be called by the company at the time of allotment and subsequent calls to be made by the company as per its notification for the issue of shares. The total amount out of the face value of shares that has been called by the company is the **called-up amount**. The remaining amount is **uncalled amount**.

A company invited the application for 100 crore shares of face value ₹ 10 each to be paid as to ₹ 6 on application and rest 4 to be called at the time of allotment and in subsequent calls. Now before the allotment, i.e., at the time of application the called-up amount will be ₹ 6 per share out of the face value of ₹ 10 and total called-up amount will be ₹ 600 crore out of the total face value of ₹ 1,000 crore.

Paid-up Capital

The amount that has been paid out of the called-up amount by the shareholders is identified as **paid-up capital**. This will happen only when the company has issued the shares by asking for the payment in installment, and few of the shareholders fail to pay the money at the time of allotment or at the time of subsequent calls being made by the company. In case full face value is demanded at the time of application then this amount will equalize the called-up amount.

A issued 1,00,000 shares of face value ₹10 each and asked for the payment as to ₹ 6 with application ₹ 3 on allotment and ₹ 1 on first call. All the amounts were called up and paid by the shareholders, except one shareholder holding 1000 shares, who failed to pay at the time of allotment and first call. Here total called-up amount will be ₹ 10,00,000 and paid-up amount will be ₹ 9,96,000. The remaining ₹ 4,000 will be calls in arrear—unpaid amount.

Reserve Capital

It is such proportion out of the face value of subscribed capital that is not called up by the company; instead the company passes the resolution not to call this amount in the normal course of business, rather to call it only when the company is to be closed down due to losses.

ACCOUNTING FOR THE ISSUE OF SHARES

Issue of shares has monetary implications and according to financial accounting principle, all the monetary transactions must be recorded in the books of accounts appropriately by following accounting fundamentals. The transactions related to the issue of shares are recorded first in the elementary books of accounts—journal and cash books, which are further posted to ledger accounts so as to facilitate the projection of the items in the final accounts at the time of preparing financial statements. The shares may be issued by the company at par, at a discount or at a premium. The issuing company is to comply with SEBI guidelines at the time of issue of shares. These guidelines provide the procedural and legal aspects of issue of shares; whereas the accounting aspect is covered under the accounting standards and rules and provision given of the Institute of Chartered Accountants of India (ICAI). From the accounting viewpoint, the following concepts are relevant about the issue of shares:

- Pricing of issue
  - At par
  - At a premium
  - At a discount
- Mode of payment
  - Full Amount on application
  - Payment in installments
- Prospectus

Pricing of Issue

The shares being issued by the company can be issued at par (issue price is equal to the face value), at a premium (issue price is more than the face value) and at a discount (issue price is less than the face value). Prior to SEBI rules, CCI used to control the pricing decision of issuing companies. Companies were required to seek the permission from CCI about charging a particular price for the shares to be issued. Now under SEBI rules, it is not controlled by SEBI; instead the issuing company is required to justify the issue price with the help of full disclosure and transparency measures to prospective investors.

Mode of Payment

It is the discretion of the issuing company either to demand the full payment at the time of application or demand the amount in installments. If the amount is demanded in installments then the minimum amount to be demanded with as application money should equalize the five per cent of the face value. The rest of the amount is to be paid at the time of allotment and in the subsequent calls. Allotment is the activity of issuing the shares to applicants. In case the full amount is not demanded with application then the allottee (the applicant who has been allotted the shares) is required to pay the allotment money, and if still the full amount has not been called up then the remaining amount may be called by the company in the form of first call, second call and so on.

Prospectus

It is a document to be issued by a company at the time of public issue by the company. It contains the details about the promoters of the company, activities of the company, past performance, if any, of the company, future prospectus, risk factors, financial results, details about the entities managing the issue—manager to the issue, book running lead manager, underwriters, brokers, bankers to issue, registrar to issue, issue related details—authorized capital, issued capital, mode of payment, issue opening and closing dates, issue price or price band in case of issue through book building, banks/facility centres where application can be deposited by the applicants, etc. The copy of the prospectus is to be filled with Registrar of Companies (ROC) and SEBI before it is issued to public.

PROSPECTUS

Prospectus is a document that contains details about the issue being floated by the company. It contains the details about promoters, directors, past financial results, if any, projections about coming financial years. The number of shares and the issue price is also disclosed in the prospectus. It also contains the details about different intermediaries involved in the management of issue.

Red-herring Prospectus is such a prospectus that does not contain either the detail about final issue price or the number of shares offered or both; such as in case of book-building of issue final issue price is not disclosed in the prospectus; instead price band is disclosed.

Accounting Entries

Nothing gets recorded in the books of accounts without filtering the monetary transaction through the systematic process of recording. The task of recording the issue related transaction begins from the time the company receives the application and ends the time when all the amounts have been received. If few of the successful applicants fail to pay the demanded amount at the time of allotment and subsequent call then the shares issued to them might be forfeited subject to the provisions of Companies Act. The forfeited shares are further re-issued all these are recorded in the books of accounts. The issue of shares might be at par, at a premium or at a discount.

Issue at Par

When a company issues the shares at par, the following entries are passed in the journal.

A. When full amount is demanded at the time of application, including situation of over subscription

(i) On receiving application money

Bank a/c Dr.

To Equity Share Application and Allotment a/c

(Application money ₹ … per share received for shares)

Note: This entry is passed for the total actual amount (applied quantity multiplied with face value) for which application is received.

(ii) On making the allotment
Equity Share Application and Allotment a/c Dr.
To Equity Share Capital a/c
(… shares of face value Rs……. issued)
Note: This entry is passed for the actual amount (allotment quantity multiplied by face value) for which shares are allotted

(iii) Refund in case of over subscription
Equity Share Application and Allotment a/c Dr.
To Bank a/c
(Application money of ₹ … per share for ….. shares refunded)

EXAMPLE 1 X Ltd invited application to issue 20,000 equity shares of face value ₹ 10 each at par. The complete amount is to be paid with the application. The company received application for (a) 20,000 shares; (b) 18,000 shares; (c) 25,000 shares. The shares were issued as per the provisions of law. Pass necessary journal entries in the books of accounts.

SOLUTION

(a) The company has received the exactly 100% subscription.

Journal of X Ltd

Date	Particulars		Amount (₹)	
			Debit	Credit
	Bank a/c	Dr.	2,00,000	
	To Equity Share Application and Allotment a/c			2,00,000
	(Application money ₹ 10 per share received for 20,000 equity shares)			
	Equity Share Application and Allotment a/c	Dr.	2,00,000	
	To Equity Share Capital a/c			2,00,000
	(20,000 shares of face value ₹ 10 each issued)			

(b) It is a situation of under subscription.

Journal of X Ltd

Date	Particulars		Amount (₹)	
			Debit	Credit
	Bank a/c	Dr.	1,80,000	
	To Equity Share Application and Allotment a/c			1,80,000
	(Application money ₹ 10 per share received for 18,000 equity shares)			
	Equity Share Application and Allotment a/c	Dr.	1,80,000	
	To Equity Share Capital a/c			1,80,000
	(18,000 shares of face value ₹ 10 each issued)			

(c) It is a situation of over subscription.

Journal of X Ltd

Date	Particulars		Amount (₹) Debit	Credit
	Bank a/c	Dr.	2,50,000	
	To Equity Share Application and Allotment a/c			2,50,000
	(Application money ₹ 10 per share received for 25,000 equity shares)			
	Equity Share Application and Allotment a/c	Dr.	2,00,000	
	To Equity Share Capital a/c			2,00,000
	(20,000 shares of face value ₹ 10 each issued)			
	Equity Share Application and Allotment a/c	Dr.	50,000	
	To Bank a/c			50,000
	(Excess application money refunded)			

(B) When full amount is not demanded at the time of application and there is over subscription but no pro-rata allotment

(i) On receiving application money

Bank a/c Dr.

To Equity Share Application a/c

(Application money ₹ … per share received for …. …shares)

Note: This entry is passed for the total actual amount (applied quantity multiplied with application money) for which application is received.

(ii) On making the allotment

Transfer Entry

Equity Share Application a/c Dr.

To Equity Share Capital a/c

(… shares of face value ₹ … allotted)

Note: This entry is passed for the amount—allotment quantity multiplied by application money.

Refund without making any allotment

Equity Share Application a/c Dr.

To Bank a/c

(Application money of ₹ ….. per share for ….. shares refunded)

For Making the Allotment Money Due

Equity Share Allotment a/c Dr.

To Equity Share Capital a/c

(Allotment money @ ₹ …. per share made due for ….. shares)

Note: This entry is passed for the amount—allotment quantity multiplied by amount demanded on allotment.

For Receiving the Allotment Money
Bank a/c Dr.
To Equity Share Allotment a/c
(Allotment money @ ₹ …. per share received for ….. shares)

For the Amount Due on Allotment but not received—Calls in Arrears
Calls in Arrears a/c Dr.
To Equity Share Allotment a/c
(Allotment money @ ₹ …. per share remained unpaid on …. shares)

(iii) When First Call Becomes Due

For making the call due
Equity Share First Call a/c Dr.
To Equity Share Capital a/c
(First call money @ ₹ …… per share made due on …….shares)

Upon receiving the first call money
Bank a/c Dr.
To Equity Share First Call a/c
(First call money @ ₹ ….. per share received on ……shares)

For the first call money that remains in arrears
Call in Arrears a/c Dr.
To Equity Share First Call a/c
(First call money @ ₹ …… for ……. shares remained in arrears)

(iv) When Second Call Becomes Due

For Making the Second Call Due
Equity Share Second Call a/c Dr.
To Equity Share Capital a/c
(Second call @ ₹ … on …..shares made due)

Upon Receiving the Second Call Money
Bank a/c Dr.
To Equity Share Second Call a/c
(Second call @ ₹ …. on ……shares received)

For the Amount Remaining Unpaid on Second Call
Calls in Arrears a/c Dr.
To Equity Share Second Call a/c
(Second call @ ₹ ….. on ……shares remained unpaid)

100% subscription case

EXAMPLE 2 Dee Cee Ltd invited application to issue 10,000 equity shares of face value ₹ 10 each at par. The amount to be paid as to ₹ 4 at the time of application, ₹ 2.50 on allotment, and the remaining amount on first and final call. The company received the application for 10,000 shares all the shares were allotted, the amount due on allotment as well as on first and final call was received in time in full. Pass necessary journal entries in the books of accounts.

SOLUTION:

Journal of Dee Cee Ltd

Particulars		Amount (₹) Debit	Amount (₹) Credit
Bank a/c	Dr.	40,000	
To Equity Share Application a/c			40,000
(Application money ₹ 4 per share received for 10,000 shares)			
Equity Share Application a/c	Dr.	40,000	
To Equity Share Capital a/c			40,000
(10,000 shares of face value ₹ 10 each, having ₹ 4 called-up amount allotted)			
Equity Share Allotment a/c	Dr.	25,000	
To Equity Share Capital a/c			25,000
(Allotment money @ ₹ 2.50 per share made due for 10,000 shares)			
Bank a/c	Dr.	25,000	
To Equity Share Allotment a/c			25,000
(Allotment money @ ₹ 2.50 per share received for 10,000 shares)			
Equity Share First and Final Call a/c	Dr.	35,000	
To Equity Share Capital a/c			35,000
(First call money @ ₹ 3.50 per share made due on 10,000 shares)			
Bank a/c	Dr.	35,000	
To Equity Share First Call a/c			35,000
(First call money @ ₹ 3.50 per share received on 10,000 shares)			
Total		2,00,000	2,00,000

Case of Over Subscription Without pro rata Allotment

EXAMPLE 3 Jay Pee Ltd invited application to issue 10,000 equity shares of face value ₹ 10 each at par. The amount to be paid as to ₹ 3 at the time of application, ₹ 2 on allotment, and the remaining amount on first and final call. The company received the application for 12,000 shares, applicants for 2,000 shares were refused the allotment and their application money was refunded. All the amounts due were received except one shareholder who was allotted 200 shares who failed to pay the allotment money and money due on the first and final call. Show necessary journal entries in the journal.

SOLUTION:

Journal of Jay Pee Ltd

Particulars		Amount (₹) Debit	Credit
Bank a/c	Dr.	36,000	
To Equity Share Application a/c			36,000
(Application money ₹ 3 per share received for 12,000 shares)			
Equity Share Application a/c	Dr.	30,000	
To Equity Share Capital a/c			30,000
(10,000 shares of face value ₹ 10 each, having ₹ 3 called-up amount allotted)			
Equity Share Application a/c	Dr.	6,000	
To Bank a/c			6,000
(Excess application money on 2,000 shares refunded)			
Equity Share Allotment a/c	Dr.	20,000	
To Equity Share Capital a/c			20,000
(Allotment money @ ₹ 2 per share made due for 10,000 shares)			
Bank a/c	Dr.	19,600	
To Equity Share Allotment a/c			19,600
(Allotment money @ ₹ 2 per share received for 9,800 shares)			
Calls in Arrears a/c	Dr.	400	
To Equity Share Allotment a/c			400
(Allotment money @ ₹ 2 per share remained unpaid on 200 shares)			
Equity Share First and Final Call a/c	Dr.	50,000	
To Equity Share Capital a/c			50,000
(First call money @ ₹ 5 per share made due on 10,000 shares)			
Bank a/c	Dr.	49,000	
To Equity Share First and Final Call a/c			49,000
(First call money @ ₹ 5 per share received on 9,800 shares)			
Calls in Arrears a/c	Dr.	1,000	
To Equity Share First and Final Call a/c			1,000
(First and Final Call @ ₹ 5 per share on 200 shares remained in arrears)			
Total		2,12,000	2,12,000

Case of Over Subscription and pro rata Allotment

EXAMPLE 4 J.J. Ltd invited application to issue 20,000 equity shares of face value ₹ 10 each at par. The amount to be paid as to ₹ 5 at the time of application, ₹ 3 on allotment, ₹ 1 per share on first call and ₹ 1 per share on second and last call. The company received the application for 28,000 shares, applicants for 3,000 shares were refused the allotment and remaining applicants were given prorata allotment. The excess application money of the successful applicants was adjusted against the allotment money and in the subsequent calls. All the amounts due were received except one shareholder who was allotted 200 shares failed to pay the allotment money and money due on the first and second call as well. Another shareholder holding 100 shares failed to pay the money at the time of allotment but he paid this arrear amount at the time of first call and also paid subsequent call money. Show necessary journal entries in the journal.

Solution

Journal of J. J. Ltd

Particulars		Amount (₹)	
		Debit	Credit
Bank a/c	Dr.	1,40,000	
To Equity Share Application a/c			1,40,000
(Application money ₹ 5 per share received for 28,000 shares)			
Equity Share Application a/c	Dr.	1,00,000	
To Equity Share Capital a/c			1,00,000
(20,000 shares of face value ₹ 10 each, having ₹ 5 called-up amount allotted)			
Equity Share Application a/c	Dr.	15,000	
To Bank a/c			15,000
(Excess application money on 3,000 shares refunded)			
Equity Share Allotment a/c	Dr.	60,000	
To Equity Share Capital a/c			60,000
(Allotment money @ ₹ 3 per share made due for 20,000 shares)			
Equity Share Application a/c	Dr.	25,000	
To Equity Share Allotment a/c			25,000
(Excess application money of successful applicants adjusted against the money due on allotment)			
Bank a/c	Dr.	34,475[1]	
Calls in Arrears a/c	Dr.	525	
To Equity Share Allotment a/c			35,000
(Allotment money after adjustment of excess money and unpaid money received)			
Equity Share First Call a/c	Dr.	20,000	
To Equity Share Capital a/c			20,000
(First call money @ ₹ 1 per share made due on 20,000 shares)			

(*Contd*)

[1]Total due on allotment ₹ 60,000. Excess adjusted ₹ 25,000. Now remaining amount of ₹ 35,000 is due on 20,000 shares. The unpaid amount on 300 shares will be ₹ 525 (35,000 × 300/20,000).

(*Contd*)

Bank a/c	Dr.	175	
To Calls in Arrears a/c			175
(Calls in arrears recovered on 100 shares)			
Bank a/c	Dr.	19,800	
Calls in Arrears a/c	Dr.	200	
To Equity Share First Call a/c			20,000
(First call money received except on 200 shares)			
Equity Share Second Call a/c	Dr.	20,000	
To Equity Share Capital a/c			20,000
(First call money @ ₹ 1 per share made due on 20,000 shares)			
Bank a/c	Dr.	19,800	
Calls in Arrears a/c	Dr.	200	
To Equity Share Second Call a/c			20,000
(Second call money received except on 200 shares)			
Total		4,55,175	4,55,175

Issue of Shares at Premium

Premium is the extra amount over and above the face value, charged by the issuing company from shareholders. It is onus of the company to justify the premium being charged. Such justification is done with the help of progress of the company and projections about the future financial results.

In case of a company that is already listed on a stock exchange then the current market price also becomes one of the basis for justifying the premium being charged by the company. The premium received by the company is part of the capital profit which can be used either to write off capital losses—premium on redemption of shares, discount on issue of shares or it can be capitalized by way of issuing bonus shares. **Bonus shares** mean issuing shares free of cost to existing shareholders. This is effected by capitalizing profits and reserves.

Usually, the premium is made due by the company at the time of allotment of shares, however sometimes it may be included in the application money. The accounting entry for the shares issued at a premium is as done as follows:

> **Premium** is the extra money over and above the face value. Issuing company needs to justify the premium being charged.

> **Bonus shares** means issuing shares free of cost to existing equity shareholders, it is effected by capitalizing profits and reserves.

(i) When premium is included in the application money.

Here the amount of premium is credited to securities premium account while passing the transfer entry for the shares allotted that is as follows:

Equity Share Application a/c Dr.
    To Equity Share Capital a/c (with the amount of capital portion included in application money)
    To Securities Premium a/c (with the amount of premium included in application money)
(…. Shares of face value Rs….allotted being ₹ …. called up)

(ii) When premium is included in the allotment money.

Equity Share Allotment a/c Dr.
    To Equity Share Capital a/c (with the amount of capital portion included in application money)
    To Securities Premium a/c (with the amount of premium included in application money)
(Allotment money made due)

Example 5 J.K. Ltd invited application to issue 30,000 equity shares of face value ₹ 10 each at 10% premium. The amount to be paid as to ₹ 6 at the time of application, ₹ 4 (including premium) on allotment, Re. 1 per share on first and final call. The company received the application for 35,000 shares, applicants for 5,000 shares were refused the allotment and remaining applicants were given allotment. One shareholder holding 300 shares paid only the application money. Rest of the shareholders paid the due amount in time. Show necessary journal entries in the journal.

Solution:

Journal of J.K. Ltd

Particulars		Amount (₹) Debit	Amount (₹) Credit
Bank a/c	Dr.	2,10,000	
To Equity Share Application a/c			2,10,000
(Application money ₹ 6 per share received for 35,000 shares)			
Equity Share Application a/c	Dr.	1,80,000	
To Equity Share Capital a/c			1,80,000
(30,000 shares of face value ₹ 10 each, having ₹ 6 called-up amount allotted)			
Equity Share Application a/c	Dr.	30,000	
To Bank a/c			30,000
(Excess application money on 5,000 shares refunded)			
Equity Share Allotment a/c	Dr.	1,20,000	
To Equity Share Capital a/c			90,000
To Securities Premium a/c			30,000
(Allotment money @ ₹ 4 per share including a premium of ₹ 1 per share made due for 30,000 shares)			
Bank a/c	Dr.	1,18,800	
Calls in Arrears a/c	Dr.	1,200	
To Equity Share Allotment a/c			1,20,000
(Allotment money received except on 300 shares)			
Equity Share First Call a/c	Dr.	30,000	
To Equity Share Capital a/c			30,000
(First call money @ ₹ 1 per share made due on 30,000 shares)			
Bank a/c	Dr.	29,700	
Calls in Arrears a/c	Dr.	300	
To Equity Share First Call a/c			30,000
(First call money received except on 300 shares)			
Total		7,20,000	7,20,000

Issue of Shares at a Discount

In certain cases, the companies issue the shares at a discount to face value. Such discount is like a loss for the issuing company. The shareholder is required to pay less then the face value of shares purchased by him/her.

The discount being a loss of capital nature is recorded as fictitious asset in the books of accounts, either to be written off by debiting the securities premium account, if available or to be amortized by charging to profit and loss account. The accounting entry for the discount is made at the time of allotment of the shares. The amount of discount that does not get written off during the financial year is shown in the balance sheet as a fictitious asset. The accounting entry for discount is done as follows:

Equity Share Allotment a/c	Dr. (the amount actually due on allotment)
Discount on Issue of Shares a/c	Dr. (the amount of discount)
To Equity Share Capital a/c	

Example 6 M.M. Ltd invited application to issue 12,000 equity shares of face value ₹ 10 each at 10% discount. The amount to be paid as to ₹ 3 at the time of application, ₹ 2 on allotment, and remaining amount on first call. The company received the application for 17,000 shares, applicants for 2,000 shares were refused the allotment and remaining applicants were given allotment on prorate basis. One shareholder holding 400 shares paid only the application money. Another shareholder holding 200 shares could not pay the first call money. Rest of the shareholders paid the due amount in time. Show necessary journal entries in the journal.

Solution:

Journal of M.M. Ltd

Particulars		Amount (₹)	
		Debit	Credit
Bank a/c	Dr.	51,000	
To Equity Share Application a/c			51,000
(Application money ₹ 3 per share received for 17,000 shares)			
Equity Share Application a/c	Dr.	36,000	
To Equity Share Capital a/c			36,000
(12,000 shares of face value ₹ 10 each, having ₹ 3 called-up amount, allotted)			
Equity Share Application a/c	Dr.	6,000	
To Bank a/c			6,000
(Applicants for 2,000 shares refused the allotment and application money from them refunded)			
Equity Share Allotment a/c	Dr.	24,000	
Discount on Issue of Shares a/c	Dr.	12,000	
To Equity Share Capital a/c			36,000
(Allotment money @ ₹ 2 per share made due for 12,000 shares)			
Equity Share Application a/c	Dr.	9,000	
To Equity Share Allotment a/c			9,000
(Excess application money of successful applicants adjusted against allotment dues)			

(*Contd*)

(*Contd*)

Bank a/c	Dr.	14,500	
Calls in Arrears a/c	Dr.	500[2]	
To Equity Share Allotment a/c			15,000
(Remaining allotment money received except on 400 shares)			
Equity Share First Call a/c	Dr.	48,000	
To Equity Share Capital a/c			48,000
(First call money @ ₹ 4 per share made due on 12,000 shares)			
Bank a/c	Dr.	45,600	
Calls in Arrears a/c	Dr.	2,400	
To Equity Share First Call a/c			48,000
(First call money received except on 600 shares)			
Total		2,49,000	2,49,000

FORFEITURE AND REISSUE OF SHARES

Forfeiture

Sometimes despite repeated reminder as per law/statute, there might be incidences of default by the shareholders in making payment of the due amount for shares issued with a provision to make the payment in installments—allotment and call money. The law provides for the forfeiture of the shares on which the amount remains overdue. Forfeiture implies depriving the allotee from holding the status of shareholder without returning the paid-up amount on such shares. Upon forfeiture, the allotee ceases to remain the shareholder and the amount paid by him/her is neither returned nor he/she is asked to pay any penalty.

Accounting Entries for Forfeiture

(i) For the forfeiture of shares

Equity Share Capital a/c	Dr. (with the called-up face value)
Securities Premium a/c	Dr. (with the premium on issue, if remains unpaid)
To Calls in Arrears a/c	(total unpaid amount)
To Discount on Issue of Shares a/c	(issue discount)
To Forfeited Share a/c	(balancing figure, or paid-up amount excluding premium)

Note: In this case, either the discount on issue or premium on issue will be applicable.

Reissue of Shares

The forfeited shares can be reissued by the board of directors as per the provisions of Companies Act, 1956. Such reissue may be either at par, at discount or at a premium without inviting formal application as is the case of fresh issue of shares. While making reissue at discount, the reissue discount shall not exceed the amount forfeited for the shares being reissued.

[2]On 12,000 shares, total due amount on allotment was ₹ 24,000; the excess application money adjusted is ₹ 9,000. Hence, the remaining due was only ₹ 15,000 on 12,000 shares. Therefore, unpaid amount on 400 shares becomes ₹ 500 (15000 × 400/12,000).

Accounting for Reissue of Shares

(i) When shares are reissued and consideration is received in cash
Bank a/c Dr. (amount received on reissue)
Discount a/c Dr. (amount equal to original discount, if any applied at the time of issue)
Forfeited Share a/c Dr. (amount of reissue discount over and above the original discount)
To Equity Share Capital a/c (paid-up value of shares issued)
To Securities Premium a/c (premium on reissue)

(ii) To transfer the balance remaining in forfeited share account
Forfeited Share a/c Dr. (unused amount of forfeited shares that have been reissued)
To Capital Reserve a/c

Note: The forfeited amount relating to shares that have not been reissued is not to be used and should remain in the forfeited share account. It is either the discount on re-issue or premium on re-issue.

Example 7 Taking the data of Example 6, if shares of both the defaulting shareholder are forfeited as per rules and further reissued at ₹ 8.50 per share as fully paid, show entries relating to forfeiture and reissue of shares.

Solution Here shares were issued originally at discount; therefore, discount on issue of shares account needs to be adjusted. The entries will be as follows:

(i) Entry for forfeiture			
Equity Share Capital a/c	Dr.	6,000	
To Discount on Issue of Shares a/c			600
To Calls in Arrears a/c			2,900
To Forfeited Share a/c			2,500
(600 shares forfeited on account of non-payment of allotment and call money)			
(ii) Entry for reissue			
Bank a/c	Dr.	5,100	
Discount on Issue of Shares a/c	Dr.	600	
Forfeited Share a/c	Dr.	300	
To Equity Share Capital a/c			6,000
(600 shares reissued as fully paid up at ₹ 8.50 per share)			
(iii) To transfer the balance of forfeited share account			
Forfeited Share a/c	Dr.	2,200	
To Capital Reserve a/c			2,200

Notes:

(i) The total discount on reissue is ₹ 900 (1.50 × 600) but out of this, ₹ 600 is the original discount debited to 'Discount on Issue of Shares a/c' and rest ₹ 300 has been charged to 'Forfeited Share a/c'.

(ii) Out of the total forfeited amount ₹ 2,500 only ₹ 300 has been used as discount applicable for reissue (discount over and above original discount) the remaining ₹ 2,200 is the capital profit transferred to capital reserve.

Example 8 If in Example 7, only 400 shares relating to first defaulter are reissued then show how the entries should be passed.

Solution Here re-issue entry for 400 shares will be passed and the amount forfeited on these 400 shares is to be used for reissue discount and transfer to capital reserve. The forfeited amount on these 400 shares is ₹ 1,500 (amount received on these shares). Out of this, the additional discount on reissue is ₹ 200 (400 * 0.50) shall be used and rest ₹ 1,300 to be transferred to capital reserve.

(i) Entry for reissue

Bank a/c	Dr.	3,400	
Discount on Issue of Shares a/c	Dr.	400	
Forfeited Share a/c	Dr.	200	
To Equity Share Capital a/c			4,000
(600 shares reissued as fully paid up at ₹ 8.50 per share)			

(ii) To transfer the balance of forfeited share account

Forfeited Share a/c	Dr.	1,300	
To Capital Reserve a/c			1,300

PRESENTATION OF ITEMS IN THE BALANCE SHEET

The items related to issue of shares are shown on the liability side of the balance sheet. The whole activity of issuing the shares results in the following items that need to be shown in the balance sheet.

Share Capital

Authorized capital and issued capital are shown to the liability side of the balance sheet but these are not included in the final total of the liabilities. Subscribed capital is added in the final total of liabilities subject to the adjustment of calls in arrears. Forfeited share account balance relating to the shares that have not been reissued is shown along with the share capital.

Reserve and Surplus

In certain cases, issue of shares and debentures results into the creation of reserve and surplus also; such as securities premium and capital reserve are the part of shareholders net worth. When securities are issued at premium, the premium so received is shown under this heading. Similarly, capital reserve arising at the time of reissue of forfeited shares is the part of reserve and surplus.

Fictitious Assets

Discount and issue expenses are considered deferred expenses hence shown as fictitious asset on the asset side.

Current Liability

Calls in advance is shown as current liability this is to be adjusted in the calls as and when these become due in future.

Note: As per recent changes to schedule VI to Companies Act, 1956 share application money pending allotment is shown under the heading shareholder's funds.

Example 9 Show the following items in the balance sheet as on March 31, 2010:

Authorized share capital of the company is 2,00,000 equity shares of face value ₹ 10 each. .Out of these, 1,50,000 shares were issued at a premium of Re. 1 each by the company as fully paid.

All the amounts were received except on 200 shares @ ₹ 2 each of capital portion only. Another 30,000 shares were issued at par to vendors of building.

Solution

Balance Sheet as on March 31, 2010 (Amount in ₹)

Liabilities		Amount	Assets	Amount
Authorized share capital			*Fixed assets*	
2,00,000 equity shares of face value ₹ 10 each		20,00,000	Building	3,00,000
Issued and subscribed share capital				
1,50,000 equity shares of face value 10 each fully called	15,00,000			
Less: calls in arrear (on 200 Share @ ₹2 each)	400	14,99,600	*Current assets*	
			Cash at bank	16,49,600
30,000 equity shares of face value ₹ 10 each issued as fully paid up to vendors of building		3,00,000		
Reserve and Surplus				
Securities premium		1,50,000		
		19,49,600		19,49,600

Example 10 Show the following items in the balance sheet as on March 31, 2011.

Authorized share capital of the company is 5,00,000 equity shares of face value ₹ 10 each. Out of these, 3,00,000 shares were issued at a discount of ₹ 1 each by the company as fully paid. All the amounts were received except on 200 shares @ ₹ 2 each and these shares were forfeited by the directors pending for reissue.

Solution

Balance Sheet as on March 31, 2011 (Amount in ₹)

Liabilities	Amount	Assets	Amount
Authorized share capital 5,00,000 equity shares of face value ₹ 10 each	50,00,000		
Issued and subscribed share capital 2,99,800 equity shares of face value 10 each fully called and paid up	29,98,000	*Current assets* Cash at bank	26,99,600
Forfeited share account (200 shares)	1,400	*Miscellaneous expenses* (to the extent not written off) Discount on issue of shares	2,99,800
	29,99,400		29,99,400

EQUITY SHARES WITH DIFFERENTIAL RIGHTS

Prior to year 2000, the companies were not allowed to issue equity shares with differential rights. But the amendments to Companies Act made in the year 2000 allow the companies to issue equity shares with differential rights. Such differential rights might be with regards to (i) dividend payment at a higher or lower rate as compared to rest of the equity shares, or (ii) differential voting rights, such as equity shares without voting rights.

ALTERATION OF SHARE CAPITAL—SHARE SPLIT AND CONSOLIDATION

Alteration of share capital means sub-division or consolidation of shares. **Sub-divisions** implies the conversion of higher face value to smaller face value and **consolidation** means conversion of smaller face value into higher face value. Sub-division is also called **share split**. The purpose of share split is to make share available for small investors that otherwise is not available due to high market price. Alteration of share capital can be executed by passing a resolution in its general meeting only when it is authorized by the articles of the company.

ILLUSTRATIONS

1. A company has 1,00,000 equity shares of face value ₹ 10 each fully paid. It decides to split the shares into the face value of ₹ 2 each as fully paid. Here total face value of equity will not change and it will remain 10,00,000 as it is at present, but the number of shares will become 5,00,000 as each share will be split into five equity share of face value ₹ 2 each.
2. A company has 2,00,000 equity shares of ₹ 5 each fully paid. The company decides to consolidate these into the face value of ₹ 10 each as fully paid. Here total face value will not change but the total number of equity shares will become one half of 2,00,000, i.e., 1,00,000, because each two shares of ₹ 5 will make one share of ₹ 10.

Conversion from Share to Stock and Stock to Share

A **share** is the smallest unit having a particular face value to represent the capital of the company. Every share in a particular category has homogenous face value. The conversion can be executed by converting shares into stock. A **stock** is a value representation of the total capital of the company that can be represented by heterogeneous monetary amount. In case of shares, one can sell number of shares without making non-integer fractions of the shares. But in case of stock one can make purchase and sale the capital in non-integer amount or in any odd monetary amount.

ILLUSTRATION A company has 2,00,000 equity shares of face value ₹ 10 each resulting into total paid-up capital of ₹ 20,00,000. The company decides to convert shares into stock. Here the company will pass the following entry for this:

Equity Share Capital a/c	Dr.	20,00,000	
To Equity Stock Capital a/c			20,00,000

Mr X who had 300 shares of face value ₹ 10 each resulting into a total face value ₹ 3,000. Earlier he could sell the shares in the multiple of not less than one share. But now the total stock value of Mr. X is ₹ 3,000 and he can even sell any odd amount out of it.

BUY BACK OF SECURITIES

Buy back of securities means purchase of its own shares and debentures by the company. The purpose of such buy back may be to avoid over-capitalization. Prior to the year 1999, the companies were not allowed to buy back their own securities. But after the promulgation of Companies (Amendments) Act, 1999, the companies are allowed to buy back their own securities—equity shares, preference shares, debentures and other specified securities. The Act provides that the funds for buy back should be provided out of (i) free reserves of the company, or (ii) balance in securities premium account, or (iii) proceeds to be realized from the issue of other securities.

Provisions of Companies (Amendment) Act, 1999

The provisions of Section 77A provide that the buy back of securities is to be carried only when it is authorized by the articles of the company and the company has passed a special resolution to this effect in the general meeting of shareholders. Once the resolution has been passed to this effect, the board of directors should file with ROC and SEBI a declaration of solvency in the form of an affidavit. The affidavit should state about the solvency position of the company and it should disclose specifically that the company is capable of discharging its liabilities and such buy back will not render the company insolvent within one year from the date of buy back. The affidavit should be signed by at least two directors—one shall be the managing director, if any. Other specific provisions are as follows:

- The buy back should be for less than 25% of the paid-up capital and free reserves of the company, subject to the condition that total buy back of equity shares in one financial year shall not exceed 25% of the paid-up equity share capital.
- Buy back is to be made only when shares are fully paid up.
- After the buy back, ratio of total debt (secured and unsecured) shall not be more than twice the amount of post-buy back paid-up capital and free reserves.
- For a listed company, buy back should be as per the provisions of SEBI.
- Every buy back should be completed within 12 months from the date of passing special resolution to this effect.
- Upon buy back securities should be extinguished within seven days from the date of completing the process of buy back.
- Further issue of the same securities within 12 months from the date of buy back is not allowed, except bonus issue, conversion or by way of exercise of an existing option.

Mechanism of Buy Back

The process of buy back can be executed in any of the following mechanisms:

(i) From the existing security holders in the proportion of their existing holding
(ii) Purchase from open market
(iii) By purchasing odd lots, if any. This is applicable for listed companies only.
(iv) By purchasing the securities issued under employee stock option plan or issued as sweat equity.

Restriction on Buy Back

The provision of Section 77B of Companies (Amendment) Act, 1999 provide that no company should carry out the buy back of securities (i) through its subsidiary or associate companies, (ii) if it has defaulted in the payment of interest or redemption of debentures or payment of dividend.

BONUS SHARES

Bonus shares means issuing equity shares free of cost to existing equity shareholders in the proportion of their existing shareholding. These shares are issued by the capitalization of free reserves, such as general reserve, profit and loss account credit balance, balance of securities premium account, capital redemption reserve and other free reserves. Issue of bonus shares does not result into inflow of funds for the company but it results into a decrease in the free reserves and an increase in the paid-up capital of the company. Issue of bonus shares might be in the form of.

(i) Issue of new fully paid equity shares at par or at premium.
(ii) Making existing partly paid-up equity shares as fully paid up without receiving due amount.

SEBI Guidelines

SEBI guidelines provide that a listed company can issue bonus shares only out of genuine profits or share premium collected in cash only. The specific requirements are as follows:

- Issue of bonus shares should be authorized by the articles of the company.
- A resolution regarding the issue of bonus shares should be passed by the board of directors and in the meeting of shareholders.
- Revaluation reserves should not be used to issue bonus shares.
- Bonus shares should not be issued unless existing shares have been made fully paid.
- A company that has defaulted in making the payment of interest on fixed deposit or debentures and in the redemption of such deposits and debentures then it is not allowed to issue bonus shares.
- The benefit of bonus issue should be reserved for the convertible portion of preference shares and debentures.
- Bonus issue should be completed within six months from the date of approval by board of directors, that too without any change in the approved scheme.
- Consequent to the issue of bonus shares if paid-up capital is likely to increase beyond the authorized capital then a resolution should be passed to increase the authorized capital.

Bonus shares are issued by the companies to give positive signal about the financial health and profitability of the company. Issue of bonus shares does not affect the liquidity position of the company. At the same time, the shareholders of the company get rewarded suitably.

Sweat Equity

When equity shares are issued to either employees or directors of the company at a discount or without charging any consideration, it is called **issue of sweat equity.** Issue of such sweat equity is subject to the provisions of Companies (Amendment) Act, 1999. The specific provisions are as follows:

- If sweat equity is issued by a listed company then it should follow the norms issued by SEBI.
- Issue of sweat equity should be authorized by its articles and approved in the meeting by passing a resolution in the general meeting of shareholders.
- The resolution should specify the category of directors and employees who are eligible for sweat equity and the number of shares along with issue price of such shares.
- Sweat equity can be issued by a company only when it has completed at least one year from the date of commencement of business.

RIGHTS ISSUE

Rights issue means offering securities only to existing equity shareholders of the company in the proportion of their existing shareholding. Section 81 of the Companies Act, 1956, provides that a company should offer subsequent issue of securities to its existing equity shareholders unless a resolution has been passed by the equity shareholder to decline such offer. Rights issue is like a privilege for existing shareholders to subscribe for the shares of the company and get confirmed allotment for their entitlement.

An existing equity shareholder has the right to either apply for the shares for which he/she is entitled or he/she can renounce his/her right in favour of another person. In such cases, another party, in whose favour such renunciation is made, is entitled for the same benefit as the original shareholder was.

Offer Price

The offer price for the rights issue should be fixed in such a way so as to pass on the benefit to existing shareholders at the same time to ensure full subscription of the rights issue. Usually, offer price for the rights shares is kept below pre-issue market price of the shares, then only the existing shareholders can benefit out of it.

Recap 1

So far, we have discussed the following topics:

- Capital of a company
- Layers of capital
- Issue of equity shares—at par, at discount and at a premium
- Forfeiture and reissue of shares
- Buy back of shares
- Rights issue
- Bonus issue
- Sweat equity

Self-assessment

1. Can equity shares be converted into debentures? Discuss.
2. Explain provisions for buy back of shares.

The following topics will be delved into next:

- Issue of preference shares
- Redemption of preference shares
- Issue of debentures
- Redemption of debentures
- Case

ISSUE OF PREFERENCE SHARES

Preference shares are the shares on which a company promises to pay a fixed percentage of dividends every year, subject to the availability of sufficient profits. These shares have preference over the equity shares with regards to the payment of dividend and at the time of winding up of the company. Except these preferences, there is no difference between equity shares and preference shares. The entries regarding the issue of these shares are carried out in the same mechanism as applicable for the issue of equity shares except the difference that instead of using equity share capital account preference shares capital account is used while passing the entries.

Example 11 Jay Pee Ltd invited application to issue 10,000 9% preference shares of face value ₹ 10 each at par. The amount to be paid as to ₹ 3 at the time of application, ₹ 2 on allotment, and the remaining amount on first and final call. The company received the application for 12,000 shares. applicants for 2,000 shares were refused, the allotment and their application money was refunded. All the amounts due were received except one shareholder who was allotted 200 shares who failed to pay the allotment money and money due on the first and final call. Show necessary journal entries in the journal.

Solution

Journal of Jay Pee Ltd

Particulars		Amount (₹)	
		Debit	Credit
Bank a/c	Dr.	36,000	
To 9% Preference Share Application a/c			36,000
(Application money ₹ 3 per share received for 12,000 shares)			
9% Preference Share Application a/c	Dr.	30,000	
To 9% Preference Share Capital a/c			30,000
(10,000 shares of face value ₹ 10 each, having ₹ 3 called-up amount allotted)			
9 % Preference Share Application a/c	Dr.	6,000	
To Bank a/c			6,000
(Excess application money on 2,000 refunded)			
9% Preference Share Allotment a/c	Dr.	20,000	
To 9 % Preference Share Capital a/c			20,000
(Allotment money @ Rs 2 per share made due for 10,000 shares)			
Bank a/c	Dr.	19,600	
To 9% Preference Share Allotment a/c			19,600
(Allotment money @ ₹ 2 per share received for 9,800 shares)			
Calls in Arrears a/c	Dr.	400	
To 9% Preference Share Allotment a/c			400
(Allotment money @ ₹ 2 per share remained unpaid on 200 shares)			
9% Preference Share First and Final Call a/c	Dr.	50,000	
To 9% Preference Share Capital a/c			50,000
(First call money @ ₹ 5 per share made due on 10,000 shares)			
Bank a/c	Dr.	49,000	
To 9% Preference Share First and Final Call a/c			49,000
(First call money @ ₹ 5 per share received on 9,800 shares)			
Calls in Arrears a/c	Dr.	1,000	
To 9% Preference Share First and Final Call a/c			1,000
(First and Final Call @ ₹ 5 per share on 200 shares remained in arrears)			
Total		2,12,000	2,12,000

REDEMPTION OF PREFERENCE SHARES

In the past, the companies used to issue non-redeemable preference shares. But after the amendments of 1971 in the Companies Act, the companies can issue only redeemable or convertible preference shares. Depending upon the terms and conditions specified at the time of issue of preference shares, the preference shares may be redeemable or convertible in both the cases it results into derecognition of preference shares. Preference shares are entitled for fixed dividend till the date of redemption or conversion. In case of conversion into equity shares, these are entitled for equity benefits from the date of conversion.

Mode of Redemption of Preference Shares

Preference shares can be redeemed in any of the following modes:

Redemption Out of Profits

In this mode, the company uses accumulated profits to provide for the redemption of preference shares. The redemption may be either at par or at a premium. Only revenue profits that are otherwise available for the distribution of dividend and not the capital profits should be used for the purpose of redemption. The revenue profits include (i) general reserve, (ii) profit and loss credit balance, (iii) dividend equalization fund, (iv) reserve fund, (v) voluntary debenture sinking fund, (vi) contingency reserve. The amount that is used out of profits is transferred from these profit accounts to capital redemption reserve account.

Redemption By Conversion

In this mode, preference shares are converted into equity shares of the company. The number of equity shares in which each preference share is to be converted depends upon the terms and conditions of preference shares.

Redemption By Issuing New Equity Shares

In this mode, new equity shares are issued to arrange the funds for redemption of preference shares.

EXAMPLE 12 On March 31, 2010, a company has 5,000 ₹ 100 14% preference shares. The preference share-holder can opt for any of the two options for the redemption of these shares. The options are (i) redemption at par by cash payment and (ii) conversion into equity shares of face value of ₹ 10 each at a premium of ₹ 10 each. Holders of 3,200 preference shares opted for (i) option and rest for (ii) on March 31, 2010 the redemption was carried out, show necessary entries regarding redemption.

SOLUTION

Option (i) Total amount due on redemption of 3,200 preference shares is ₹ 3,20,000. Here it should be considered as redemption out of profits the entries are as follows:

(a) For making the redemption due			
14% Preference shares a/c	Dr.	3,20,000	
To Preference shareholders' a/c			3,20,000
(b) For making the payment in cash			
Preference shareholder's a/c	Dr.	3,20,000	
To Bank a/c			3,20,000

(c) To transfer the amount from general reserve to capital redemption reserve

General reserve a/c	Dr.	3,20,000	
To Capital redemption reserve a/c			3,20,000

Option (ii) Total amount due on the conversion of 1,800 preference shares is ₹ 1,80,000. Here equity share issued on conversion is at ₹ 20 (face value plus premium) Therefore, each preference share gets converted into five equity shares, so total number of equity shares to be issued on conversion is 9,000 (1,800 × 5).

(a) For making the redemption due

14% Preference shares a/c	Dr.	1,80,000	
To Preference shareholders' a/c			1,80,000

(b) For issuing new equity shares at premium on conversion

Preference shareholder's a/c	Dr.	1,80,000	
To Equity share capital a/c			90,000
To Securities premium a/c			90,000

Example 13 On March 31, 2010 2,000 ₹ 100 redeemable preference were outstanding. These are due for redemption at premium of 5%. The company issued necessary equity shares at par to provide for the redemption of preference shares. The balance sheet of the company discloses that it has general reserve of ₹ 1,25,000. The redemption premium is to be provided out of it. Show necessary journal entries regarding redemption of preference shares.

Solution

	Face value	Redemption premium
Total amount due on redemption	2,00,000	10,000
Less: Available from reserves		10,000
Less: To be arranged be new equity issue	2,00,000	

The company should issue 20,000 new equity shares of face value ₹ 10 each at par.

(i) For the issue of new equity shares

Bank a/c	Dr.	2,00,000	
To Equity share application a/c			2,00,000
Equity share application a/c	Dr.	2,00,000	
To Equity share capital a/c			2,00,000

(ii) To provide redemption premium out of general reserve

General reserve a/c	Dr.	10,000	
To Premium on redemption of preference shares a/c			10,000

(iii) For the redemption of preference shares.

Redeemable preference shares a/c	Dr.	2,00,000	
Premium on redemption of preference share a/c	Dr.	10,000	
To Bank a/c			2,10,000

ISSUE OF DEBENTURES

A debenture is a debt instrument representing a type of loan taken from general public. Debentures are also called **borrowed capital** on this company has the obligation to pay a fixed percentage of interest every year. The accounting entries for debentures are also similar as these are passed in case of equity shares except the difference in the name of account.

EXAMPLE 14 J.K. Ltd invited application to issue 3,000 12% redeemable debentures of face value ₹ 100 each at par. The amount to be paid are ₹ 60 at the time of application, ₹ 30 on allotment, ₹ 10 per debenture on first and final call. The company received the application for 5,000 debentures, applicants for 5,00 debentures were refused the allotment and remaining applicants were given pro-rata allotment. The excess application money of the successful applicants was adjusted against the allotment money and in the subsequent calls. One debenture holder holding 20 debentures paid only the application money. Rest of the debenture holders paid the due amount in time. Show necessary journal entries in the journal.

SOLUTION

Journal of J. K. Ltd

Particulars		Amount (₹)	
		Debit	Credit
Bank a/c To 12% Redeemable Debenture Application a/c (Application money ₹ 60 per debenture received for 5,000 debentures)	Dr.	3,00,000	3,00,000
12% Redeemable debenture Application a/c To 12% Redeemable debenture a/c (3,000 debentures of face value ₹ 100 each, having ₹ 60 called up amount allotted)	Dr.	1,80,000	1,80,000
12% Redeemable debenture Application a/c To Bank a/c (Application money of 500 debentures refunded)	Dr.	30,000	30,000
12% Redeemable debenture Allotment a/c To 12% Redeemable debenture a/c (Allotment money @ ₹ 30 per debenture made due for 3,000 debentures)	Dr.	90,000	90,000
12% Redeemable debenture Application a/c To 12% Redeemable debenture a/c (Excess application money of successful applicants adjusted against allotment dues)	Dr.	90,000	90,000
12% Redeemable debenture First & Final Call a/c To 12% Redeemable debenture a/c (First call money @ ₹ 10 per share made due on 3,000 shares)	Dr.	30,000	30,000
Bank a/c Calls in Arrears a/c To 12% Redeemable debenture First & Final Call a/c (Frist call money received after the adjustment of excess money except on 20 debentures)	Dr. Dr.	29,800 200[3]	30,000
Total		7,50,000	7,50,000

[3]Arrear amount on 20 debentures is Rs. 200 (20 × 10)

REDEMPTION OF DEBENTURE

Redemption of debentures implies relinquishing the debt obligation either by the repayment of the principal amount or by the conversion of debentures into equity shares of the company. Debentures either have the provision for redemption or conversion at the end of pre-specified time period the redemption or conversion as may be applicable is carried out according to the terms and conditions specified at the time of issue of debentures.

Modes of Redemption of Debentures

The redemption of debentures can be carried out in different manners. Different modes of redemption are as follows:

- Redemption by annual drawing
- Redemption by purchase of own debentures from open market
- Redemption by conversion
- Redemption by creating debenture sinking fund or debenture redemption reserve fund
- Redemption without creating debenture sinking fund

Redemption by Annual Drawing

Under this method of redemption, the company makes the repayment for certain number of debentures every year by draw of lots out of outstanding debentures. The payment is made as per the terms and conditions specified by the company at the time of issue of debentures.

EXAMPLE 15 X Limited has 20,000; ₹ 100 each, 12% debentures on April 1, 2010. The terms of issue provide that every year 1/5 of debentures to be redeemed at par by annual drawings. In the year 2010–11, the required number of debentures was redeemed show necessary journal entries in the books of accounts.

SOLUTION During the year 2010–11, 4,000 debentures have been redeemed. The entries will be

Journal

12% Debenture a/c	Dr.	4,00,000	
To Bank a/c			4,00,000
(4,000 debentures of face value ₹ 100 each redeemed at par)			

Redemption by Purchase of Own Debentures from Open Market

In this method, the company purchases its own debentures from open market, i.e., stock market with the purpose of cancellation of debentures. This results into redemption of debentures. The purchase of own debentures from market might result into the following two situations:

Purchase of Own Debentures and Immediate Cancellation Own debentures are purchased from market with the intention to cancel these immediately at the time of purchase.

EXAMPLE 16 On April 1, 2010 X Limited has 10,000; ₹ 100 each, 12% debentures. The terms of issue provide that every year 1/5 of debentures to be redeemed by making purchase from open market. During the year 2010–11, the company purchased the following debentures for immediate cancellation:

(i) 800 debentures at a market price of ₹ 98 per debenture
(ii) 1,200 debentures at a market price of ₹ 99.20 per debenture

Show necessary journal entries in the books of accounts.

SOLUTION

Journal

(i)	12% Debenture a/c	Dr.	80,000	
	To Bank a/c			78,400
	To Profit on redemption of debenture a/c			1,600
	(800 own debentures of face value ₹ 100 each purchased @ ₹ 98 each for immediate cancellation)			
(ii)	12% Debenture a/c	Dr.	1,20,000	
	To Bank a/c			1,19,040
	To Profit on redemption of debenture a/c			960
	(1,200 own debentures of face value ₹ 100 each purchased @ ₹ 99.20 each for immediate cancellation)			

Purchase of Own Debentures and Holding as Investment Here own debentures purchased from market are not cancelled immediately; instead held as investment. Subsequently, these own debentures held as investment are either cancelled or sold in the market.

EXAMPLE 17 On April 1, 2010, X Limited has 10,000; ₹ 100 each, 12% debentures. The terms of issue provide that every year 1/5 of debentures to be redeemed by making purchase from open market. During the year 2010–11, the company purchased the following debentures:

(i) 800 debentures at a market price of ₹ 98 per debenture these were cancelled subsequently.
(ii) 1,200 debentures at a market price of ₹ 99.20 per debenture these were sold by company @ ₹ 101 per debenture. Show necessary journal entries in the books of accounts.

SOLUTION

Journal

(i)	Own debenture a/c	Dr.	78,400	
	To Bank a/c			78,400
	(800 own debentures of face value ₹ 100 each purchased @ ₹ 98 each and held as investment)			
(ii)	Own debenture a/c	Dr.	1,19,040	
	To Bank a/c			1,19,040
	(1,200 own debentures of face value ₹ 100 each purchased @ ₹ 99.20 each and held as investment)			

(iii)	12% Denture a/c	Dr.	80,000	
	To Own debenture a/c			78,400
	To Profit on redemption of debenture a/c			1,600
	(800 own debentures held as investment cancelled resulting into redemption)			
(iv)	Bank a/c	Dr.	1,21,200	
	To Own debenture a/c			1,19,040
	To Profit on sale of debenture a/c			2,160
	(1,200 own debentures held as investment sold)			
(v)	Profit on redemption of debenture a/c	Dr.	1,600	
	Profit on sale of debenture a/c	Dr.	2,160	
	To Profit and loss a/c			3,760
	(Profit on redemption and sale of debentures transferred)			

Cum-interest and Ex-interest Market Price

The market price of debenture may be cum-interest or ex-interest. **Cum-interest** market price means the market price includes the amount of accrued interest also. The **accrued interest** is the interest from the date of previous interest due date till the date of purchase; whereas the **ex-interest** market price is the price in which the accrued interest is not included and the buyer is required to make the payment for accrued interest over and above the market price.

Example 18 Debentures of face value ₹ 100 each are having a coupon rate 12% p.a. have a provision for interest payment every year on September 30 and March 31. The following were the market prices:

(i) On July 1, cum-interest ₹ 99 per debenture (ii) On February 1, ex-interest ₹ 99.50 per debenture. If 200 debentures are purchased on both of these dates then calculate effective purchase price and accrued interest.

Solution *Calculation of effective purchase price and accrued interest on July 1*

Cum-interest market price of 200 debentures (200 × 99)	₹ 19,800
Less: Accrued interest from April 1 to June 30	₹ 600
(20,000 × 12/100 × 3/12)	
Effective purchase price	₹ 19,200
Total amount to be paid ₹ 19,800	

Calculation of effective purchase price and accrued interest on February 1

Ex-interest market price of 200 debentures (200 × 99.50)	₹ 19,900
Here ex-interest market price is the effective purchase price.	
Accrued interest from October 1 to January 31	₹ 800
(20,000 × 12/100 × 4/12)	
Total amount to be paid ₹ 20,700 (19,900 + 800)	

Example 19 Taking the data of Example 18, pass necessary entries if the company makes the purchase of these debentures on respective date for immediate cancellation.

Solution *On July 1:* Here profit on redemption is ₹ 800 this is the difference between the face value ₹ 20,000 and the effective purchase price ₹ 19,200.

10% Debenture a/c	Dr.	20,000	
Interest on debenture a/c	Dr.	600	
To Bank a/c			19,800
To Profit on redemption of debenture a/c			800
(200 debentures cancelled by purchase from market)			

On February 1: Here profit on redemption is ₹ 100 this is the difference between the face value ₹ 20,000 and the effective purchase price ₹ 19,900.

10% Debenture a/c	Dr.	20,000	
Interest on debenture a/c	Dr.	800	
To Bank a/c			20,700
To Profit on redemption of debenture a/c			100
(200 debentures cancelled by purchase from market)			

Redemption by Conversion

If terms and conditions about the redemption of debentures provide for the conversion of debentures into certain number of equity shares of the company then it is called **redemption by conversion**. Herein debentures are cancelled on the pre-specified due date and debenture holders are issued certain number of equity shares of the company as per the terms of conversion for debentures. The entitlement of interest payment on debenture ceases from the date of conversion and the shares issued as a result of conversion are entitled for the benefits of usual equity shares of the company.

EXAMPLE 20 On July 1, 2008, Dewee Limited issued 30,000 10% debentures of face value ₹ 100 each at par. After 18 months from the date of issue, each debenture is to be converted into four equity shares of face value ₹ 10 each at a premium of ₹ 15 each. On the date of conversion, all the debentures were converted into required number of equity shares. Show necessary journal entries showing issue and conversion of debentures.

SOLUTION

July 1, 2008

(i) Bank a/c	Dr.	30,00,000	
To Debenture application a/c			30,00,000
(Application money @ ₹ 100 per debenture received for 30,000 debentures)			
(ii) Debenture application a/c	Dr.	30,00,000	
To 10% Debenture a/c			30,00,000
(30,000 10% ₹ 100 debentures issued at par)			

January 1, 2010

Each debenture is to be converted into four equity shares of face value ₹10 each. Therefore, on conversion 1,20,000 (4 × 30,000) equity shares having aggregate face value ₹ 12,00,000 (1,20,000 × 10) are to be issued. Remaining amount ₹ 18,00,000 (30,00,000 – 12,00,000) is the securities premium.

(i) 10% Debenture a/c	Dr.	30,00,000	
To Debenture holder's a/c			30,00,000
(Conversion of 30,000 debentures made due)			
(ii) Debenture holder's a/c	Dr.	30,00,000	
To Equity share capital a/c			12,00,000
To Securities premium a/c			18,00,000
(1,20,000 equity shares of face value ₹ 10 each issued at a premium of ₹ 15 each)			

REDEMPTION BY CREATING DEBENTURE SINKING FUND—DEBENTRURE REDEMPTION RESERVE FUND

Sinking fund is a fund created by investing a particular amount every year to provide for the redemption of redeemable debentures. The amount to be invested every year is charged to profit and loss appropriation account. Rules of SEBI provide that for debentures with a maturity period more than 18 months, the company should create a sinking fund so as to provide for the redemption of redeemable debentures. **Debenture sinking fund** is also called **debenture redemption reserve fund**.

Calculation of Sinking Fund Amount

The amount to be transferred from profit and loss appropriation account for debenture sinking fund is calculated using sinking fund table. The amount is calculated as follows:

Amount to be transferred = Maturity value × Sinking fund table value

Sinking fund table value = $1/[\{(1+r)^n - 1\}/r]$, here 'r' is rate of interest and 'n' is time period.

Accounting for Debenture Sinking Fund

Every year, journal entries are passed for the following:

(i) To transfer required amount from profit and loss appropriation account to debenture sinking fund account.
(ii) For the investment of amount so transferred including interest, if any.
(iii) For interest on invested amount.
(iv) For sale of investment in the year in which redemption is due.
(v) For profit or loss on sale of investment.
(vi) For the redemption of debenture on maturity.
(vii) At the end to transfer balance of debenture sinking fund to general reserve account.

EXAMPLE 21 On April 1, 2007, Vycity Limited issued 2,000 ₹ 100 9% debentures at a premium of 10%. Debentures have a maturity of four years. To provide for the redemption of debentures, the company created debenture sinking fund at an interest rate of 5% per annum. Re. 0.2320185 invested @ 5% p.a. results into ₹ 1 at the end of fourth year. On the maturity date debentures were redeemed. Show journal entries.

SOLUTION To provide ₹ 2,00,000 on the date of redemption, every year ₹ 46,403.71 should be transferred to debenture sinking fund account and invested @ 5% pa. The journal entries are as follows:

Date	Particulars		Amount (₹) Debit	Amount (₹) Credit
01/04/07	Bank a/c	Dr.	2,20,000	
	To Debenture application a/c			2,20,000
	(application money received)			
01/04/07	Debenture application a/c	Dr.	2,20,000	
	To 9% Debenture a/c			2,00,000
	To Securities premium a/c			20,000
	(2,000 debentures issued at premium)			

(*Contd*)

(*Contd*)

31/03/08	Profit and loss appropriation a/c	Dr.	46,403.71	
	To Debenture sinking fund a/c			46,403.71
	(amount transferred to sinking fund)			
31/03/08	Debenture sinking fund investment a/c	Dr	46,403.71	
	To Bank a/c			46,403.71
	(transferred amount invested)			
31/03/09	Profit and loss appropriation a/c	Dr.	46,403.71	
	To Debenture sinking fund a/c			46,403.71
	(amount transferred to sinking fund)			
31/03/09	Bank a/c	Dr.	2,320.19[4]	
	To Debenture sinking fund a/c			2,320.19
	(interest on investment as on 31/03/08 received)			
31/03/09	Debenture sinking fund investment a/c	Dr.	48,723.90	
	To Bank a/c			48,723.90
	(transferred amount including interest invested (46,403.71 + 2,320.19)			
31/03/10	Profit and loss appropriation a/c	Dr.	46,403.71	
	To Debenture sinking fund a/c			46,403.71
	(amount transferred to sinking fund)			
31/03/10	Bank a/c	Dr.	4,756.38	
	To Debenture sinking fund a/c			4,756.38
	(interest on investment as on 31/03/09 received)			
31/03/10	Debenture sinking fund investment a/c	Dr.	51,160.09	
	To Bank a/c			51,160.09
	(transferred amount including interest invested (46,403.71 + 4,756.38)			
31/03/11	Profit and loss appropriation a/c	Dr.	46,403.71	
	To Debenture sinking fund a/c			46,403.71
	(amount transferred to sinking fund)			
31/03/11	Bank a/c	Dr.	7,314.39	
	To Debenture sinking fund a/c			7,314.39
	(interest on investment as on 31/03/10 received)			
31/03/11	Bank a/c	Dr.	1,46,287.70	
	To Debenture sinking fund investment a/c			1,46,287.70
	(investment sold at book value)			
31/03/11	9% Debenture a/c	Dr.	2,00,000	
	To Bank a/c			2,00,000
	(debentures redeemed)			
31/03/11	Debenture sinking fund a/c	Dr.	2,00,005.80	
	To General reserve a/c			2,00,005.80
	(balance of debenture sinking fund transferred to ₹ 5.80 extra is due to approximation difference)			

[4]Interest @ 5% for one year has been calculated on the balance of investment as on March 31, 2008, i.e., ₹ 46,403.71.

Ledger Accounts in Case of Debenture Sinking Fund

Different ledger accounts related to debenture sinking fund are (i) debenture sinking fund (ii) debenture sinking fund investment account and (iii) debenture account.

Example 22 Taking the data of Example 21, show necessary accounts regarding redemption of debentures.

Solution

Debenture a/c

Date	Particulars	Amount (₹)	Date	Particulars	Amount(₹)
31/03/08	To Balance c/f	2,00,000	01/04/07	By Debenture application a/c	2,00,000
31/03/09	To Balance c/f	2,00,000	01/04/08	By Balance b/f	2,00,000
31/03/10	To Balance c/f	2,00,000	01/04/09	By Balance b/f	2,00,000
31/03/11	To Bank a/c	2,00,000	01/04/10	By Balance b/f	2,00,000

Debenture Sinking fund a/c

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31/03/08	To Balance c/f	46,403.71	31/03/08	By Profit and loss appropriation a/c	46,403.71
31/03/09	To Balance c/f	95,127.61	1/04/08 31/03/09 31/03/09	By Balance b/f By Profit and loss appropriation a/c By Bank a/c	46,403.71 46,403.71 2,320.19
31/03/10	To Balance c/f	1,46,287.70	01/04/09 31/03/10 31/03/10	By Balance b/f By Profit and loss appropriation a/c By Bank a/c	95,127.61 46,403.71 4,756.38
31/03/11	To General reserve a/c	2,00,005.80	01/04/09 31/03/10 31/03/10	By Balance b/f By Profit and loss appropriation a/c By Bank a/c	1,46,287.70 46,403.71 7,314.39

Debenture sinking fund investment a/c

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31/03/08	To Bank a/c	46,403.71	31/03/08	By Balance c/f	46,403.71
01/04/08 31/03/09	To Balance b/f To Bank a/c	46,403.71 48,723.90	31/03/09	By Balance c/f	95,127.61
01/04/09 31/03/10	To Balance b/f To Bank a/c	95,127.61 51,160.09	31/03/10	By Balance c/f	1,46,287.70
01/04/10	To Balance b/f	1,46,287.70	31/03/11	By Bank a/c	1,46,287.70

Redemption Without Creating Sinking Fund

Sometimes, the company does not create sinking fund and provide for the redemption of debentures out of profits of the company. Redemption may be either at par or at premium or at a discount. The entries in this case are passed as in case of redemption by annual drawings.

Premium on Redemption of Debentures

When terms and conditions of debentures provide for redemption at a premium then such premium is provided out of profit. This premium is like a loss for company to be charged to profits or general reserve. The accounting entries are as follows:

(i) To provide for redemption premium
General reserve or profit and loss account Dr.
To Premium on redemption of debenture a/c

(ii) When debentures are redeemed
Debenture a/c Dr.
Premium on redemption of debenture a/c Dr.
To Bank a/c

SEBI GUIDELINES REGARDING ISSUE OF DEBENTURES

Prior to the implementation of SEBI Act, 1992 issue of debentures was regulated by the provisions of CCI (controller of capital issues), 1947. CCI lacked in providing sufficient guidelines for the issue of debentures, whereas SEBI has provided detailed guideline regarding the issue of debentures. These are as follows:

- A company can issue the debentures only when it has obtained minimum investment grade credit rating from an independent rating agency.
- Credit rating 'B' is considered as minimum investment grade rating. Such rating should not be older than the six from at the time of issue of debentures.
- The company should appoint debenture trustee to safeguard the interest of debenture holders.
- All the terms and conditions about issue, security of debentures, payment of interest, redemption/conversion of debentures should be specified at the time of issue of debentures that cannot be changed subsequently.
- The company should create debenture sinking fund in case the conversion or redemption falls beyond 18 months from the date of issue.
- For partly convertible debentures (PCD) and fully convertible debentures (FCD), the company should provide an option to debenture holders regarding the conversion of the debentures into equity shares of the company. Such option should provide for either conversion or redemption at the discretion of debenture holder.
- If before the conversion of PCD/FCD, a company issues bonus shares then the proportion likely to be related to the debentures to be converted into equity shares should be kept reserve. These reserved bonus shares should be issued once the debentures get converted into equity shares.

SOLVED EXAMPLES

Example 23 J.K. Ltd invited application to issue 30,000 equity shares of face value ₹ 10 each at par. The amount to be paid as to ₹ 6 at the time of application, ₹ 3 on allotment, Re. 1 per share on first and final call. The company received the application for 50,000 shares, applicants for 5,000 shares were refused the allotment and remaining applicants were given prorata allotment. The excess application money of the successful applicants was adjusted against the allotment money and in the subsequent calls. One shareholder holding 200 shares paid only the application money. Rest of the shareholders paid the due amount in time. Show necessary journal entries in the journal.

SOLUTION:

Journal of J. K. Ltd

Particulars		Amount (₹) Debit	Amount (₹) Credit
Bank a/c	Dr.	3,00,000	
To Equity Share Application a/c			3,00,000
(Application money ₹ 6 per share received for 50,000 shares)			
Equity Share Application a/c	Dr.	1,80,000	
To Equity Share Capital a/c			1,80,000
(30,000 shares of face value ₹ 10 each having ₹ 6 called up amount allotted)			
Equity Share Application a/c	Dr.	30,000	
To Bank a/c			30,000
(Excess application money on 5,000 refunded)			
Equity Share Allotment a/c	Dr.	90,000	
To Equity Share Capital a/c			90,000
(Allotment money @ ₹ 3 per share made due for 30,000 shares)			
Equity Share Application a/c	Dr.	90,000	
To Equity Share Allotment a/c			90,000
(Excess application money of successful applicants adjusted against allotment dues)			
Equity Shares First & final Call a/c	Dr.	30,000	
To Equity Share Capital a/c			30,000
(First call money @ ₹ 1 per share made due on 30,000 shares)			
Bank a/c	Dr.	29,800	
Calls in Arrears a/c	Dr.	200[5]	
To Equity share First & Final Call a/c			30,000
(First call money received after the adjustment of excess money except on 300 shares)			
Total		7,50,000	7,50,000

EXAMPLE 24 ABC Ltd was registered with an authorized share capital of ₹ 5,00,000 divided into 50,000 equity shares of face value of ₹ 10 each. Out of this on December 1, the company issued 30,000 shares that were fully subscribed by the public, the amount was payable as follows:

On application ₹ 2; on allotment ₹ 3; ₹ 2.50 on first call and ₹ 2.50 on second call. The issue closed on December 3 and allotment was made on January 5. The allotment money was received on February 5, whereas first and second calls were made on May 5 and June 5, respectively. The amount due on first and second call was collected on June 5 and July 5, respectively. All the amounts were received except one shareholder holding 100 shares failed to pay the amount due on allotment that he paid with interest along with the first call. Another shareholder holding 200 shares paid the entire due money at the time of allotment. Interest

[5] Arrears on 200 shares is Rs 200 (200 × 1).

@ 5% p.a. was charged on calls in arrears and an interest @ 6% p.a. was paid on calls received in advance. Journalize these transactions.

Solution

Journal of ABC Ltd

Date	Particulars		Amount (₹) Debit	Credit
1/12	Bank a/c	Dr.	60,000	
	To Equity Share Application a/c			60,000
	(Application money ₹ 2 per share received for 30,000 shares)			
05/01	Equity Share Application a/c	Dr.	60,000	
	To Equity Share Capital a/c			60,000
	(Allotted 30,000 shares of face value ₹ 10 each, having ₹ 2 called-up amount)			
05/01	Equity Share Allotment a/c	Dr.	90,000	
	To Equity Share Capital a/c			90,000
	(Allotment money @ ₹ 3 per share made due for 30,000 shares)			
05/02	Bank a/c	Dr.	90,700	
	To Equity Share Allotment a/c			89,700
	To Calls in Advance a/c			1,000
	(Allotment money received except for 100 shares, and one shareholder having 200 shares paid rest of the amount, i.e., ₹ 5 per share as an advance)			
5/05	Equity Share First Call a/c	Dr.	75,000	
	To Equity Share Capital a/c			75,000
	(First call money @ ₹ 2.50 per share made due on 30,000 shares)			
05/05	Calls in Advance a/c	Dr.	500	
	To Equity Share First Call a/c			500
	(Call received in advance adjusted)			
05/06	Bank a/c	Dr.	74,500	
	To Equity Share First Call a/c			74,500
	(First call money received)			
05/06	Bank a/c	Dr.	305	
	To Equity Share Allotment a/c			300
	To Interest on Calls in Arrears a/c			5[6]
	(Calls in arrears collected with interest for four months)			

(*Contd*)

[6]The allotment was to be received by Feb. 5, but actually on 100 shares ₹ 300 has been received on June 5. Hence, interest @ 5% per annum for four months ₹ 5 has been collected.

(*Contd*)

05/06	Equity Share Second Call a/c Dr.	75,000	
	To Equity Share Capital a/c		75,000
	(Second call made due)		
05/06	Calls in Advance a/c Dr.	500	
	To Equity Share Second Call a/c		500
	(Call received in advance adjusted)		
05/07	Bank a/c Dr.	74,500	
	To Equity Share Second Call a/c		74,500
	(Amount due on second call collected)		
05/07	Interest on Calls in Advance a/c Dr.	17.50	
	To Bank a/c		17.50
	(Interest paid on calls received in advance)		
Total		6,01,022.50	6,01,022.50

Note: Calls in advance collected on Feb. 5, for first and second call. First call became due on May 5; hence interest for three months for first call amount, i.e., on ₹ 500 and second call became due on June 5; therefore, interest for 4 months on second call amount, i.e., on ₹ 500. Total interest ₹ 17.50.

Example 25 M.N. Ltd invited application to issue 10,000 equity shares of face value ₹ 10 each at 20% premium. The amount to be paid as to ₹ 5 (including ₹ 1 of premium) at the time of application, ₹ 5 (including Re. 1 of premium) on allotment, ₹ 1 per share on first and Re. 1 on second and final call. The company received the application for 25,000 shares, applicants for 6,000 shares were refused the allotment and remaining applicants were given allotment on prorate basis. One shareholder holding 300 shares paid only the application money. Another shareholder holding 200 shares could not pay the second call money. Rest of the shareholders paid the due amount in time. Show necessary journal entries in the journal.

Solution

Journal of M.N. Ltd

Particulars	Amount (₹) Debit	Amount (₹) Credit
Bank a/c Dr.	1,25,000	
To Equity Share Application a/c		1,25,000
(Application money ₹ 5 per share received for 25,000 shares)		
Equity Share Application a/c Dr.	50,000	
To Equity Share Capital a/c		40,000
To Securities Premium a/c		10,000
(10,000 shares of face value ₹ 10 each, having ₹ 4 called-up amount and ₹ 1 per share premium allotted)		

(*Contd*)

(*Contd*)

Equity Share Application a/c	Dr.	30,000	
To Bank a/c			30,000
(Applicants for 6,000 shares refused the allotment and application money there on refunded)			
Equity Share Allotment a/c	Dr.	50,000	
To Equity Share Capital a/c			40,000
To Securities Premium a/c			10,000
(Allotment money @ ₹ 5 per share including a premium of ₹ 1 per share made due for 10,000 shares)			
Equity Share Application a/c	Dr.	45,000	
To Equity Share Allotment a/c			45,000
(Excess application money of success applicants adjusted against allotment dues)			
Bank a/c	Dr.	4,850	
Calls in Arrears a/c	Dr.	150[7]	
To Equity Share Allotment a/c			5,000
(Remaining allotment money received except on 300 shares)			
Equity Share First Call a/c	Dr.	10,000	
To Equity Share Capital a/c			10,000
(First call money @ ₹ 1 per share made due on 10,000 shares)			
Bank a/c	Dr.	9,700	
Calls in Arrears a/c	Dr.	300	
To Equity Share First Call a/c			10,000
(First call money received except on 300 shares)			
Equity Share Second Call a/c	Dr.	10,000	
To Equity Share Capital a/c			10,000
(First call money @ ₹ 1 per share made due on 10,000 shares)			
Bank a/c	Dr.	9,500	
Calls in Arrears a/c	Dr.	500	
To Equity Share Second Call a/c			10,000
(First call money received except on 500 shares)			
Total		3,45,000	3,45,000

KEY TERMS

Residual claim
Issued capital
Reserve capital
Sweat equity
Authorized capital
Called-up capital
Prospectus
Subscribed capital
Paid-up capital
Red-herring prospectus
Buy back of securities

[7]On 10,000 shares total due amount was ₹ 50,000; the excess application money adjusted ₹ 45,000, hence remaining due was only ₹ 5,000 on 10,000 shares. Hence, unpaid amount on 300 shares becomes ₹ 150/- (5000 × 300/10,000).

FINAL RECAP

- **Authorized capital** is the maximum amount of capital that can be raised by the company by issuing shares during its lifetime.
- **Issued capital** is such portion out of the authorized capital for which the company has invited the application for subscription.
- **Subscribed capital** is such proportion of capital for which the company finally makes the allotment is identified as subscribed capital.
- The total amount out of the face value of shares that has been called by the company is the **called-up amount**, the remaining amount is **uncalled** amount.
- The amount that has been paid out of the called-up amount by the subscribers is identified as **paid-up capital**.
- **Reserve capital** is such proportion out of the face value of subscribed capital that is not called up by the company; instead the company passes the resolution not to call this amount in the normal course of business, rather to call it only when the company is to be closed down due to losses.
- **Alteration of share capital** means sub-division or consolidation of shares.
- **Buy back of securities** means purchase of its own shares and debentures by the company.
- **Bonus shares** means issuing equity shares free of cost to existing equity shareholders in the proportion of their existing shareholding.
- When equity shares are issued to either employees or directors of the company at a discount or without charging any consideration it is called **issue of sweat equity.**
- **Rights issue** means offering securities only to existing equity shareholders of the company in the proportion of their existing shareholding.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. A document that does not contain the details about the final issue price of the shares being issued is called
   (a) Letter of intent (b) Prospectus
   (c) Red-herring prospectus (d) Offer document
2. Which of the following is not applicable for buy back of shares?
   (a) A listed company is required to follow SEBI guidelines about buy back.
   (b) An unlisted company cannot buy back its securities.
   (c) Neither of these.
   (d) Both of these.
3. Which of the following is applicable about rights issue?
   (a) Rights can be renounced.
   (b) Rights can be renounced only by the permission of SEBI.
   (c) Rights can be renounced only in favour of another exiting equity shareholder.
   (d) Neither of these.

DESCRIPTIVE QUESTIONS

1. Write short notes on the following:
   (a) Authorized capital (b) Sweat equity (c) Rights issue (d) Bonus shares
2. Differentiate between preference shares and debentures.

Numerical Problems

1. M.N. Ltd invited application to issue 10,000 preference shares of face value ₹ 10, each at 20% premium. The amount to be paid as to ₹ 5 (including Re. 1 of premium) at the time of application, ₹ 5 (including ₹ 1 of premium) on allotment, ₹ 1 per share on first and Re. 1 on second and final call. The company received the application for 25,000 shares, applicants for 6,000 shares were refused the allotment and remaining applicants were given allotment on prorate basis. One shareholder holding 300 shares paid only the application money. Another shareholder holding 200 shares could not pay the second call money. Rest of the shareholders paid the due amount in time. Show necessary journal entries in the journal.
2. ABC Ltd was registered with an authorized share capital of ₹ 5,00,000 divided into 50,000 equity shares of face value of ₹ 100 each. Of these, on December 1, the company issued 30,000 shares that were fully subscribed by the public. The amount was payable as follows:
   On application ₹ 20; on allotment ₹ 30; ₹ 25 on first call and ₹ 25 on second call. The issue closed on December 3 and allotment was made on January 5. The allotment money was received on February 5, whereas first and second calls were made on May 5 and June 5, respectively. The amount due on first and second call was collected on June 5 and July 5, respectively. All the amounts were received except one shareholder holding 100 shares failed to pay the amount due on allotment that he/she paid with interest along with the first call. Another shareholder holding 200 shares paid the entire due money at the time of allotment. Interest @ 5% p.a. was charged on calls in arrears and an interest @ 6% p.a. was paid on calls received in advance. Journalize these transactions.
3. J.K. Ltd invited application to issue 3,000 equity shares of face value ₹ 10 each at par. The amount to be paid as to ₹ 3 at the time of application, ₹ 6 on allotment, ₹ 1 per share on first and final call. The company received the application for 5,500 shares, applicants for 500 shares were refused the allotment and remaining applicants were given pro rata allotment. The excess application money of the successful applicants was adjusted against the allotment money and in the subsequent calls. One shareholder holding 300 shares paid only the application money. Rest of the shareholders paid the due amount in time. These 300 shares were forfeited and reissued at a disclunt of Re. 1 each. Show necessary journal entries in the journal.
4. On July 1, 2008, Dewee Limited issued 30,000 10% debentures of face value ₹ 100 each at par. After 18 months from the date of issue, each debenture is to be converted into two equity shares of face value ₹ 10 each at a premium of ₹ 40 each. On the date of conversion, all the debentures were converted into required number of equity shares. Show necessary journal entries showing issue and conversion of debentures.
5. Debentures of face value ₹ 100 each having a coupon rate 10% p.a. have a provision for interest payment every year on September 30 and March 31. The following were the market prices:
   (i) On July 1, ex-interest ₹ 99 per debenture
   (ii) On February 1, cum-interest ₹ 99.50 per debenture
   If 100 debentures are purchased on both of these dates, then calculate effective purchase price and accrued interest.

Answers

Multiple Choice Questions

1. (c) 2. (b) 3. (a)

Numerical Problems

1. Total calls in arrears ₹ 950
2. Interest on calls in Arrear ₹ 50; on calls in advance ₹ 175
3. Amount forfeited ₹ 1,500 on 300 shares
4. 60,000 equity shares to be issued on conversion
5. (i) Accrued interest ₹ 250, (ii) ₹ 333

CASE

Redemption of Preference Shares

Suman Limited has issued share capital of 1,30,000, 15% preference share of ₹ 10 each and 1,50,000 equity shares of ₹ 10 each. The preference shares are redeemable at a premium of 5% on April 1, 2011.

Balance Sheet as on March 31, 2011 (Amount in ₹)

Liabilities		Amount	Assets	Amount
Authorized share capital			*Fixed assets*	
2,00,000 equity shares of face value ₹ 10 each		20,00,000	Building	3,00,000
2,00,000 15% preference shares of face value ₹ 10 each		20,00,000	Goodwill	5,00,000
			Investment	3,50,000
Issued and subscribed share capital			*Current assets*	
1,50,000 equity shares of face value 10 each fully called	15,00,000		Cash at bank	29,49,600
Less: calls in arrear (on 200 shares @ ₹ 2 each)	400	14,99,600	Sundry debtors	1,50,000
30,000 equity shares of face value ₹ 10 each issued as fully paid up to vendors of building		3,00,000	Inventory	2,00,000
1,30,000 15% Preference shares of face value ₹ 10 each fully called and paid		13,00,000		
Reserve and Surplus				
Securities premium		1,50,000		
Profit and loss account		6,50,000		
Current liability and provisions				
Sundry creditors		3,50,000		
Provision for tax		2,00,000		

In order to facilitate the redemption of preference shares, the company proposed the following:

(a) To sell the investment at a profit of ₹ 40,000
(b) To issue new 9% debentures of face value ₹ 10,50,000
(c) Rest is to be provided out of profits

At the same time, the company passed a resolution to capitalize the profits of ₹ 3,00,000 to issue bonus shares. The company also passed a resolution to issue sweat equity to its existing equity employees, which provided for the issue of each equity share of face value ₹ 10 at a price of ₹ 18 as compared to the market price of ₹ 35 per share.

Discussion Question

1. Analyse the case and show how redemption is to be carried out.

CHAPTER 15

Accounting for Merger, Amalgamation and Acquisitions

Learning Objectives

After reading this chapter, you will be able to

- Learn the concept of business combination—amalgamation
- Familiarize yourself with the provisions of IFRS-03 about business combination and provisions of AS-14 about amalgamation
- Calculate purchase consideration
- Know accounting for amalgamation

Accounting for Business Combination—Amalgamation

Business combination comes into existence when two or more existing companies merge into one single business entity. The separate legal entity of amalgamated companies gets dissolved. The surviving company is called amalgamating company.

IFRS-03 provides that at least one company out of the amalgamated companies should be identified as acquirer and accounting for business combination should be executed using **purchase method of accounting.** The provisions of AS-14, i.e. Indian GAAP, provide the accounting by two methods 'pooling of interest method' and 'purchase method' of accounting depending upon the fulfillment of specific conditions relating to amalgamation. Use of fair value is almost mandatory under IFRS but AS-14 does not make it mandatory, however recently introduced near final Ind-AS-103 insists on the use of fair value.

Once a complete convergence with IFRS-03 is implemented, accounting standards across the globe will have uniform accounting policies.

INTRODUCTION

Business combination comes into existence when two or more companies amalgamate with the objective to realize synergy benefits. Sometimes, a weaker company is merged into a strong company or a dominant company acquires business of the company being dominated. In a true case of business combination, separate legal entity of one or more acquired companies is dissolved and these get merged into the legal entity of acquiring company. However, business of companies merged is intended to be continued by the acquiring company even after business combination.

Business combination comes into existence when two or more companies amalgamate with the objective to realize synergy benefits.

ACCOUNTING FOR BUSINESS COMBINATION

As per the provisions of FAS-141 issued by FASB, most commonly used methods of accounting for business combination were (i) pooling of interest method and (ii) purchase method.

Pooling of interest method was to be used only when assets and liabilities of amalgamating companies were merged at the existing carrying amount on the date of amalgamation without any consideration for the fair value of the assets and liabilities. This method had a greater difficulty in identifying intangible assets like goodwill resulting from the exercise of amalgamation and the effect of business combination on the financial position of the acquiring company. Similarly this method does not emphasize on the requirement for the identification of acquirer in such business combination exercise. Due to these difficulties majority of the standard setting organizations across the countries are of the opinion to discontinue this method of accounting for business combination.

Purchase method is the one in which all the assets and liabilities of acquired company are not combined with the assets and liabilities of the acquiring company at the same time it has the provision of considering fair value of assets acquired and liabilities assumed by the acquiring entity. This method also recognizes the discharge of purchase consideration in cash, by the issue of securities or by the combination of both of these.

The provisions of IFRS insist upon the discontinuation of pooling of interest method of accounting and favour the adoption of purchase method of accounting as it considers every business combination is like an acquisition of acquired company by the acquiring company.

WHAT IS NOT RECOGNIZED AS BUSINESS COMBINATION?

Joint venture, co-ownership of assets, and acquisition of assets of group of assets that does not constitute a separately identifiable legal business entity are not considered as business combination. Therefore the provisions of IFRS-03, AS-14 and statement FAS-141 are not applied in these cases. These cases are dealt with the provisions of accounting standards concerning consolidated financial statements and accounting for joint venture.

IDENTIFICATION OF ACQUIRER

Identification of acquirer in a business combination is necessary to facilitate the preparation of post amalgamation financial statements. The provisions of statement FAS-141 issued by FASB (Finance and Accounting Standard Board) and the provisions of IFRS-03 and near final Ind-AS-103 also insist upon the identification of acquirer. Therefore identification of acquirer is must before preparing post amalgamation financial statements and it should be done as follows.

Identification on the Basis of Incidence of Payment or Issue of Equity

- A business combination in which purchase consideration is discharged by making cash payment of by other asset the entity making such payment is identified as acquiring company (acquirer) and the entity receiving it is identified as acquired company.
- A business combination in which purchase consideration is discharged by the issue of equity instruments/shares the entity issuing such equity instruments/shares is identified as acquirer and the company receiving shares so issued is identified as acquired company. However in a reverse acquisition it is the acquired entity which issues the equity shares.

As per IFRS 03 and Ind-AS-103 acquirer in a business combination is the one who makes cash payment or issues securities, in certain cases it is identified on the basis of voting rights in the amalgamating company.

Identification on the Basis of Voting Rights

The business entity that is likely to have majority proportion of voting rights in the combined business entity on the date of business combination is identified as acquirer. While arriving at the total voting right only equity shares on the date of acquisition should not be considered rather certain instrument likely to be converted into equity at a later date should also be considered. *Here the company having majority voting right is identified as acquirer.*

Identification on the Basis of Composition of Board of Directors

Identification of acquirer should be done by considering the composition of board of director pursuant to amalgamation. *The company which is supposed to have an influence or control on the composition of board of directors is considered as acquirer.*

Example 1 Three companies Dee, Pee and Cee having 10,000; 15,000 and 20,000 equity shares, respectively, of face value of ₹ 10 each were combined together and all the assets and liabilities of these companies were acquired by a newly formed company namely DPC. DPC issued shares to each of these companies in the ratio of one new share in DPC for every one share in the existing companies. The board of directors of amalgamated company i.e. DPC was represented by these three companies on the basis of shareholding pattern resulting from business combination. Identify acquirer in this business combination.

Solution In this case, separate legal entity of Dee, Pee and Cee is being dissolved and all the assets and liabilities of these three companies are being transferred in the favour of amalgamated company i.e. DPC the purchase consideration has been discharged by the issue of shares. As DPC being a newly formed company to acquire amalgamating companies therefore identification of acquirer should be done on the basis of majority representation in the board of directors of newly formed company.

In this situation Cee will have larger proportion in the total shares of DPC therefore majority is represented by Cee hence acquirer as per the provisions of IFRS 03 and near final Ind-AS-103 is Cee. The accounting effect of this identification is that the assets and liabilities of Cee need not be revalued and these should be taken at the existing carrying amount immediately preceding the date of business combination. At the same time no new asset or new liability should be identified for Cee.

FUNDAMENTAL ACCOUNTING PRINCIPLES

The provisions of IFRS-03 and Ind-AS-103 stipulate the adoption of acquisition method, i.e., purchase method of accounting should be adopted while preparing post amalgamation financial statements, except when combination involves the entities under common control. IFRS-03 does not approve of 'pooling of interest' method of accounting but it requires that every business combination should be accounted for using 'purchase method' of accounting.

Purchase Method

IFRS-03 establishes the fact that acquirer should identify different assets acquired and liabilities assumed and measure these assets and liabilities at the fair value on the date of business combination. The ***fair value*** is the value which can be established reliably and reasonably between willing buyer and seller in an arm's length transaction for the asset or liability under consideration. The recognition of identifiable assets and liabilities and estimation of fair value of these assets and liabilities should be made by considering the facts like (i) contractual terms, (ii) economic conditions affecting the business of combined business entities, (iii) operating conditions concerning combining entities particularly affecting acquirer, and (iv) other factors existing on the date of acquisition.

> The ***fair value*** is the value that can be established reliably and reasonably between willing buyer and seller in an arm's length transaction for the asset or liability under consideration.

If fair value of the assets acquired and liabilities assumed can not be established then it is the existing carrying amount as shown in the balance sheet of vendor company on the date of business combination should be used to make initial recognition in the books of acquirer.

This method of accounting requires that the acquirer should incorporate only those assets and liabilities that are specified in the scheme of business combination. The assets and liabilities that are not acquired by the acquirer are disposed of by the transferor company on its own. Different items of reserve and surplus as well as fictitious assets belonging to equity shareholders of the vendor company are not preserved rather liquidated by transferring to transferor's equity shareholder's account.

Purchase Consideration

It is the total amount of cash paid, value of assets given and value of securities issued by the acquirer to vendor company for acquiring the net assets of the vendor. All these items are valued at the fair value if it can be assessed reliably and reasonably. In case of securities issued the fair value may be the value fixed by the statutory bodies/authorities. In case of other assets the market value of assets given up is taken, however when such market value can not be estimated reliably then the book value of assets given up should be considered.

> Purchase consideration is the total amount of cash paid, value of assets given and value of securities issued by the acquirer to vendor company for acquiring the net assets of the vendor.

ALLOCATION PERIOD

The time period over which estimation of fair value can be made is termed as ***allocation period.*** When fair value of assets acquired and liabilities assumed can not be determined reliably on the date of business combination and the scheme of business combination provides for the estimation of fair value over the extended period then the acquirer arranges required information to arrive at the fair value of assets and liabilities during this allocation period. Usually the acquirer is required to present within twelve months its first financial statements after the combination therefore allocation period should not exceed a period of twelve months from the date of business combination.

Example 2 DXK Limited was acquired by KXD Limited for which KXD agrees to issue 50,000 equity shares of face value ₹ 10 each having market price ₹ 23 per share on the stock exchange, apart from this KXD paid ₹ 2 per share for every equity share of DXK. DXK has total 70,000 equity shares of ₹ 10 each. Calculate purchase consideration paid by KXD.

Solution Here market price of KXD is the fair value of the shares issued by KXD. The total amount of purchase consideration is as follows

(i)	Total amount of cash paid by KXD (70,000 × 2)	₹ 1,40,000
(ii)	Fair value of shares issued by KXD (50,000 × 23)	₹ 11,50,000
	Total purchase consideration	₹ 12,90,000

Direct Costs

The costs that are specifically incurred and directly attributable to the incidence of business combination are recognized as direct costs. These include cost of issuing and registering the securities issued as a part of purchase consideration, cost of registering assets acquired, and other legal expenses. These expenses should be debited to ***goodwill account or capital reserve account*** as the case may be. These costs get amortized with the amortization of goodwill.

> The costs specifically incurred and directly attributable to the incidence of business combination are recognized as direct costs.

However indirect cost like routine business expenses or expenses of existing amalgamation and acquisition department or expenses of legal department of acquirer should not be adjusted in goodwill or capital reserve rather these are to be expensed as normally.

Example 3 Taking the case of previous example if KXD incurred ₹ 30,000 as expenses in issuing equity shares pursuant to business combination and it also incurred an additional expense ₹ 20,000 as liquidation expenses of DXK. Further to it KXD has legal depart which devoted a total time of one month to execute the exercise of business combination the estimated expenses of the department for one month are ₹ 40,000. Show how these costs are to be accounted for in the books of KXD.

Solution (i) The cost of share issue ₹ 30,000 and liquidation expense ₹ 20,000 should be recognized as direct costs as these are directly attributable to the incidence of business combination. As per the provisions both of these should be added to goodwill and should be amortized along with the amortization of goodwill. If pursuant to business combination capital reserve has resulted then these direct costs should be adjusted to reduce the amount of capital reserve.

(ii) Expenses of legal department are the routine expenses of the business therefore can not be recognized as direct costs but as indirect costs therefore these to be recognized as routine revenue expenses of the business and not to be combined with the direct cost of business combination.

Useful Info

Provision for Expected Costs not Allowed

Provisions of IFRS 03 and different accounting standards applicable across the countries do not allow the recognition of expected losses, expected costs and provision of such losses and costs in the post combination financial statement. If due to the nature of acquirer's business the acquirer is required to incur certain expenses to discontinue the business acquired at a later date then such expenses should be accounted for as per the provisions of IAS-37 regarding provisions, contingent liabilities and contingent assets.

Contingent Consideration and Allocation Period

Additional amount of purchase consideration payable at a later date subject to the outcome of some future events is recognized as ***contingent consideration***. Payment of such additional amount is subject to the outcome of some future events. If amount of such contingent consideration can not be determined on the date of business combination then it should not be included in the purchase consideration calculated on the date of amalgamation. The adjustment in the initially recognized purchase consideration should be made as soon as the payment of contingent consideration is determinable.

Additional amount of purchase consideration payable at a later date subject to the outcome of some future events is recognized as ***contingent consideration***.

Such adjustment in purchase consideration and change in the goodwill/negative goodwill is retrospective in nature from the date of business combination and should be accounted for as change in estimates.

The time period over which contingent consideration should be recognized by the acquirer is called ***allocation period***. Usually contingent consideration is to be recognized with a period of twelve month from the date of business combination. Therefore allocation period for the recognition of contingent consideration shall not exceed twelve months from the date of business combination.

EXAMPLE 4 The balance sheets of Hanging Limited (HL) and Flat Limited (FL) on 31st March, 2011 are as follows:

Balance Sheet as on 31st March, 2011

(rupees in crores)

Liabilities	HL	FL	Assets	HL	FL
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,05,000	25,500
			Plant and machinery	75,000	15,000
General reserve	63,000	15,000	Stock	30,000	6,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	30,000	—
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	3,000	1,800
	3,00,000	80,550		3,00,000	80,550

On the balance sheet date, HL acquired the business of FL for which it agrees to pay the following purchase consideration on the date of business combination.

(i) HL to issue one share of its for every three shares of FL.
(ii) The market price of HL's shares on the date of business combination is ₹ 35 per share.
(iii) HL to pay ₹ 6 per share in cash for every one share of FL.
(iv) Further it is provided in the scheme of business combination that if combined entity reports a profit of ₹ 40,000 crore as half year's profit on 30th September, 2011, then HL shall issue additional Rs 100 crore face value shares to be valued at the fair value when such contingency is resolved.

Show how purchase consideration and different assets and liabilities should be recognized in the books of HL.

SOLUTION The scheme of acquisition provides that HL is liable to make the payment of additional purchase consideration if the combined entity earns the specified profits by the end of 30th September,

2011. Initially, HL should issue 1,000 (3,000 × 1/3) crore equity shares of face value ₹ 10 valued at ₹ 35 per share.

The purchase consideration should be recognized as follows

(i) Initially, HL should recognize the following purchase consideration (₹ in crore):

Cash paid to the shareholders of FL (3,000 × 6)	₹ 18,000
Fair value of shares issued (1,000 × 35)	₹ 35,000
Total purchase consideration	***₹ 53,000***

(ii) Subsequently if combined entity earns a profit of ₹ 40,000 crore as half year's profit on 30th September, 2011 then the additional ₹ 100 crore face value shares valued at a price determinable on 30th September, 2011. Here the amount of additional consideration is determinable only on 30th September, 2011. Therefore, it should be recognized only on this date with recognizing the additional consideration as change in the estimate. The final amount of goodwill or negative goodwill is to be recognized only on 30th September, 2011.

Example 5 By taking the data of Example 4, assume that the clause (iv) is replaced with the clause "HL is to issue additional number of shares if market price of its shares falls below ₹ 21 by the end of financial year 2011–12 to keep the value of shares issued at the initial level." Then show how contingent consideration is to be recognized.

Solution The value of shares issued initially is ₹ 35,000 crore, as HL issues 1,000 crore shares valued at ₹ 35 each. Now suppose at the end of year 2011-12 price of HL's shares becomes ₹ 20 per share then the value of shares issued is to be maintained at ₹ 35,000 crore the additional number of shares to be issued shall be (35,000/20 – 1,000) 750 crore shares. The total shares issued becomes 1,750 crore to be valued at ₹ 20 resulting into a fair value of shares issued to ₹ 35,000 crore.

This is the same as the fair value of shares issued initially therefore there is no requirement to recognize additional consideration. It will change only the distribution between the paid up value of shares issued and the amount of securities premium. Initially the paid value should be ₹ 10,000 crore (1,000 × 10) and securities premium ₹ 25,000 crore (25 × 1,000). On the later date when contingency is resolved the paid value will be ₹ 17,500 crore (1,750 × 10) and securities premium ₹ 1,750 (1,750 × 10)

Initial Accounting Determined Provisionally

Sometimes it is difficult to arrive at the accurate fair value of assets, liabilities and contingent liabilities and cost of business combination but a provisional estimate of the fair value of these items is possible on the date of combination. The provision of IFRS 03 and statement FAS-41 provide that the initial accounting for business combination can be carried at the provisionally determined values by the end of the accounting period in which such business combination is effected. The provisional value recognized initially should be adjusted as follows

- The adjustment to provisionally determined values to be completed within twelve months from the date of acquisition i.e. business combination.
- The amount of goodwill or negative goodwill should be recognized from the date of acquisition.
- A comparative statement should be presented showing provisionally determined value and value after the adjustment, if any.

When a reliable measurement of fair value is not possible on the date of combination but it is possible in the near future the initial measurement can be carried out provisionally subject to subsequent adjustments therein.

Example 6 (i) Keeping the data of Example 5 and inserting the following provision, show how it should be recognized by HL.

(ii) The fair value of assets can be assessed on the date of business combination but it has been included in the scheme of business combination that the proper estimation of fair value of assets acquired and liabilities assumed will be complete by the end of September, 2011.

Solution Here the assets acquired and liabilities assumed by HL on the date of acquisition i.e. 31st March, 2011 should be recognized at the fair value on this date with the provision to have changes in the initially recognized value. This is to be termed as initial accounting determined provisionally. Subsequently by 30th September, 2011 when contingency is resolved about the estimation of fair value of the assets and liabilities the difference if any is accounted as the initial carrying amount of assets and liabilities and accordingly goodwill and negative goodwill should be recognized.

Separately Identifiable Assets and Liabilities

The provisions of IFRS-03 require that the acquirer should make as far as possible a distinct identification of different assets and liabilities resulting from business combination. Such identification helps in arriving at an accurate fair value of each and every asset acquired and liability assumed. It also helps in making an accurate valuation of goodwill and proper amortization of such goodwill.

There might be certain assets which have not been reported in the balance sheet of vendor (acquired) company like brand, in-process research and development expenses, share based employee benefits, etc.

IFRS 03 also requires that the acquirer should recognize contingent liabilities, if any which have not been reported by the acquired in its balance sheet. Such contingent liabilities should be recognized at the fair value.

In a business combination separately identifiable intangible assets should be identified so as to have proper valuation of goodwill and negative goodwill.

Determination of Fair Value of Separately Identifiable Assets and Liabilities

As per IFRS 03 provisions separately identifiable assets and liabilities should be valued as follows:

- Receivables at their present value discounted at an appropriate discount rate subject to the adjustment for irrecoverable amount.
- Inventories of finished goods at the estimated selling value after making an adjustment of disposal cost.
- Inventories of semi-finished goods at the estimated selling price of finished goods less cost of completion to make it sellable as finished goods.
- Raw material at the replacement cost on the date of business combination.
- Tangible and intangible assets at their fair value.
- Liabilities at the present value of amount to be paid to settle the claim.
- Traded investments at the market value.
- Non-traded investments at the estimated value.

Recognition of Intangible Assets

The provisions contained in IFRS 03 provide the identification of certain intangible assets other than goodwill. The prominent criteria for the identification of intangible assets are as follows:

(i) Contractual legal criterion, i.e. the asset originates from certain legal contract, and

(ii) Separability criterion, i.e. the asset can be separated from other assets and can be sold independently at its fair value.

The provisions provide for the recognition of following intangible assets:

(a) Market based intangible assets like trademarks, certification marks, internet domain name, non-competition agreement.
(b) Customer based intangible assets like customer lists, order backlog, contracts with customers, customer relationship.
(c) Artistic based intangible assets like books, magazines, newspapers, literary work, pictures, photographs, videos, broad casting programs, television programs, etc.
(d) Contract based intangible assets like license, royalty agreement, advertising contracts, lease agreement, construction and franchise permission, employment contracts, etc.
(e) Technology based intangible assets like patent rights, database, software, formulation and recipes, etc.

It is further specified that all these intangible assets should be accounted for by using the provisions of IAS-38 about accounting for intangible assets and Indian GAAP AS-26 on accounting for intangible assets.

Goodwill and Negative Goodwill

A comparison of purchase consideration and net asset value calculated after considering the fair value results either into goodwill or negative goodwill.

> Excess of purchase consideration over net asset value is recognized as goodwill in the balance sheet of acquiring company.

Goodwill

When amount of purchase consideration is in excess of net asset value of the assets acquired and liabilities assumed by the acquirer the difference is recognized as ***goodwill***. The acquiring company makes this extra payment in the anticipation of realizing extra economic benefits in future also on account of the amalgamation. The provisions of IFRS 03 require the goodwill should not be amortized rather it should be put to impairment test in each of the financial year or earlier than it. The impairment of goodwill should be carried in compliance with the provisions of IAS-36.

> The amount by which purchase consideration falls short of net asset value is recognized as negative goodwill in the balance sheet of acquiring company.

Negative Goodwill

When amount of purchase consideration is less as compared to the net asset value of the assets acquired and liabilities assumed by the acquirer the difference is recognized as ***negative goodwill***. The provisions of IFRS-03 consider that negative goodwill is the result of bargaining power of the management of acquirer therefore it should be recognized as profit for the year and transferred to profit and loss account immediately.

REVERSE ACQUISITION

> Reverse acquisition arises when vendor company in an amalgamation transaction gains control over the board of director of the acquiring company by virtue of having majority of shares.

In a business combination comprising of settlement through the exchange of share the business entity that issues the shares is identified as acquirer, but some time such exchange of shares passes the control of combined business entity in the favor of the acquired company i.e. the company receiving the shares in exchange, this incidence of passing the control is referred as ***reverse acquisition.*** Such reverse acquisition should be accounted for using purchase/acquisition method of accounting for business combination.

Illustration Company 'X' having 500 equity share of face value ₹ 10 is combined into company 'Y' having 400 equity shares of ₹ 10 each. As per the scheme of business combination 'Y' shall issue two of its equity shares for every one shares of 'X'. This will result into the issue of 1,000 equity shares by 'Y' to the shareholders of 'X'. After the acquisition total number of equity shares of 'Y' will become a 1,400 out of which 1,000 shares are held by the shareholders of 'X' which translates into around 71% holding of the combined entity by the shareholder of 'X'.

Here, from the legal viewpoint, 'Y' is the acquirer as it is issuing its equity shares in exchange for the equity shares of 'X' but from the accounting view point 'X' is the acquirer as it gains control over the management of combined entity post acquisition.

DEMERGER OR SPIN-OFF

When an existing business entity establishes a new company with the objective to pass on to this new company one of its separate identifiable business unit it is termed as demerger or spin-off. It is just opposite of the uniting of interest or pooling of interest. The newly formed company issues equity shares in exchange for the net assets acquired by it from the demerged company.

Almost all or majority of the equity shares of the newly formed company are held by the demreged company (company selling the net assets) therefore it gets controlled by the demerged company despite of the fact that this newly formed company is the acquirer company as it issues the shares to discharge the purchase consideration.

Sale of a separately identifiable business division by a company to a newly formed company formed exclusively for this purpose is **demerger/ spin-off.**

Accounting Effect

In case of demerger or spin-off following accounting effect is provided.

(i) in the books of accounts of demerged company

- Assets and liabilities to be transferred to resulting company only at the existing carrying amount.
- Shares received from the resulting company to be passed on to existing shareholder of the demerged company in the ratio of existing shareholding pattern.
- If demerger results into positive net worth calculated on the basis of assets and liabilities transferred in the favour of resulting company then the amount equal to positive net worth is adjusted in the reserves and surplus account.
- If demerger results into negative net worth then demerged company should issue equity shares free of cost to its shareholders equal to the amount of negative net worth. Alternatively the amount of negative net worth can be shown as profit in the reserve and surplus account.

(ii) in the books of accounts of resulting company

- It should show assets acquired and liabilities assumed at the book value at which these are transferred to it.
- Shares issued to demerged company to be shown as liability.
- Goodwill i.e. excess of purchase consideration over the net asset value to be shown as an asset.
- Deficit of purchase consideration over the net asset value to be shown as capital reserve.

Example 7 Dhanlaxmi Limited has two divisions. Namely Dhan and Laxmi. On 1st April, 2010, it decided to create a new company to which it will pass on the plant and machinery worth ₹ 1,00,000 and sundry creditors worth ₹ 50,000 for which newly established company Rooplaxmi Limited will issue shares of ₹ 50,000. Show how the balance sheet of Dhanlaxmi Limited and Rooplaxmi Limited will appear just after the demerger.

Balance Sheet of Dhanlaxmi Limited as on 31st March, 2010

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	2,55,000	Freehold property	2,70,000
		Plant and machinery	2,20,000
General reserve	67,500	Stock	88,250
Capital reserve	1,59,000	Debtors	1,38,000
Securities premium	12,000	Investment	26,250
P & L a/c	25,000	Bank	20,000
Work compensation fund	12,500	Preliminary expenses	250
Export profit reserve	1,250		
12% Debentures	1,75,000		
Sundry creditor	55,500		
	7,62,750		7,62,750

Solution Share received from Rooplaxmi be given to the shareholders of Dhanlaxmi.

It is the case of positive net worth ₹ 50,000 (1,00,000 – 50,000). Plant and machinery and sundry creditors of Dhanlaxmi to be reduced respectively by ₹ 1,00,000 and ₹ 50,000. Positive net worth is to be deducted from general reserve.

Balance Sheet of Dhanlaxmi Limited as on 1st April, 2010 (after spin-off)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	2,55,000	Freehold property	2,70,000
		Plant and machinery	1,20,000
General reserve	17,500	Stock	88,250
Capital reserve	1,59,000	Debtors	1,38,000
Securities premium	12,000	Investment	26,250
P & L a/c	25,000	Bank	20,000
Work compensation fund	12,500	Preliminary expenses	250
Export profit reserve	1,250		
12% Debentures	1,75,000		
Sundry creditor	5,500		
	6,62,750		6,62,750

Balance Sheet of Rooplaxmi Limited as on 1st April, 2010 (after spin-off)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	50,000	Plant and machinery	1,00,000
Sundry creditor	50,000		
	1,00,000		1,00,000

Example 8 Taking the data of Example 7, if Dhanlaxmi transfers all the debentures along with the plant and machinery and creditors mentioned therein and Rooplaxmi issues the shares of only ₹ 50,000 then how the balance sheets will appear.

Solution It is the case of demerger. After the demerger plant and machinery debentures and sundry creditors should be reduced by the amount transferred to Rooplaxmi. Shares issued by Rooplaxmi are to be passed on to the shareholders of Dhanlaxmi and nothing is to be reduced from general reserve.

But at the same time, it is the case of negative net worth which is ₹ 1,25,000 (1,00,000 − 50,000 − 1,75,000).

For this negative amount of net worth, Dhanlaxmi should issue shares to its shareholders free of cost.

Alternatively, this ₹ 1,25,000 can be used to increase general reserve but accounting standards do not allow the realization of profit by self transaction by a business entity.

Rooplaxmi will have goodwill of ₹ 1,75,000, which is to be shown in the post spin-off balance sheet of Rooplaxmi, but it needs to be written off completely in the year 2010-11 as such type of goodwill can not be carried forward for a longer time period.

Balance Sheet of Dhanlaxmi Limited as on 1st April, 2010 (after spin-off)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	3,80,000	Freehold property	2,70,000
		Plant and machinery	1,20,000
General reserve	67,500	Stock	88,250
Capital reserve	1,59,000	Debtors	1,38,000
Securities premium	12,000	Investment	26,250
P & L a/c	25,000	Bank	20,000
Work compensation fund	12,500	Preliminary expenses	250
Export profit reserve	1,250		
Sundry creditor	5,500		
	6,62,750		6,62,750

Balance Sheet of Rooplaxmi Limited as on 1st April, 2010 (after spin-off)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	50,000	Goodwill	1,75,000
		Plant and machinery	1,00,000
12% Debentures	1,75,000		
Sundry creditor	50,000		
	2,75,000		2,75,000

Recap 1

So far, we have discussed the following topics:

- Business Combination Under IFRS 03
- Purchase Consideration
- Contingent Consideration and Allocation Period
- Goodwill and Negative Goodwill
- Direct Costs in Business Combination
- Purchase Method of Accounting under IFRS 03
- Demerger or Spin-off
- Reverse Merger

Self-assessment

1. Write short notes on the following:
   - Contingent consideration and allocation period
   - Allocation period
   - Reverse merger

The following topics will be delved into next:

- Amalgamation under Indian GAAP—AS-14
- Calculation of Purchase Consideration
- Pooling of Interest Method of Accounting
- Purchase Method of Accounting
- Accounting for Profit and Loss, Reserves in Amalgamation
- Amalgamation and Demerger and Income Tax Act, 1961
- Slump Sales and Income Tax Act, 1961
- Case

ACCOUNTING FOR BUSINESS COMBINATION—AMALGAMATION AND INDIAN GAAP (AS-14)

Business combination implies union of two of more companies to realize synergy benefits. Under this two or more companies are either absorbed by a newly established company or by an existing company. Business combination when results into the dissolution of separate entity of acquired company is business combination in real sense and dealt under AS-14 of Indian GAAP. When business combination does not result into the dissolution of acquired company then it results into corporate relationship of associate company or holding and subsidiary companies. In the later case accounting provisions of AS-27 about consolidated financial statements are applicable.

Definitions as Per AS-14

Provisions of AS-14 contain the following definitions relating to amalgamation of companies, i.e. business combination.

Transferor Company It is the company which sells/transfers its assets and liabilities to another company. It is also called ***vendor company i.e. acquired company.***

Transferee Company It is the company which acquires the assets and liabilities of the another company. It is also called ***acquiring company or purchasing company.***

Purchase Consideration It is the total amount to be paid by the acquirer i.e. by purchasing company to the shareholders of acquired company. This includes cash and the value of shares issued by the acquirer to the acquired company. Purchase consideration might be discharged in cash or by the issue of shares by the acquirer or by both as per the terms and conditions of amalgamation.

Note: Very soon the provisions of Ind-AS-103 will also be applicable to account for business combination. These are at the last stage of finalisation by ICAI.

Fair Value It such value of an asset or liability for which an exchange is possible between two willing parties in an arm's length business transaction.

Pooling of Interest It is the method of accounting adopted in case of amalgamation in the nature of merger. Here, financial statements particularly the balance sheets of all the companies amalgamating together are consolidated in such a manner as if separate business of all the amalgamating companies is combined together. All the assets and liabilities including reserves and fictitious assets are pooled together at the existing book value. Here, all the assets and liabilities including reserves are transferred in the favour of acquirer company except paid up equity share capital and preference share capital. Usually no changes are made in the value of assets and liabilities except for the adjustment on account of differences in the accounting policies.

Purchase Method Under this method different assets and liabilities of the transferor company are either incorporated in the financial statements of the acquirer company at the existing book value or at the fair value of identifiable assets and liabilities, if such fair value is reliably available. Under this assets and liabilities to be included might include such assets and liabilities not recognized in the financial statement of transferor company earlier. Under this method it is not necessary that the acquiring company assumes all the asset and liabilities of the transferor company.

Amalgamation

When two or more existing companies are acquired by a newly established company thereby resulting into the dissolution of separate legal entity of existing companies so acquired it is termed as amalgamation. All the assets taken and liabilities assumed by the acquirer company are transferred in the favour of acquiring company for which it makes the payment of purchase consideration to the shareholders of vendor companies i.e. acquired companies. This is like merger of few existing companies into a newly established company to execute the merger plan.

Dissolution of two or more companies into a newly established company is termed as **amalgamation**.

Illustration Bank of Punjab Limited (BOP) and Centurian Bank (CB) were acquired by a newly established bank namely Centurian Bank of Punjab. After the amalgamation separate legal entity of BOP and CB was dissolved and all the shareholders were given shares in acquirer, i.e. Centurian Bank of Punjab.

Absorption

Absorption takes place when one or more existing company is acquired by another existing company. Here the company acquiring the assets and liabilities survives and the separate legal entity of acquired company ceases to exist after the absorption. All the assets and liabilities of vendor company are usually taken over by the purchasing company, the assets and liabilities not taken over by the acquiring company are discharged by the vendor company on its own.

Acquisition is identified when one or more existing company is acquired by another existing company.

Types of Amalgamation

Accounting standard (AS 14) defines amalgamation in two different forms as:

Amalgamation in the Nature of Merger

It is such amalgamation in which (i) all the assets and liabilities of the transferor company as assumed by the transferee company, (ii) shareholders holding not less

Company getting dissolved is identified as acquired company.

than 90% of the equity shares of the transferor company after amalgamation will become equity shareholders of transferee company, (iii) the purchase consideration for the amalgamation is discharged by transferee by issuing its shares for the total purchase consideration and not in cash, except for the fractional shares resulting from amalgamation, (iv) the business of the transferor company is intended to be continued by the transferee company after the amalgamation, and (v) no adjustment is intended to be made in the book value of assets and liabilities of the acquired company while incorporating these in the financial statements of the acquirer, except for bringing in the uniformity in the accounting policies, if required.

Amalgamation in the Nature of Purchase

When any one or more of the conditions applicable for amalgamation in the nature of merger is not satisfied then it is termed as amalgamation in the nature of purchase.

UNITING OF INTEREST

There are the incidences of amalgamation in which the clear identification of acquirer is not feasible. Such incidence of amalgamation is termed as ***uniting of interest*** by all the combining companies. This is also termed as ***pooling of interest.*** The provisions of AS – 14 specify that the accounting in this type of amalgamation is to be done by following pooling of interest method of accounting. Under this all the assets and liabilities of amalgamating companies are merged into one single balance sheet however equity shares and preference shares of the amalgamating companies are not reported at the existing book value instead at the value of purchase consideration discharged by the business entity emerging after amalgamation.

PURCHASE CONSIDERATION

It is the aggregate of cash paid and valued of the securities issued by the acquirer company to the shareholders of vendor company for the net assets acquired by the acquirer company. Calculation of purchase consideration depends upon the type of amalgamation.

Calculation of Purchase Consideration in Case of Amalgamation in the Nature of Merger

As acquirer company acquires all the assets and assumes all the liabilities including reserves of the vendor company at the book value therefore the purchase consideration is equal to the net asset value calculated at the existing book value subject to the adjustment for reserves.

Calculation of purchase consideration

Book value of all the assets	₹ *****
Less :Book value of all liabilities	₹ *****
Net Assets Taken	
Less : Reserves and Surplus	₹ *****

Purchase consideration	₹ *****

If value of shares issued and payment of cash for fractional shares is different from the purchase consideration calculated above then this difference is adjusted against reserves.

Example 9 DD Limited and SS Limited amalgamated on 1st April, 2010. All the assets and liabilities of both the companies were acquired by newly established company DS Limited. Following was the balance sheet of both the companies on 1st April, 2010.

Balance Sheet as on 31st March, 2010

Liabilities	DD	SS	Assets	DD	SS
Equity shares of face value ₹ 10 each	1,50,000	1,75,000	Land and building	1,00,000	80,000
			Plant and machinery	1,12,500	1,07,500
General reserve	37,500	50,000	Stock	31,250	68,750
P & L a/c	25,000	12,500	Debtors	45,000	1,00,000
Investment Allowance Reserve	12,500	2,500	Investment	26,250	13,750
			Cash	11,250	10,000
Export profit reserve	1,250	2,500			
12% Debentures	75,000	1,00,000			
Sundry creditor	25,000	37,500			
	3,26,250	3,80,000		3,26,250	3,80,000

DS agreed to issue required number of equity shares of face value ₹ 10 each to discharge the purchase consideration to both the amalgamating companies. Calculate purchase consideration. Also identify the acquirer if IFRS-03 or Ind-AS-103 is applicable.

Solution Here all the assets and liabilities of acquired companies are being taken at the book value and purchase consideration is being discharged by the issue of equity shares therefore it is the case of amalgamation in the nature of merger. The amount of purchase consideration is not given therefore it shall be equal to the net asset value (NAV).

Calculation of Purchase Consideration

Particulars	Company DD (₹)	Company SS (₹)
Land and building	1,00,000	80,000
Plant and machinery	1,12,500	1,07,500
Stock	31,250	68,750
Debtors	45,000	1,00,000
Investment	26,250	13,750
Cash	11,250	10,000
Gross value of assets acquired	3,26,250	3,80,000
Less : Liabilities assumed		
12% Debentures	75,000	1,00,000
Sundry creditor	25,000	37,500
Net Assets value	**2,26,250**	**2,42,500**
Less : Reserve and Surplus		
General reserve	37,500	50,000
P & L a/c	25,000	12,500
Investment Allowance Reserve	12,500	2,500
Export profit reserve	1,250	2,500
Purchase Consideration	1,50,000	1,75,000

The purchase consideration for DD is ₹ 1,50,000 and for SS it is ₹ 1,75,000. DS should issue 15,000 and 17,500 equity shares of face value ₹ 10 respectively to DD and SS. However the combined purchase consideration ₹ 3,25,000 is to be apportioned between DD and SS in the ratio of their NAV.

If IFRS 03 or Ind-AS-103 is applicable then the existing shareholders of SS will have the majority in the newly formed company DS and, therefore, they will have dominance in the board of directors of DS, hence SS should be identified as acquirer.

Calculation of Purchase Consideration in case of Amalgamation in the Nature of Purchase

In this type of amalgamation purchase consideration may be calculated using any of the following methods.

Lumpsum Payment Method

Under this method the amount of purchase consideration is determined as total cash payment by the acquirer to acquired company. The purchase consideration is discharged in cash only.

Net Payment Method

In this case the amount of purchase consideration is equal to the sum total of cash paid and value of shares issued by acquiring company to the shareholders of vendor company.

Net Asset Value (NAV) Method

In this case acquiring company might or might not acquire all the assets and liabilities of the vendor company, therefore the assets acquired and liabilities assumed by the acquiring company are considered while arriving at NAV. Different reserves and fictitious assets are not transferred in the favour of transferee (acquiring) company hence these are not considered while calculating NAV.

In this case purchase consideration is equal to the net asset value of assets acquired and liabilities assumed by the acquiring company. While calculating NAV different assets and liabilities are considered at the value agreed by the amalgamating companies. If agreed value of the assets and liabilities acquired is not given then these are taken at the existing book value as disclosed in the balance sheet of the acquired (vendor) company.

Net asset value (NAV) is the difference between the value of assets acquired and value of liabilities assumed by acquiring company.

Calculation of Net Asset Value (NAV)

Book value or agreed value of of all the assets acquired	₹ *****
Less : Book value or agreed value of all liabilities assumed	₹ *****

Net Asset Value	₹ *****

Note: Statutory reserves are not included while calculating NAV but these are to be maintained by the acquiring company if required.

Example 10 On 1st April, 2011, Dickins Limited (DL) acquired the business of Ceepee Limited (CL) by acquiring all the assets and liabilities at the book value it agreed to discharge the purchase consideration as follows:

(i) To issue 1,75,000 equity shares of face value of ₹ 10 each to the equity shareholders of CL

(ii) To issue requisite number of 10% preference shares of ₹ 10 at par so as to redeem 15% preference shares of CL at a premium of 10%

Balance Sheet as on 31st March, 2011

Liabilities	DL('000)	CL('000)	Assets	DL('000)	CL('000)
Equity shares of face value ₹ 10 each	2,500	1,500	Land and building	1,250	775
15% Preference shares of ₹ 10 each	1,100	850	Plant and machinery	1,625	850
General reserve	250	125	Furniture & Fixtures	288	175
P & L a/c	375	250	Investment	350	250
Investment Allowance Reserve	---	50	Stock	625	475
Export profit reserve	150	100	Debtors	450	515
12% Debentures	250	175	Cash	362	260
Sundry creditor	225	175			
Other current liabilities	100	75			
	4,950	3,300		4,950	3,300

Show how purchase consideration will be calculated if it is (i) amalgamation in the nature of merger and (ii) amalgamation in the nature of purchase.

SOLUTION **(i) Amalgamation in the nature of merger**

In this all the assets, liabilities and reserve and surplus is to be passed on in the favour of DL. DL shall issue 10% preference shares for a total value of ₹ 9,35,000 (8,50,000 × 1.10). The calculation of net asset value and adjustment there to for reserve and surplus results into the following outcome:

Calculation of Net Value of Assets Taken After Adjustment of Reserve and Surplus

Particulars	Amount ('000)
Land and building	775
Plant and machinery	850
Furniture & Fixtures	175
Investment	250
Stock	475
Debtors	515
Cash	260
Gross value of assets acquired	3,300
Less : Liabilities assumed	
12% Debentures	175
Sundry creditor	175
Other current liabilities	75
Net Assets Taken	**2,875**
Less : Reserve and Surplus	
General reserve	125
P & L a/c	250
Investment Allowance Reserve	50
Export profit reserve	100
Net Value Assets Taken after adjustment of reserve and surplus	**2,350**

The total amount of shares issued by DL to discharge the purchase consideration

(i)	Value of equity shares issued (1,75,000 × 10)	₹ 17,50,000
(ii)	Value of 10% preference shares issued	₹ 9,35,000
	Total amount of shares to be issued by DL	₹ 26,85,000

Conclusion : The difference of ₹ 3,35,000 between the value of shares issued by DL ₹ 26,85,000 and the paid up value of equity and preference shares ₹ 23,50,000 should be adjusted to general reserve in the post amalgamation balance sheet.

(ii) Amalgamation in the nature of purchase

Total value of shares issued by DL will remain as given above in (i), we need to calculate NAV so as to arrive at the amount of goodwill or capital reserve (negative goodwill), if any.

Calculation of Net Value of Assets Taken, i.e. NAV

Particulars	Amount ('000)
Land and building	775
Plant and machinery	850
Furniture & Fixtures	175
Investment	250
Stock	475
Debtors	515
Cash	260
Gross value of assets acquired	3,300
Less : Liabilities assumed	
12% Debentures	175
Sundry creditor	175
Other current liabilities	75
NAV	2,875

Conclusion : As the total amount of purchase consideration ₹ 26,85,000 is less than the NAV calculated above, the difference ₹ 1,90,000 should be considered as capital reserve in the books of DL.

Purchase Consideration and Provisions of AS-14

Introduction

The provisions of AS-14 suggest that the purchase consideration may consist of securities issued, cash payment and other assets given by the purchasing company to vendor company. All these items are valued at the fair value if it can be assessed reliably and reasonably. In case of securities issued the fair value may be the value fixed by the statutory bodies/authorities. In case of other assets the market value of assets given up is taken, however when such market value can not be estimated reliably then the book value of assets given up should be considered.

Contingent Consideration

Additional amount of purchase consideration payable at a later date subject to the outcome of some future events is recognized as contingent consideration. Payment of such additional amount is subject to the outcome of some future events. If amount of such contingent consideration can not be determined on the date of amalgamation then it can not be included in the purchase consideration calculated on the date of amalgamation. Such contingent consideration is to be given accounting treatment as per the provisions of AS-4 about 'Contingencies and Events Occurring After the Balanced Sheet Date'. Accordingly, (i) if, it is most likely that contingent consideration will be paid on a later date, then it is prudent to make provision for such consideration in the financial statement following amalgamation, (ii) the estimation of contingent consideration may be made by using expert opinion.

Intrinsic Value Method

Intrinsic value (IV) is the value of equity shares of the company after considering equity net worth with due consideration to agreed or fair value of assets and liabilities of the acquired and acquirer company. Under this method, purchase consideration is arrived at by considering the intrinsic value of both the companies. The amount of purchase consideration is the intrinsic value of shares issued by the acquirer company to acquired company.

Net worth per share calculated after considering fair value and value of undisclosed assets and liabilities is called intrinsic value per share.

Number of shares to be issued by acquirer
= (IV of acquired/IV of acquiring) × Existing number of shares of acquired company
Amount of purchase consideration
= Number of shares issued by acquirer × intrinsic value of acquirer

METHODS OF ACCOUNTING FOR AMALGAMATION

Indian GAAP about amalgamation, i.e. AS-14, (very soon provision of Ind-AS-103 will also be applicable) specifies two method of accounting for amalgamation of companies. These are

- Pooling of interest method of accounting
- Purchase method of accounting

Pooling of Interest Method of Accounting

This method of accounting is adopted when amalgamation is in the nature of merger as specified earlier. In this accounting method virtual pooling of interest of amalgamating entities is carried out.

Under pooling of interest method all the assets and liabilities including reserves are combined at the book value into the balance sheet of acquiring company.

In the Books of Acquiring Company

The financial statement of vendor company is merged in the books of purchasing company as follows

(i) assets and liabilities of acquired companies are merged in a line-by line manner at the existing carrying amount,

(ii) all the reserves of acquired companies are merged in a line-by manner at the existing carrying amount,

(iii) existing equity share capital and preference share capital of the vendor company are not included in the merged financial statement prepared by the acquirer company, instead the number of shares issued by the acquirer company to discharge the purchase consideration are included in the financial statement prepared pursuant to the amalgamation,

(iv) the difference between the existing equity and preference of transferor company and the new equity and preference shares issued by the transferee company should be ***adjusted in the reserves***.

In the Books of Vendor Company

As vendor company gets liquidated and separate legal entity of the vendor company ceases to exist after the amalgamation. Therefore, vendor company should close all accounts in its books of accounts.

(i) All the assets and liabilities are transferred to realization account at the existing carrying amount.

(ii) All the reserves and fictitious assets are transferred to realization account at the existing carrying amount.

(iii) Realization account is credited with the amount of purchase consideration.
(iv) Balance of realization account, if any is transferred to equity shareholders account
(v) Shares received for purchase consideration are allotted to shareholders as per the terms of amalgamation.

Example 11 Taking the data of Example 10 under 'amalgamation in the nature of merger', show how realization account and equity shareholder's account will appear in the books of CL and post amalgamation balance sheet in the books of DL.

Solution In case of 'amalgamation in the nature of merger' all the assets and liabilities are transferred in the favour of DL along with all the reserves and surplus items. DL is to discharge the purchase consideration as shown in the solution to previous example.

Explanation

(i) The difference between the amount of shares issued by DL and the amount of net assets after adjustment of reserves and surplus of CL ₹ 3,35,000 has been adjusted to general reserve account. The resulting value of general reserve after adjustment is ₹ 40,000 (2,50,000 + 1,25,000 − 3,35,000).
(ii) Items of assets, liabilities and reserve and surplus have been combined at the book value in a line-by line manner.
(iii) Equity share capital after the amalgamation is 4,25,000 shares of ₹ 10 each.
(iv) 10% preference shares issued by DL for a total amount of ₹ 9,35,000 have been included in the combined balance sheet.
(v) The difference between the carrying amount of 15% preference share capital and the consideration received for preference shares holders ₹ 85,000 (9,35,000 − 8,50,000) has been taken as profit for preference shareholder and debited to realization account.
(vi) Balance of realization account ₹ 250,000 is the profit on realization credited to equity shareholder's account.

(i) In the books of CL (acquired company)

Realization Account

Particulars	Amount('000)	Particulars	Amount ('000)
To Land and building a/c	775	By12% Debentures a/c	175
To Plant and machinery a/c	850	By Sundry creditor a/c	175
To Furniture & By Fixtures a/c	175	By Other current liabilities a/c	75
To Investment a/c	250	By DL's a/c (purchase consideration)	2,685
To Stock a/c	475	By General Reserve	125
To Debtors a/c	515	By P&L a/c	250
To Cash a/c	260	By Investment Allowance Reserve	50
To 15% Prefer Shareholder's a/c	85	By Export Profit Reserve	100
To Equity shareholder's a/c (profit on realization)	250		
	3,635		3,635

Equity Shareholder's Account

Particulars	Amount('000)	Particulars	Amount ('000)
To Equity shares in DL a/c	1,750	By Equity share capital a/c	1,500
		By Realization a/c	250
	1,750		1,750

Preference Shareholder's Account

Particulars	Amount('000)	Particulars	Amount ('000)
To 10% Preference shares in DL a/c	935	By Preference share capital a/c	850
		By Realization a/c	85
	935		935

(ii) In the books of DL (acquiring company)

Balance Sheet as on 31st March, 2011(post amalgamation)

Liabilities	Amount ('000)	Assets	Amount('000)
Equity shares of face value ₹ 10 each	4,250	Land and building	2,025
15% Preference shares of ₹ 10 each	1,100	Plant and machinery	2,475
10% Preference shares of ₹ 10 each	935	Furniture & Fixtures	463
General reserve	40	Investment	600
P & L a/c	625	Stock	1,100
Investment Allowance Reserve	50	Debtors	965
Export profit reserve	250	Cash	622
12% Debentures	425		
Sundry creditor	400		
Other current liabilities	175		
	8,250		8,250

Purchase Method of Accounting

This method of accounting is adopted in case of amalgamation in the nature of purchase. Different assets and liabilities as taken by the acquiring company are incorporated in the books of acquiring company at the fair value or agreed book value, if given, otherwise at the existing carrying amount. It is also termed as ***acquisition method of accounting***.

Purchase method of accounting is applied when either few of the assets and liabilities are not taken or some of these is not taken at the book value or purchase consideration is discharged by cash payment.

In the Books of Acquiring Company

The following steps are taken in this method to report the result of amalgamation in the financial statement—balance sheet of acquiring company.

(i) Assets acquired and liabilities assumed by acquiring company are recorded at the fair value or agreed value on the date of amalgamation, in the absence of these values existing carrying amount as on the date of amalgamation is used.

(ii) Reserves and fictitious assets of acquired (vendor) company are not incorporated in the balance sheet of acquiring company, however statutory reserves which are required to be maintain in future also are incorporated in the balance sheet of acquiring company.

STATUTORY RESERVES

Statutory reserves are such reserves which are to be maintained by companies to comply with the requirements of income tax act 1961. These include (i) development allowance reserve, (ii) investment allowance reserve. Similarly there are certain other reserves maintained by the companies to abide by the regulatory provisions of different statues like (i) workmen's compensation reserve, (ii) export subsidy reserve, (iii) exchange fluctuation reserve, and others.

Out of such reserves maintained by vendor company which are required to be continued by the acquiring company even after the amalgamation should be accounted for by passing the following entry in the books of acquiring company.

Amalgamation Adjustment a/c Dr.
To Statutory Reserves a/c

These reserves are shown on the liability side of the post amalgamation balance sheet and amalgamation adjustment account is shown on the asset side of this balance sheet. Subsequently when the time limit to maintain such statutory reserve expires the reserve is reversed by passing the following entry.

Statutory Reserve a/c Dr.
To Amalgamation Adjustment a/c

(iii) If amount of purchase consideration is more than the net asset value the difference is called ***goodwill***. When purchase consideration is less than the net asset value the difference is called ***capital reserve.***

(iv) If liquidation expenses of vendor company are paid by the acquiring company without any recourse to vendor then the following entry is passed by it

Goodwill/Capital Reserve a/c Dr.
To Bank a/c

Goodwill is shown on the asset side and capital reserve on the liability side in the post combination balance sheet

In the books of Vendor Company

As vendor company gets liquidated and separate legal entity of the vendor company ceases to exist after the amalgamation, the vendor company should close all accounts in its books of accounts.

(i) The assets acquired and liabilities assumed by the acquirer and statutory reserves to be maintained by acquiring company are transferred to realization account at the fair value or agreed amount or existing carrying amount as given in the amalgamation plan.
(ii) All the reserves including statutory reserves not to be maintained by acquiring company, paid up amount of equity share capital and fictitious assets are transferred to equity shareholder's account at the existing carrying amount.
(iii) Paid up amount of preference share capital is transferred to preference shareholder's account.
(iv) Realization account is credited with the amount of purchase consideration.
(v) Balance of realization account, if any is transferred to equity shareholders account.
(vi) Shares and cash received for purchase consideration are allotted to shareholders as per the terms of amalgamation.

EXAMPLE 12 Taking the data of Example 9 & 10 and assuming that amalgamation is in the nature of purchase and that after the amalgamation acquirer is required to maintain statutory reserves, show how these will appear in the books of account of CL and DL.

SOLUTION **Explanation**

(i) The amount of shares issued by DL is less than the amount of net assets value by ₹ 1,90,000 (28,75,000 − 26,85,000), this difference is to be considered as capital reserve for DL.
(ii) Items of assets and liabilities have been transferred at the existing carrying amount.
(iii) Equity share capital after the amalgamation is 4,25,000 shares of ₹ 10 each.
(iv) 10% Preference shares issued by DL for a total amount of ₹ 9,35,000 has been included in the combined balance sheet.
(v) The difference between the carrying amount of 15% preference share capital and the consideration received for preference shares holders ₹ 85,000 (9,35,000 – 8,50,000) has been taken as profit for preference shareholder and debited to realization account.
(vi) Balance of realization account ₹ is the profit on realization credited to equity shareholder's account.
(vii) Investment allowance reserve and export profit reserve should be transferred to realization account and should also be maintained in the combined balance sheet of DL to be prepared after amalgamation.

(i) In the books of CL (acquired company)

Realization Account

Particulars	Amount('000)	Particulars	Amount ('000)
To Land and building a/c	775	By12% Debentures a/c	175
To Plant and machinery a/c	850	By Sundry creditor a/c	175
To Furniture & By Fixtures a/c	175	By Other current liabilities a/c	75
To Investment a/c	250		
To Stock a/c	475	By Investment Allowance Reserve	50
To Debtors a/c	515		
To Cash a/c	260	By Export profit reserve	100
To 15% Prefer Shareholder's a/c	85	By DL's a/c (purchase consideration)	2,685
		By Equity shareholder's a/c (loss on realization)	125
	3,385		3,385

Equity Shareholder's Account

Particulars	Amount('000)	Particulars	Amount ('000)
To Realization a/c	125	By Equity share capital a/c	1,500
		By General reserve a/c	125
To Equity shares in DL a/c	1,750	By P & L a/c	250
	1,875		1,875

Preference Shareholder's Account

Particulars	Amount('000)	Particulars	Amount ('000)
To 10% Preference shares in DL a/c	935	By Preference share capital a/c	850
		By Realization a/c	85
	935		935

(ii) In the books of DL (acquiring company)

Balance Sheet as on 31st March, 2011(post amalgamation)

Liabilities	Amount ('000)	Assets	Amount('000)
Equity shares of face value ₹ 10 each	4,250	Land and building	2,025
15% Preference shares of ₹ 10 each	1,100	Plant and machinery	2,475
10% Preference shares of ₹ 10 each	935	Furniture & Fixtures	463
General reserve	250	Investment	600
Capital reserve	190	Stock	1,100
P & L a/c	375	Debtors	965
Investment Allowance Reserve	50	Cash	622
Export profit reserve	250	Amalgamation Adjustment	150
12% Debentures	425		
Sundry creditor	400		
Other current liabilities	175		
	8,400		8,400

Explanation: As DL is required to maintain the statutory reserves therefore investment allowance reserves ₹ 50,000 and export profit reserve ₹ 1,00,000 of CL should be maintained by DL and an amalgamation adjustment amount for this amount is to be maintained in the combined balance sheet.

TREATMENT OF BALANCE OF PROFIT AND LOSS ACCOUNT ON AMALGAMATION

In case of **amalgamation in the nature of merger** the balance of profit and loss, whether debit or credit appearing in the balance sheet of the transferor company are transferred to transferee company. *These are considered while calculating net asset value* duly adjusted for reserves & surplus.

In case of **amalgamation in the nature of purchase** the balance of profit and loss, whether debit or credit appearing in the balance sheet of the transferor company, is not transferred to transferee company rather these are transferred to equity shareholders' account while transferring the paid up amount of equity share capital. *These are not considered while calculating net asset value.*

TREATMENT OF RESERVES

Different reserves appearing in the balance sheet of transferor company are given accounting treatment according to the type of amalgamation.

In case of ***'amalgamation in the nature of merger'*** all the reserves including statutory reserves are transferred in the favour or transferee company and to be maintained by it as these would have been maintained by the transferor company had there not been any amalgamation. *These reserves are also considered while calculating net asset value* duly adjusted for reserves and surplus.

In case of ***'amalgamation in the nature of purchase'*** only statutory reserves are required to be maintained by the transferee company as these would have been maintained by the transferor company had there not been any amalgamation. Rest of the reserves are not transferred in the favour of transferee company rather these are transferred to equity shareholder's account. *These reserves including statutory reserves are not considered while calculating net asset value.*

Treatment of Reserves Specified in A Scheme of Amalgamation

Introduction

In certain schemes of amalgamation either the provisions of company act 1956 or some other statute might prescribe some different treatment as compared to the treatment given under AS-14 then such treatment is to be followed for the specified reserves and rest of the reserves should be given the treatment as per the provisions discussed above.

Disclosure

If a different treatment other than the treatment given under AS-14 is provided to specified reserves then the acquiring company is required to make following disclosure in the post amalgamation financial statement—balance sheet.

- Description of the different treatment
- Reasons for such different treatment
- Financial impact of such different treatment

SLUMP SALE UNDER INDIAN INCOME TAX ACT

According to the provisions of Income Tax Act slump sale means transfer of a business enterprises or its separately identifiable business for a lump-sum amount of consideration without assigning value to each and every asset and liability separately. Usually sale of assets results into either a capital gain or regular income only when different assets are sold by making a separate identification and assigning a value to such assets. In such case sale of inventory items results into regular income to be taxed at the normal corporate tax rate and sale of non-current assets i.e. fixed assets either results into regular income or a capital gain depending upon the holding period of such asset.

In a slump sale, all the assets are sold without making an individual identification of each and every asset and, therefore, these are **tested for taxation** as follows:

(i) When assets are sold under slump sale before the expiry of thirty six months from the date of purchase, then the gain is recognized regular income and taxed at the normal tax rate which is 33.90%.

(ii) When assets are sold under slump sale after the expiry of thirty six months from the date of purchase, then the gain is recognized capital gain and taxed at the capital gain tax rate which is 22.66%.

Apart from the issue of income tax on gain, the stamp duty on transfer of property is applicable as per the prevailing law for the registration of different assets individually.

AMALGAMATION AND DEMERGER UNDER THE INCOME TAX ACT, 1961

Although the provisions of different accounting standards provide a significant coverage about the accounting for amalgamation and demerger, still a company is required to abide by the provisions of income tax act and related act so that the acquiring company does not default in fulfilling its financial liability with regards to tax obligation arising on accounting of amalgamation, business combination, reverse acquisition, demerger or spin-off.

Amalgamation

Definition

Section 2 (1B) of Income Tax Act, 1961 defines amalgamation as follows:

"Amalgamation means the merger of one or more companies with another company or the merger of two or more companies to form one company (the company or companies which so merge being referred to as the amalgamating company or companies and the company with which they merge or which is formed as a result of the merger, as the amalgamated company) in such a manner that

(i) all the property and liabilities of the amalgamating company or companies immediately before the amalgamation becomes the property and liability of the amalgamated company by virtue of the amalgamation; and

(ii) shareholders holding not less than three-fourth in value of the shares in the amalgamating company or companies (other than shares already held therein immediately before the amalgamation by or by a nominee for , the amalgamated company or its subsidiary) become shareholders of the amalgamated company by virtue of amalgamation.

Explanation

The above referred definition when interpreted yields the following conclusion about the term amalgamation

- The company which transfers its assets and liability to another company is to be identified as an amalgamating company.
- The company acquiring the assets and liabilities of the another company is to be identified as amalgamated company.
- The rule specifies that issue of shares by amalgamating company to discharge the purchase consideration is must, however the proportion of shareholding of the amalgamating company in the amalgamated is insignificant.
- It is further specified that all the assets and liabilities of the amalgamating company become the assets and liabilities of amalgamated company.

The Deviation from AS-14

As per the rules of Income Tax Act, 1961 a scheme of amalgamation in which amalgamated company does not issue its shares to discharge the purchase consideration rather makes lump sum payment as purchase consideration then it should be interpreted as **slump sale and not amalgamation**.

Demerger

Definition

The definition of demerger has been inserted under section 2(19AA) in the Income Tax Act in the year 1999 accordingly as follows:

"Demerger in relation to companies, means the transfer, pursuant to scheme of arrangement under section 391 to 394 of the companies act, 1956 by a demerged company or its one or more undertakings to any resulting company in such a manner that

(i) All the properties and liabilities of the undertaking, being transferred by the dermerged company, immediately before the demerger, become the propoeties and liabilities of the resulting company by virtue of the demerger; and such properties and liabilities are transferred at book value.

(ii) The resulting company (new company) issues, in consideration of the demerger, its shares to the shareholders of the demerged company on a proportionate basis;

(iii) The shareholders holding not less than three-fourth in value of the shares in the demerged company (other than shares already held therein immediately before the demerger, or by a nominee for, the resulting company or, its subsidiary) become shareholders of the resulting company or companies by virtue of demerger;

(iv) The transfer of undertaking is on a going concern basis;

(v) The demerger is in accordance with the conditions, if any, notified by government of India in this behalf.

Explanation

The above referred definition results into the following conclusion:

- When an existing company transfers one of its running undertaking in the favour of another new company, it is termed as demerger.
- The asset and liabilities should be transferred at the existing carrying amount as reported by demerged company immediately before demerger.
- The company transferring its undertaking is identified as demerged company.
- The resulting company pursuant to demerger discharges the purchase consideration by the issue of its shares to demerged company.
- The shares so issued pursuant to demerger should lead to atleast 75% shareholding of the demerged company in the resulting company.

Capital Gain in Amalgamation and Demerger and Income Tax Rules

Capital gain is recognized when amalgamating company or demerged company transfers the asset at a value more than the carrying amount of asset transferred. As per section 47 of Income Tax Act, 1961 keeps these capital gains outside the ambit of capital gains for the purpose of taxation only when:

- In case of amalgamation, the amalgamated company is an Indian company,
- In case of demerger, the resulting company is an Indian company.

Further to it, the consideration for amalgamation or demerger is discharged by the issue of shares by amalgamated company or resulting company.

Thus, the provisions of this section imply that neither the companies nor the shareholder are subject to capital gain tax pursuant to amalgamation or demerger.

Losses in case of Amalgamation and Demerger and Income Tax Rules

As per the section 72A(1) of Income Tax Act, 1961, the following provisions are applicable for losses in case of amalgamation and demerger.

Carry Forward of Losses in Case of Amalgamation

(i) The amalgamating company is an industrial undertaking or a ship.

(ii) Pursuant to the scheme of amalgamation amalgamated company is allowed to carry forward accumulated losses and unabsorbed depreciation over a period of eight years from the date of amalgamation subject to the fulfillment of the following conditions

- The amalgamated company should carry the business of amalgamating company at least for the next five years from the date of amalgamation.
- The amalgamated company should not dispose the assets acquired under the amalgamation during next five year from the date of amalgamation.
- The amalgamating company fulfills certain other conditions as specified under this act.

Carry Forward of Losses in Case of Demerger

(i) The assets transferred pursuant to demerger can be identified distinctly by the demerged company and carrying value of assets so transferred can be recognized reasonably.

(ii) Accumulated losses or unabsorbed depreciation relating to such assets is allowed to be carried forwarded by the resulting company for a period of eight years from the date of demerger.

(iii) When a complete group of asset is not transferred by the demerged company instead a part of it is transferred then the proportionate amount of accumulated loss or unabsorbed depreciation relating to the proportion of the asset so transferred is allowed to be carried forwarded by the resulting company for a period of eight years from the date of demerger.

ALLOWABILITY OF AMALGAMATION OR DEMERGER EXPENSES

In the year 1991 A new section 35 DD has been inserted in the income tax act 1956 which is effective from 1st April, 1999. This section provides that amalgamated company in case of amalgamation and resulting company in case of demerger relevant expenses should be amortized over a period of successive five years following the year of amalgamation or demerger. This results into the amortization of one fifth of the expenses in each of the successive previous years for the income assessment falling after the year of amalgamation/demerger.

Disclosure as Per AS-14

For all the amalgamations, the acquiring company is required to make the following disclosure in the first financial statements following the date of amalgamation:

(i) Names, industry and general nature of business of all the amalgamating companies

(ii) Effective date of amalgamation and scheme of amalgamation

(iii) Accounting method used to execute amalgamation

Additional Disclosure in Case of Amalgamation in the Nature of Merger

Amalgamation in the nature of merger is given accounting treatment by pooling of interest method, herein following additional disclosure is required

(a) Number of shares issued along with their description and the shareholding percentage of each amalgamation in the post amalgamation equity.
(b) The difference, if any in the amount of purchase consideration and the net asset value and the accounting treatment given to such difference.

Additional Disclosure in case of Amalgamation in the Nature of Purchase

Under this accounting is followed by purchase method, and following additional disclosure is required in the first financial statement following the amalgamation:
(a) Amount of purchase consideration and its description along with contingent consideration payable.
(b) Goodwill or capital reserve arising on account of amalgamation and the accounting treatment given to these in the post amalgamation financial statements – balance sheet.
(c) Amortization method for goodwill arising pursuant to amalgamation.

SOLVED EXAMPLES

EXAMPLE 13 The following are the balance sheets of A and B as on 31st March, 2010:

Balance Sheet as on 31st March, 2010

Liabilities	A	B	Assets	A	B
Equity shares ₹ 100 each	3,00,000	1,50,000	Fixed assets	4,15,000	1,25,000
Reserves	1,00,000	30,000	Current assets	2,00,000	1,75,000
8% Debentures	1,00,000	50,000	Preliminary expenses	10,000	5,000
Sundry Creditors	1,25,000	75,000			
	6,25,000	3,05,000		6,25,000	3,05,000

Goodwill of A and B is to be valued at ₹ 60,000 and ₹ 20,000, respectively. A purchased B on the basis of intrinsic value of shares. Show accounts in the books of B and post amalgamation balance sheet in the books of A.

SOLUTION

Calculation of intrinsic value of both the companies and purchase consideration

Particulars	A	B
Assets		
Fixed assets	4,15,000	1,25,000
Current assets	2,00,000	1,75,000
Goodwill	60,000	20,000
	6,75,000	3,20,000
Less: Liabilities		
8% Debentures	1,00,000	50,000
Sundry creditors	1,25,000	75,000
Net Asset Value	4,50,000	1,95,000
Number of equity shares	3,000	1,500
Intrinsic value per share	150 (4,50,000/3,000)	130 (1,95,000/1,500)

Number of shares to be issued by acquiring company to the shareholders of acquired company = (intrinsic value of acquired/intrinsic value of acquiring) × number of shares of acquired company
i.e. = (130/150) × 1,500 = 1,300 shares of face value ₹ 100 each at a price of ₹ 150 resulting into securities premium per share of ₹ 50
Therefore purchase consideration is ₹ 1,95,000 (1,300 × 150)
Since purchase consideration equals net asset value therefore there is neither goodwill nor capital reserve.

(i) In the books of B (acquired company)

Realization Account

Particulars	Amount	Particulars	Amount
To Fixed assets a/c	1,25,000	By 8% Debentures	50,000
To Current assets a/c	1,75,000	By Sundry Creditors	75,000
To Equity shareholders' a/c (profit)	20,000	By A's a/c	1,95,000
	3,20,000		3,20,000

Equity Shareholder's Account

Particulars	Amount	Particulars	Amount
To Preliminary expenses a/c	5,000	By Equity share capital a/c	1,50,000
		By Reserve a/c	30,000
To Equity shares in A a/c	1,95,000	By Realization a/c (profit)	20,000
	2,00,000		2,00,000

(ii) In the books of A (acquiring company)

Balance Sheet as on 31st March, 2010 (post amalgamation)

Liabilities	Amount	Assets	Amount
Equity shares ₹ 100 each	4,30,000	Fixed assets	5,40,000
Reserves	1,00,000	Goodwill	20,000
Securities premium	65,000	Current assets	3,75,000
8% Debentures	1,50,000	Preliminary expenses	10,000
Sundry Creditors	2,00,000		
	9,45,000		9,45,000

Here A has issued 1,300 shares of face value ₹ 100 each at a premium of ₹ 50 each therefore increase in the paid up value is ₹ 1,30,000 and securities premium is ₹ 65,000 (50 ×1,300). Rest of the assets and liabilities have been combined in line-by line manner.

EXAMPLE 14 The following are the balance sheets of AB Limited as on 31st March, 2010, which has two distinct business segments i.e. 'Division A' and 'Division B'. On 31st March, 2010, it was decided to spin off division A by transferring it to a newly established company A Limited which shall issue 15,000 equity shares of ₹ 10 each to the shareholders of AB Limited. Show how the balance sheet of AB and A will appear after demerger.

Balance Sheet as on 31st March, 2010

Particulars	Division A	Division B	Total
Assets			
Freehold property	1,20,000	2,50,000	3,70,000
Loans and advances	10,000	---	10,000
Debtors	25,000	20,000	45,000
Bills receivables	5,000	---	5,000
Stock	20,000	30,000	50,000
Bank	----	10,000	10,000
Liabilities			
Equity shares of ₹ 10 each		2,00,000	2,00,000
General reserve		2,00,000	2,00,000
Debentures		10,000	10,000
Secured loan		10,000	10,000
Sundry creditors	30,000	36,000	66,000
Bills payable		4,000	4,000

SOLUTION (i) Here the net asset value of the demerged division is as follows

Total value (book value) of assets transferred by AB

Assets Transferred	
Freehold property	1,20,000
Loans and advances	10,000
Debtors	25,000
Bills receivables	5,000
Stock	20,000
Total Value of Assets	1,80,000
Less : Book value of liabilities	
Sundry creditors	30,000
Net Asset Value	1,50,000

(ii) AB should adjust this positive NAV to general reserve after the spin-off general reserve will remain at ₹ 50,000 (2,00,000 – 1,50,000).

(iii) Shares received from resulting company i.e. from A Limited will be passed on to the shareholder of AB Limited in the ratio of existing shareholding pattern of AB.

(iv) Balance sheet of AB (demerged company) after demerger is as follows:

Balance Sheet as on 31st March, 2010 (post demerger)

Liabilities	Amount	Assets	Amount
Equity shares of ₹ 10 each	2,00,000	Freehold property	2,50,000
General reserve	50,000	Loans and advances	---
Debentures	10,000	Debtors	20,000
Secured loan	10,000	Bills receivables	---
Sundry creditors	36,000	Stock	30,000
Bills payable	4,000	Bank	10,000
	3,10,000		3,10,000

(v) Balance sheet of resulting company, i.e. A Limited is as follows:

Balance Sheet as on 31st March, 2010 (post demerger)

Liabilities	Amount	Assets	Amount
Equity shares of ₹ 10 each	1,50,000	Freehold property	1,20,000
Sundry creditors	30,000	Loans and advances	10,000
		Debtors	25,000
		Bills receivables	5,000
		Stock	20,000
		Bank	----
	1,80,000		1,80,000

Example 15 On 1st April, 2010, Dubar Limited acquired the assets and liabilities of Super Limited.

Balance Sheet as on 31st March, 2010

Liabilities	DL	SL	Assets	DL	SL
Equity shares of face value ₹ 10 each	1,50,000	1,75,000	Freehold property	1,00,000	80,000
			Plant and machinery	1,12,500	1,07,500
General reserve	37,500	50,000	Stock	31,250	68,750
P & L a/c	25,000	12,500	Debtors	45,000	1,00,000
Work compensation fund	12,500	2,500	Investment	26,250	13,750
Export profit reserve	1,250	2,500	Bank	11,000	9,000
12% Debentures	75,000	1,00,000	Preliminary expenses	250	1,000
Sundry creditor	25,000	37,500			
	3,26,250	3,80,000		3,26,250	3,80,000

Dubar and Super agreed for the following scheme of business acquisition:

(i) Dubar not to take investment of Super.

(ii) Freehold property of Super to be valued at ₹ 1,70,000 and stock at ₹ 60,000.

(iii) Stock of Dubar comprises of stock worth 15,000 (cost to super ₹ 12,000) purchased from Super.

Unrealized Profit

When stock of acquiring company comprises the stock purchased form vendor company or stock of vendor company comprises the stock sold by acquiring company, the acquiring company is required to adjust the amount of stock for unrealized profit on such stock. In first case gross profit margin of vendor is applied and in the second case gross profit margin of acquiring is applied to calculate the amount of unrealized profit. It is adjusted as follows

Goodwill/Capital reserve a/c	Dr.
To Stock a/c	(with the amount of unrealized profit)

(iv) Debtors of Dubar include ₹ 7,000 due from Super.

Mutual Holding of Assets and Liabilities

When pre-amalgamation balance sheet contains certain assets owned by one company which results into a corresponding liability for another company, such asset and liabilities are classified as mutual holding of assets and liabilities. These assets and liabilities should be eliminated in the combined balance sheet.

(iv) Dubar to issue its equity shares of face value ₹ 10 in such number which is calculated using a swap ratio of 3 : 5 for Super. Each share so issued has a fair value ₹ 14 on the date of acquisition.

(v) Statutory reserves need not to be carried for future.

Show post acquisition balance sheet of Dubar.

Solution As all the assets and liabilities are not been taken by the acquiring company therefore it is the case of amalgamation in the nature of purchase. The relevant calculations are as follows:

(i) Purchase consideration is the fair value of shares issued by Duber to Super. Here Duber will issue 10,500 shares (17,500 × 3/5) valued at ₹ 14 each the total amount of purchase consideration is ₹ 1,47,000.

(ii) Calculation of NAV

Particulars	Amount
Freehold property	1,70,000
Plant and machinery	1,07,500
Stock	60,000
Debtors	1,00,000
Bank	9,000
Gross value of assets acquired	4,46,500
Less : Liabilities assumed	
12% Debentures	1,00,000
Sundry creditor	37,500
Net Assets Value	3,09,000

(iii) As purchase consideration is only ₹ 1,47,000 but NAV is ₹ 3,09,000 therefore the difference is to be recognized as capital reserve in the balance sheet of Dubar.

(iv) Out of the debtors of combined balance sheet ₹ 7,000 is to be eliminated similarly from the creditors as well because it is mutual owing now getting merged in one single balance sheet.

(v) Unrealized profit ₹ 3,000 (15,000 – 12,000) is to be adjusted as follows

Capital Reserve a/c	Dr.	3,000
To Stock a/c		3,000

(ii) In the books of Dubar Limited (acquiring compnay)

Balance Sheet as on 31st March, 2010 (post amalgamation)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	2,55,000	Freehold property	2,70,000
General reserve	37,500	Plant and machinery	2,20,000
Capital reserve	1,59,000	Stock	88,250
Securities premium	42,000	Debtors	1,38,000
P & L a/c	25,000	Investment	26,250
Work compensation fund	12,500	Bank	20,000
Export profit reserve	1,250	Preliminary expenses	250
12% Debentures	1,75,000		
Sundry creditor	55,500		
	7,62,750		7,62,750

KEY TERMS

Business combination
Transferor
Acquirer company
Good will
Demerger/spin-off
Amalgamation in the nature of merger
Transferee
Purchase consideration
Capital reserve/negative goodwill
Amalgamation in the nature of purchase
Vendor company
Fair value
Slump sales

FINAL RECAP

- **Business combination** comes into existence when two or more companies amalgamate with the objective to realize synergy benefits.
- **Transferor company** is the company that sells/transfers its assets and liabilities to another company. It is also called **vendor company, i.e. acquired company.**
- **Transferee company** is the company which acquires the assets and liabilities of the another company. It is also called **acquiring or purchasing company .**
- **Purchase consideration** is the total amount to be paid by the acquirer, i.e. by purchasing company to the share-holders of acquired company. This includes cash and the value of shares issued by the acquirer to the acquired company. Purchase consideration might be discharged in cash or by the issue of shares by the acquirer or by both as per the terms and conditions of amalgamation.
- **Fair value** is such value of an asset or liability for which an exchange is possible between two willing parties in an arm's length business transaction.
- **IFRS-03 and Ind-AS-103** establishes the fact that acquirer should identify different assets acquired and liabilities assumed and measure these assets and liabilities at the fair value on the date of business combination.
- The time period over which estimation of fair value can be made is termed as **allocation period.**
- **Direct costs** are the costs that are specifically incurred and directly attributable to the incidence of business combination are recognized as direct costs. These include cost of issuing and registering the securities issued as a part of purchase consideration, cost of registering assets acquired, and other legal expenses.
- Additional amount of purchase consideration payable at a later date subject to the outcome of some future events is recognized as **contingent consideration**. Payment of such additional amount is subject to the outcome of some future events.
- When amount of purchase consideration is in excess of net asset value of the assets acquired and liabilities assumed by the acquirer the difference is recognized as **goodwill**.

- When amount of purchase consideration is in less as compared to the net asset value of the assets acquired and liabilities assumed by the acquirer the difference is recognized as **negative goodwill**.
- In a business combination settled through the exchange of share the business entity that issues the shares is identified as acquirer, but some time such exchange of shares passes the control of combined business entity in the favor of the acquired company i.e. the company receiving the shares in exchange, this incidence of passing the control is referred as **reverse acquisition**.
- When an existing business entity establishes a new company with the objective to pass on to this new company one of its separate identifiable business unit it is termed as **demerger or spin-off**.

Review Questions

Multiple Choice Questions

1. When acquiring company takes all the assets and liabilities at the book value and discharges the purchase consideration by issuing its shares, then it is to be accounted for by using
   (a) Pooling of interest method (b) Purchase method
   (c) Any of these as it is subjective (d) None of these
2. Under purchase method of amalgamation, if net asset value exceeds the amount of purchase consideration, then it results into
   (a) Goodwill (b) Capital reserve
   (c) Adjustment in general reserve (d) None of these
3. Under purchase method of amalgamation, if net asset value is less than the amount of purchase consideration, then it results into
   (a) Goodwill (b) Capital reserve
   (c) Adjustment in general reserve (D) None of these
4. Joint venture, co-ownership of assets, and acquisition of assets of group of assets that does not constitute a separately identifiable legal business entity are not considered as
   (a) Amalgamation in the nature of merger (b) Amalgamation in the nature of purchase
   (c) Either of these (d) Neither of these
5. When there exists the provision for contingent consideration, the allocation period shall not exceed
   (a) Twelve months (b) Six months
   (c) Three months (d) None of these
6. In an amalgamation of two companies A and B into a newly established company AB, AB issued 30,000 shares of ₹ 10 each to A and 45,000 equity shares of ₹ 10 each to B. Identify the acquirer under IFRS-03.
   (a) A (b) B
   (c) AB (d) More facts are required
7. Pursuant to demerger, if the resulting company is a foreign company, then show how capital gain is to be recognized.
   (a) To be taxed @ 22.60% (b) To be taxed at 33.90%
   (c) Need not be recognized (d) None of these
8. Pursuant to demerger, if the resulting company is an Indian company, then show how capital gain is to be recognized.
   (a) To be taxed @ 22.60% (b) To be taxed at 33.90%
   (c) Need not be recognized (d) None of these
9. In a demerger or amalgamation, the maximum period for which accumulated losses and unabsorbed losses can be carried forward is

(a) Five years (b) Eight years
(c) Ttwo years (d) None of these

10. Amalgamation and demerger expense should be recognized as
    (a) Expensed in the year of amalgamation or demerger
    (b) Amortized over a period of five years from the date of amalgamation or demerger
    (c) Amortized over a period of eight years from the date of amalgamation or demerger
    (d) None of these

Descriptive Questions

1. Explain the term business combination how purchase consideration is to be calculated under IFRS 03.
2. Differentiate between the provisions of IFRS-03 and AS-14.
3. Define demerger. What accounting procedure should be followed for it?
4. How have amalgamation and demerger been defined under Income Tax Act, 1961? What are the taxation provisions for it?
5. Write short notes on the following:
    (a) Reverse acquisition
    (b) Slump sales under income tax act, 1961
    (c) Goodwill vs. negative goodwill
    (d) Pooling of interest vs. purchase method of accounting
    (e) Contingent consideration

Numerical Problems

1. Dinesh Limited was acquired by Kamlesh Limited for which Kamlesh issued 85,000 equity shares of face value ₹ 10, each having market price ₹ 13 per share on the stock exchange. Apart from this, Kamlesh paid ₹ 1 per share for every equity share of Dinesh. Dinesh has total 1,70,000 equity shares of ₹ 10 each. Calculate purchase consideration paid by Kamlesh.
2. The balance sheets of Hyper Limited (HL) and Fun Limited (FL) on 31st March, 2011 are as follows:

Balance Sheet as on 31st March, 2011

(rupees in crores)

Liabilities	HL	FL	Assets	HL	FL
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,05,000	25,500
			Plant and machinery	75,000	15,000
General reserve	63,000	15,000	Stock	30,000	6,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	30,000	---
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	3,000	1,800
	3,00,000	80,550		3,00,000	80,550

On the balance sheet date HL acquired the business of FL for which it agreed to pay the following purchase consideration on the date of business combination.

(i) HL to issue its one share for every two shares of FL.
(ii) The market price of HL's shares on the date of business combination is ₹ 30 per share.
(iii) HL to pay ₹ 5 per share in cash for every one share of FL.

(iv) Further it is provided in the scheme of business combination that if combined entity reports a profit of ₹ 38,000 crore as half year's profit on 30th September, 2011 then HL shall issue additional 80 crore shares to be valued at the fair value when such contingency is resolved.
Show how purchase consideration and different assets and liabilities should be recognized in the books of HL.

3. DK Limited and SK Limited amalgamated on 1st April, 2010. All the assets and liabilities of both the companies were acquired by newly established company DS Limited. The following was the balance sheet of both the companies on 1st April, 2010:

Balance Sheet as on 31st March, 2010

Liabilities	DK	SK	Assets	DK	SK
Equity shares of face value ₹ 10 each	1,50,000	1,25,000	Land and building	1,00,000	80,000
			Plant and machinery	1,12,500	1,07,500
General reserve	37,500	1,00,000	Stock	31,250	68,750
P & L a/c	25,000	12,500	Debtors	45,000	1,00,000
Investment Allowance reserve	12,500	2,500	Investment	26,250	13,750
			Cash	11,250	10,000
Export profit reserve	1,250	2,500			
12% Debentures	75,000	1,00,000			
Sundry creditor	25,000	37,500			
	3,26,250	3,80,000		3,26,250	3,80,000

DS agreed to issued required number of equity shares of face value ₹ 10 each valued at ₹ 20 each to discharge the purchase consideration to both the amalgamating companies. Calculate purchase consideration. And identify the acquirer if IFRS 03 or Ind-AS-103 is applicable.

4. On 1st April, 2011, Deep Limited (DL) acquired the business of Cycle Limited (CL) by acquiring all the assets and liabilities. Land and building of CL was valued at ₹ 9,50,000 and furniture and fixtures at ₹ 2,00,000 and rest of the assets and liabilities at the book value. It agreed to discharge the purchase consideration as follows:
   (i) To issue 1,80,000 equity shares of face value of ₹ 10 each to the equity shareholders of CL
   (ii) To issue requisite number of 10% preference shares of ₹ 10 at par so as to redeem 15% preference shares of CL at par

Balance Sheet as on 31st March, 2011

Liabilities	DL('000)	CL('000)	Assets	DL('000)	CL('000)
Equity shares of face value ₹ 10 each	2,500	1,500	Land and building	1,250	775
			Plant and machinery	1,625	850
15% Preference shares of ₹ 10 each	1,100	850	Furniture & Fixtures	288	175
			Investment	350	250
General reserve	250	125	Stock	625	475
P & L a/c	375	250	Debtors	450	515
Investment Allowance Reserve	—	50	Cash	362	260
Export profit reserve	150	100			
12% Debentures	250	175			
Sundry creditor	225	175			
Other current liabilities	100	75			
	4,950	3,300		4,950	3,300

Show how purchase consideration will be calculated and the accounts will be shown in the books of both the companies.

5. The following are the balance sheets of A and B as on 31st March, 2010:

Balance Sheet as on 31st March, 2010

Liabilities	A	B	Assets	A	B
Equity shares ₹ 100 each	3,00,000	1,50,000	Fixed assets	4,15,000	1,25,000
Reserves	1,00,000	30,000	Current assets	2,00,000	1,75,000
8% Debentures	1,00,000	50,000	Preliminary expenses	10,000	5,000
Sundry Creditors	1,25,000	75,000			
	6,25,000	3,05,000		6,25,000	3,05,000

Goodwill of A and goodwill of B are to be valued at ₹ 60,000 and ₹ 20,000, respectively. A purchased B for which it agreed to issue requisite number of equity shares of face value ₹ 100, each at a premium of ₹ 25 each. Show accounts in the books of B and post amalgamation balance sheet in the books of A.

Answers

Multiple Choice Questions

1. (a), 2. (b), 3. (a), 4. (d), 5. (a), 6. (b), 7. (a), 8. (c), 9. (b), 10. (b)

Numerical Problems

1. Purchase consideration: ₹ 12,75,000.
2. Initial issue of shares ₹ 1,500 crore, shares value at ₹ 30, initial purchase consideration ₹ 60,000 crore
3. DK is the acquirer, the number of shares to be issued to DK 7,500 and to SK 6,250 purchase considerations DK-₹ 1,50,000 and SK-₹ 1,25,000).
4. NAV ₹ 30,75,000 and purchase consideration ₹ 26,50,000.
5. 1,560 shares of face value ₹ 100 each to be issued at a premium of ₹ 25 each.

CASE

Business Combination

Ramson Limited and Macson Limited are strong competitors running the business in the pharmaceutical industry for about last 20 years. Both of the companies realized that due to competition they were spending heavy money on sales promotion and doctors made an advantage out of it. On 31st January, 2011, managing directors of both the companies negotiated the scheme of business combination. The scheme was subsequently approved by the shareholders and by the regulator. The abstracts from the amalgamation scheme are given below.

The balance sheets Ramson Limited and Macson Limited are as follows:

Balance Sheet as on 31st March, 2011
(Rupees in crores)

Liabilities	RL	ML	Assets	RL	ML
Equity shares of face value ₹ 10 each	2,50,000	1,30,000	Land and building	1,05,000	25,500
			Plant and machinery	1,10,000	1,15,000
General reserve	63,000	65,000	Stock	30,000	56,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	95,000	—
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	3,000	1,800
	4,00,000	2,30,550		4,00,000	2,30,550

On the balance sheet date, RML acquired the business of both and ML. RML agreed to discharge the purchase consideration by issuing requisite number of its equity shares at and issue price of ₹ 18 against the face value of ₹ 10 per share. Further it agreed to value the land and building at a 10% higher value for both the companies, it also agreed to value plant and machinery at an appreciation of 20% on the existing book value, but valued the investment at ₹ 78,000 only.

The debtors of RL comprise ₹ 15,000 crore due from ML, bills receivables of ML comprise of bills accepted by RL of ₹ 1,000 crore.

Discussion Questions

1. How will you recognize purchase consideration and different assets and liabilities in the books of HL?
2. Calculate purchase consideration for both the companies.
3. Identify the acquirer using IFRS 03 or Ind-AS-103 rules.
4. Prepare post amalgamation balance sheet of RML.
5. Had both the companies agreed to maintain their pre-amalgamation book value per share, then what should have been the purchase consideration for each of the companies?

CHAPTER

16

Consolidated Financial Statement

Learning Objectives

After reading this chapter, you will be able to

- Classify different types of corporate relationships—associate company, subsidiary and holding company
- Understand accounting in case of associate company
- Define accounting for joint venture
- Know the preparation of consolidated financial statement

Corporate Relationships through Investments

The relationship between different companies is regulated by shareholding of the investor company in the investee company. When shareholding by the investor is less than 20%, then accounting is to be done by following AS-13; whereas when the shareholding of investors is between 20–50%, then investee is called an **associate company** of the investor and accounting for consolidation is to be done using the provisions of AS-23 and IAS-28.

Shareholding by the investors more than 50% helps in establishing the relationship of the holding and the subsidiary company. In this case, the consolidated financial statements are prepared by following the provisions of AS-21 and IAS-27.

Provisions of International Financial and Reporting Standards (IFRS) insist the use of fair value at the time of preparing consolidated financial statement, whereas Indian GAAP does not consider fair value.

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated financial statements are like merged financial statements of two separate business entities that are bound either directly or indirectly by the relationship of holding company and subsidiary company.

Investment in the shares of a company by another company is with two purposes—one to realize the gain—regular income as well as capital appreciation and another to influence the operating and financial decisions of the investee company. **Regular gain** is in the form of dividend and **capital appreciation** is in the form of increase in the market value of shares purchased by the investor company. Both of these gains are similar to the gains from portfolio investment; therefore, accounting for such investment should be done by following portfolio investment practices. When investment in the shares of the investee company is done with the purpose of influencing operating and financial decisions of the investee company by the investor company then the investor company should adopt different accounting policies and practices as applicable for investment in associates.

> **Adoption of accounting policies** for the presentation of financial statements is affected by the relationship between investor company and investee company.

INSIGNIFICANT INFLUENCE VS SIGNIFICANT INFLUENCE

When an investor company holds less than 20% shares of the investee company, it is considered as an **insignificant influence** because the investor company is not in a position to influence the operating and financing decision of the investee company. Such investment by the investor company is with the aim to realize the gains similar to portfolio investment.

A significant influence through investment of the investor company exists only when the investor company holds the shares more than or equal to 20% but not exceeding 50% shares of the investee company. In this situation, the investor company can have direct or indirect influence on the operating and financing decisions of the investee company. Here the investee company is identified as an **associate company** of the investor company. Here the investor company has only the influence and not the control over the affairs of an investee company. This influence results into the realization of benefits more then the benefits from portfolio investment. Significant influence lacks control. Therefore, there is no requirement of preparing consolidated financial statement by the investor company. However, investor company incorporates in its balance sheet net assets of the investee company to the extent of its shareholding.

> Investment in less than 20% shares of the investee companies leads to insignificant influence of the investor company, whereas the investment in the range of 20–50% leads to significant influence.

SIGNIFICANT INFLUENCE VS CONTROL

Significant influence comes into existence only when the investor company holds the shares in the investee company in the range of 20–50%. But the moment the investor company holds the shares 51% or more in the investee company, it results into a relationship between the **subsidiary** and the **holding company**. The investee company is called the **subsidiary of the investor company** and the investor company is called the **holding company of the investee company**. Here holding company has control over subsidiary company. This relationship requires the consolidation of financial statement of subsidiary into the financial statement of the holding company. Accordingly, the holding company presents standalone financial statements as well as consolidated financial statements as if subsidiary and holding are single entity.

> A **holding company** exercises control over the board of directors of subsidiary of its own subsidiary. This is called **indirect control**.

Accounting Standards and Accounting for Investment

Accounting standards contain the provisions about consolidation of financial statements when the investor company exercises control over the investee company and these also contain the provisions for the presentation of investment where the investor company lacks control over the investee company.

Indian GAAP—Indian Accounting Standards

AS-23 contains the provision about "accounting for investments in associates and consolidated financial statements". AS-13 contains the provisions about "accounting for investment". These provisions are applicable when the investor company lacks control. AS-27 contains the provisions about "financial reporting of interests in joint ventures". It defines the term 'joint venture' and specifies the requirements relating to accounting for investments in joint ventures.

International Accounting Standards

IAS-27 contains the provisions about accounting for consolidated financial statements for a group of entities under the control of a parent. IAS-28 deals with the accounting for investment in associates and IAS-31 contains the provisions about interest in joint venture and accounting for joint venture.

ACCOUNTING FOR INVESTMENT IN ASSOCIATES

A company in which an investor company holds the share capital with voting rights in the range of 20–50% is called an **associate of the investor company**. The investor company has significant influence on the operating and financial decision of the associate (investee) company provisions of AS-23 and IAS-28 are applicable in accounting for this investment.

Accordingly, an associate is a business entity in which the investor company has significant influence but it is neither a subsidiary nor a joint venture of the investor company. Significant influence is the power of the investor company to participate in the operating and financial decisions of the associate but such associate is not controlled directly or indirectly by the investor company.

The standard defines the control as (a) the direct or indirect ownership of more than 50% of the shares with voting rights of the investee company, (b) control over the composition of the board of directors of the investee company. The company that is controlled like this is called **subsidiary of the investor company** and the investor company is called **holding company**.

SIGNIFICANT INFLUENCE—FORM OVER SUBSTANCE

Although the shareholding limit of 20% is the benchmark to recognize whether an investor company has significant influence over the investee company or not but this is not the sole criterion. An investor company can have significant influence through the following means even when it holds less than 20% of the voting right shares of the investee company:

- Representation in the board of directors.
- Participation in policy making process.
- Interchange of managerial personnel or technical information.

Accounting Methods

The provisions of AS-23 and IAS-27 provide the accounting for investment should be done by using **equity method**. However, an investor company is exempted from these provisions when investment is held with the sole objective to dispose the investment in the near future. In such case, accounting is to be done by following **cost method**.

Accounting for investment in associates is recognized by following either equity method or cost method. However, the investment held for sale in near future is accounted for using cost method.

Equity Method

Under this method, the investment is initially recognized at cost by identifying goodwill or capital reserve resulting at the time of making such investment. The carrying amount is adjusted to recognize the investor company's share in the profit and losses of the associate (investee) company from the date of acquisition onwards. The carrying amount of investment is decreased by the amount of dividend received. Adjustment in the carrying amount should also be done when equity of the investee company changes significantly on account of revaluation of assets.

Under equity method, the initial recognition of investment is at cost; subsequently, the carrying amount is adjusted for the profits/losses and dividends by the investee company.

Initial recognition

It is done at the cost incurred in making the investment in associate.

Subsequent recognition

Investor's share in the profit and loss is adjusted in the initial carrying cost. However, the amount of dividend received by the investor is used to reduce the initial carrying cost. Investor's share in the profit and loss should be disclosed under the heading 'other income'.

Recognition of Goodwill

Goodwill arises when the investor company pays more than the proportionate book value of associate company in acquiring the investment, i.e., equity shares of the associate company. The difference between the cost of investment and the proportionate book value is to be recognized as **goodwill**. The amount of goodwill is not shown separately in the financial statement of the investor company; rather it is included in the initial carrying amount of investment.

Excess of invested amount over the proportionate book value/fair value of the investee company is recognized as **goodwill**.

EXAMPLE 1 On April 1, 2010 Gussain Limited (GL) purchased 30% equity shares of George Huss Limited (GHL) at a cost of ₹ 1,80,000. The equity of GHL Limited on this date comprised (a) equity share capital ₹ 3,00,000, (b) securities premium ₹ 2,00,000, (c) reserve and surplus ₹ 1,00,000.

During the year 2010–11, GHL earned a net profit of ₹ 90,000 out of which 50% was distributed as dividend among equity shareholders. Show how GL should account for its investment in GHL.

SOLUTION **Initial recognition—initial carrying amount**

Here GL holds 30% equity shares of GHL; this evidences that GHL is an associate of GL. Therefore, accounting should be done by using equity method. On April 1, 2010 the initial recognition of investment should be at cost only, i.e., ₹ 1,80,000. However, the initial equity net worth of GHL is ₹ 6,00,000 (3,00,000 + 2,00,000 + 1,00,000), the sum total of equity share capital, securities premium and reserve and surplus.

Therefore, on April 1, 2010 the carrying amount of investment in associate is ₹ 1,80,000. This should be adjusted for GL's share in the profit as reported by GHL for the year 2010–11.

The amount by which the invested amount falls short of the proportionate book value/ fair value of the investee company is recognized as **capital reserve**.

Subsequent adjustment—adjustment regarding profit in the initial carrying amount

At the end of the year, the equity net worth of GHL increases by the amount of retained profits ₹ 45,000 out of the profits for the year 2010–11. Therefore, GL's share in this equity net worth is equal to 30% of 6,45,000 (6,00,000 + 45,000), i.e., ₹ 1,93,500. Subsequent mearsurement is as follows:

Initial cost of investment	₹ 1,80,000
Add: 30% of the net profit for the year	₹ 27,000
	₹ 2,07,000
Less: Dividend received 30% of 45,000	₹ 13,500
Carrying amount at the end of 2010–11	₹ 1,93,500

Complexities in Equity Method—Difference between Book Value and Fair Value of Assets of Associate

While accounting for investment in associate using equity method, the adjustment for profit/loss and dividends is not sufficient. It also requires an adjustment for changes in the book value of assets of the associate company. Such change should be recognized if there exists a significant difference between the book value and fair value of assets of the investee company. Here goodwill is recognized by taking the difference between the proportionate fair value of net asset and the cost of investment by the investor company. The difference between the book value and fair value of assets is to be amortized over the life of respective assets using amortization schedule.

EXAMPLE 2 Taking the data of Example 1, if we consider that GL purchased 30% equity of GHL at a cost of ₹ 2,15,000 and there was no difference between the book value and fair value of the assets. Then show how goodwill is to be recognized. If we further assume that the fair value of net assets increased by ₹ 1,00,000 over the given net book value of asset ₹ 6,00,000. Then show how goodwill is to be recognized.

SOLUTION In the first case, when change in fair value has not been given the amount of goodwill is the difference between cost of acquisition ₹ 2,15,000 and the proportionate net book value ₹ 1,80,000 (30% of 6,00,000). Therefore, the amount of goodwill is ₹ 35,000 (2,15,000 – 1,80,000). This goodwill should be shown as a part of the carrying cost but should be disclosed in the financial statements.

In the second case, when fair value has changed and net fair value of asset is ₹ 7,00,000 (6,00,000 + 1,00,000) the amount of goodwill is the difference between the cost of acquisition ₹ 2,15,000 and proportionate fair value ₹ 2,10,000 (30% of 7,00,000). Therefore, goodwill will be ₹ 5,000 only. The difference between the proportionate fair value ₹ 2,10,000 and proportionate book value ₹ 1,80,000, i.e., ₹ 30,000 should be amortized over the useful life of respective assets.

Inter-company Transactions and Unrealized Profit/Loss

When either of the investor company or its associate has certain assets or closing stock purchased from one another, it results into an unrealized profit till the time such asset is not used completely or stock does not get sold to a third party. The equity method provides for the adjustment of such unrealized profit to the extent unrealized profit belongs to the investor company. Such unrealized profit might result from the following two types of transactions:

(a) Sale of asset/goods by an associate to the investor company is identified as **upstream transaction**.

(b) Sale of asset/goods by the investor company to its associate is identified as **downstream transaction**.

Accounting prudence emphasizes that profit should not be recognized unless it has been earned. Therefore, the transactions mentioned above if result into unrealized profit/loss then it needs to be eliminated by investor company to the extent its proportion in the unrealized profit/loss. However, the unrealized loss needs not to be eliminated if these cannot be recovered.

The amount of profit contained in the stock of either of the companies resulting from the business transactions between the investor company and the investee company is identified as **unrealized profit**.

Unrealized Profit from Closing Stock

When either of the company's closing stock contains such stock that has been purchased from another company, it results into an unrealized profit at the gross profit rate of the company selling such stock. The investor company should eliminate the relevant proportion of the unrealized profit while recognizing investment in its financial statements.

Example 3 Gee Limited (GL) is an associate of Jee Pee Limited (JPL). During the year, GL sold goods of selling price ₹ 3,00,000 to JPL. On March 31, 2011 closing stock of JPL comprised stock amounting to ₹ 70,000 out of the goods purchased from GL. Financial statements of GL disclose a gross profit margin of 30% for the year 2010–11. Show how unrealized profit is to be eliminated by JPL on March 31, 2011 when JPL holds 45% shares of GL.

Solution Out of the total amount of goods purchased, JPL has goods worth ₹ 70,000 only, total amount of unrealized profit resulting from this stock is ₹ 21,000 (30% of 70,000). Out of this only 45% belongs to JPL as it holds only 45% shares in GL. Therefore, JPL should eliminate ₹ 9,450 (45% of 21,000) while presenting its investment in associate. The entry for such elimination will be as follows:

Equity in GL's profit a/c	Dr	9,450	
To Investment in GL a/c			9,450

(relevant proportion of unrealized profit eliminated from total profit belonging to JPL)

Example 4 Gee Limited (GL) is an associate of Jee Pee Limited (JPL). During the year, JPL sold goods of selling price ₹ 3,00,000 to GL. On March 31, 2011, closing stock of GL comprised stock amounting to ₹ 70,000 out of the goods purchased from JPL. Financial statements of JPL disclose a gross profit margin of 25% for the year 2010–11. Show how unrealized profit is to be eliminated by JPL on March 31, 2011 when JPL holds 45% shares of GL.

Solution Out of the total amount of goods purchased by GL from JPL goods worth ₹ 70,000 is included in the closing stock of GL. Therefore, the unrealized profit is to be recognized only for this amount of goods. Total amount of unrealized profit resulting from this stock is ₹ 17,500 (25% of 70,000). Out of this only 45% belongs to JPL as it holds only 45% shares in GL. Therefore, JPL should eliminate ₹ 7,875 (45% of 17,500) while presenting its investment in associate. The entry for such elimination will be as follows:

Equity in GL's profit a/c	Dr	7,875	
To Investment in GL a/c			7,875

(relevant proportion of unrealized profit eliminated from total profit belonging to JPL)

Unrealized Profit from Assets

> Amount of profit contained in the non-current assets of either of the companies resulting from the business transactions between investor company and investee company is identified as **unrealized profit**.

Sale or purchase of asset between associate and its investor company also results into unrealized profit. The relevant proportion out of the unrealized profit is equal to the shareholding of the investor company in the equity capital of the investee company. The investor company should account for this proportion in unrealized profit as follows:

(a) In the year of transaction of sale or purchase

Equity in investee's profit a/c	Dr.	(with the relevant amount of unrealized profit)
To investment in investee company a/c		

(b) This amount of unrealized profit should be amortized over the useful life of the asset

Investment in investee company a/c	Dr.
To Equity in investee's profit a/c	

Example 5 Suppose in Example 4, JPL sold a machinery to GL on which it earned a profit of ₹ 60,000. The useful life of the asset is ten years. JPL holds 45% equity in GL. Show how unrealized profit is to be recognized in the year 2010–11.

Solution Here unrealized profit is only ₹ 27,000 (45% of 60,000). Therefore, JPL should pass the following entry to recognize it:

Equity in GL's profit a/c	Dr.	27,000	
To Investment in GL a/c			27,000

Out of this, every year 1/10 is to be amortized by passing the following entry:

Investment in GL a/c	Dr.	2,700	
To Equity in GL's profit a/c			2,700

Reporting Investment at Zero Value by Investor Company

As soon as the proportionate amount of losses of the associate company that belongs to the investor company equalizes the carrying amount of the investment, the investor company should report its investment in associate at zero value. Subsequent losses should not be disclosed in the financial statement of the investor company, unless investor has guaranteed to reimburse such losses. If subsequently the investee starts generating profits then it should recognize its share in the profit of the associate company after unrecognized losses have been adjusted.

Discontinuation of Equity Method

An investor company should stop using equity method for recording investment in associate if (a) it ceases to exercise significant influence on the investee company but still holds the investment in the associate, or

(b) application of equity method is not appropriate because the associate has been restricted from distribution of funds to its investor company, even though it holds significant shareholding as explained earlier.

As soon as the equity method is discontinued, the accounting for investment is to be recognized as per the provisions of AS-13 relating to financial investment and IAS-39 for the recognition of investment in financial assets.

Presentation of investment using equity method should be discontinued as soon as investor company looses the significant influence over the investee company.

Benefits and Shortcomings (Pitfalls) of the Equity Method of Accounting

While comparing equity method with the cost method of accounting for investment, the apparent **benefit of the equity method** is that it helps in disclosing the investment of investor at the appropriate amount of profit/loss that belongs to the investor company. This helps in making a true and fair presentation of investment in associate companies. But equity method is to be adopted only when investor company exercises directly or indirectly significant influence on the investee company. This helps in making a proper disclosure about investment activities of the investor company and its value.

Major shortcoming (pitfall) of equity method arises due to the complexities arising from the difference in the book value and fair value of assets of investee company. Another difficulty arises on account of recognition of unrealized profit. Sometimes it is very difficult to identify and estimate the amount of unrealized profit resulting from inter-company transactions.

Cost Method of Accounting for Investment

This method of accounting for investment is adopted when neither significant influence exists nor a control by the investor company can be exercised. Under this method investment is initially recognized at the cost and might be considered as current asset or long term asset. The amount of dividend received from such investment is considered as an income in the year in which such dividend is received by the investor company. The investor company is not required to adjust the carrying amount of investment at each balance sheet unless it becomes inevitable to recognize heavy losses from investment that is irrecoverable. Table 16.1 illustrates comparison between cost method and equity method.

TABLE 16.1 Comparison between Cost Method and Equity Method

Point of Difference	Cost Method	Equity Method
(i) Initial recognition	at cost	at cost
(ii) Subsequent recognition	at cost	at the net asset value as per the relevant proportion of investor
(iii) Dividends	as income	to reduce the cost of investment
(iv) Goodwill	not recognized	recognized but not disclosed separately
(v) Losses	not recognized	recognized excluding temporary losses

Indian GAAP

Indian GAAP presented in the form of Indian accounting standards contain the provision for investment by the investor company. In case of significant influence relationship accounting is to be done by following AS-23 and in case investment does not result into significant influence of investor the accounting is to be done by following AS-13. However, AS-21 contains the provision for the consolidation of financial statements of subsidiaries with the financial statements of holding company.

ACCOUNTING FOR JOINT VENTURE

A joint venture is the outcome of a contractual agreement between two or more entities resulting into a jointly controlled economic activity for the realization of economic benefits. The joint control is about financial and operating policies relating to certain economic activity like a business assignment that can be identified distinctly from the routine business activities of all the parties to joint venture.

Joint Control

Joint control is the contractually agreed sharing of control over an economic activity.

Joint Venture Contract (Agreement)

Usually, a joint venture contract provides for
- Objective and duration of the joint venture
- Reporting obligation of joint venture
- Capital contribution and contribution of other resources by each co-venturer, sharing of profit and losses among co-venturers
- Prime decision-making responsibility of each co-venturer.

A joint venture should necessarily be in written agreement form without this agreement it is difficult to establish a relationship of joint venture. The prominent feature of joint venture is that each venturer has the power to make significant influence over the decision-making concerning the economic activity irrespective of the division of work and decision-making area.

> A **joint venture** is like objective/activity specific partnership.

Forms (Types) of Joint Ventures

Joint venture as defined earlier might be in different forms. AS-27 and IAS-31 specify the following forms of joint ventures:
- Jointly controlled operations
- Jointly controlled assets
- Jointly controlled entities

Jointly Controlled Operations

It is a type of Joint venture. When a separate corporate entity or partnership firm is not established by the co-venturers rather each venturer contributes its resources—property, plant, equipment, inventory, etc. to carry out the economic activities covered under the jointly controlled operations.

Accounting Effect Each venturer who is a party to jointly controlled operations recognizes in its separate financial statement that is subsequently consolidated into the financial statement of group companies its own share of
- Assets and liabilities
- Expenses incurred and revenue generated from jointly controlled operations.

As assets, liabilities, expenses and revenue are recognized exclusively in the separate and consolidated financial statement of each of the co-venturer as per the share in economic benefits; therefore, there is no requirement to make any adjustment or consolidation of books of accounts relating to joint venture. Legally, there is no

> Only jointly controlled entity is required to maintain separate set of books of accounts and prepare separate financial statements.

compulsion to prepare separate financial statement for joint venture. However, co-venturers might prepare the financial statement of the joint venture so as to make an independent financial appraisal of joint venture.

There is no need to prepare a separate set of books of accounts for joint venture.

Illustration A prominent example of jointly controlled operations is Indo-Pak railway services being operated jointly by Indian government and Pakistan government. In this no separate joint venture corporation has been established. The railway department of each of the countries is contributing its own assets and expenses to generate revenue from the railway operations.

Jointly Controlled Assets

Jointly controlled assets involve the use of certain common assets for the economic benefit of all the venturers. Such common asset is purchased and owned jointly by all the co-venturers specifically purchased for the joint venture activities. Each co-venturer realizes its share of economic benefit from the use of jointly controlled asset and also incurs its share of expenses in using the asset.

Illustration A rented building jointly controlled by two colleges to run their courses during different shift timings. The management of each of the college generates revenue by using the building and incurs its own expenses.

Accounting Effect With respect to jointly controlled asset, each co-venturer should disclose in its separate financial statement that is subsequently consolidated if required the following items:

- Its share in the jointly controlled asset with the proper classification of the asset.
- Liability assumed with respect to jointly controlled asset.
- Income from the use or sale of output generated by the use of jointly controlled asset.
- Expanse incurred to realize the revenue from jointly controlled asset.

There is no need to prepare a separate set of books of accounts for joint venture.

Jointly Controlled Entity

A **jointly controlled entity** is the one that is established as a separate entity for the purpose of joint venture. Sometimes a partnership firm may be established instead of a corporate entity. This separate entity functions as other business entities run their economic activities except the difference that its operating and financing decisions are controlled unanimously and jointly by the co-venturers. Each of the co-venturer shall recognize its interest in the jointly controlled entity by using **proportionate consolidation method** of accounting.

Separate Financial Statements of Venture With regards to jointly controlled entities functioning as a joint venture, a separate set of books of accounts is prepared. The contribution of each venturer in the form of cash or otherwise is recognized as venturer's capital in the separate set of books of accounts, such as it is done in a partnership firm. Separate financial statements are prepared to ascertain profit/loss and assess assets and liabilities on the date of balance sheet. These financial statements also disclose the profit or loss belonging to each of the co-venturer.

Illustration Consortium financing by different banks in which banks establish a consortium and contribute there resources to carry the business of the consortium in lending money as per the objectives of the consortium. Each bank contributes its share of capital in the consortium and a separate set of books are prepared by this consortium.

Proportionate Consolidation Method of Accounting—Line by Line Consolidation

Proportionate consolidation method of accounting is such a method in which each co-venturer incorporates in its books of accounts its share in the jointly controlled entity by recording each item of asset, liability, expense and revenue in its financial statement. The resulting financial statement is called **consolidated financial statement of each co-venturer**.

Under this method of preparing consolidated financial statement, a venturer has two alternates for incorporating its interest in the jointly controlled entity. First, it can consolidate proportionate amount of asset, liability, expense/loss and revenue as per its share in the jointly controlled entity in a line-by line manner by clubbing the amount of similar items as already held by the venturer in its routine business activity. Second, it can consolidate proportionate amount of asset, liability, expense/loss and revenue by showing its share in the jointly controlled entity separate under each item in the consolidated financial statement.

Items that are not similar to the existing items are shown separately in the consolidated financial statement.

Illustration XYZ is having its own pharmaceutical business and it has entered into a joint venture with WWW for which both have contributed capital in 4:6 ratio respectively and a separate business corporation namely XWZ has been established in which XYZ has 40% stake. Suppose XYZ has its own building of ₹ 30,00,000 and XWZ also has a building of ₹ 10,00,000. Now XYZ can either show the building in its consolidated financial statements at ₹ 34,00,000 (30,00,000 plus 40% of 10,00,000) or it can show own building at ₹ 30,00,000 and below it building in joint venture at ₹ 4,00,000 is shown separately.

USEFUL INFO

Equity Method of Consolidation and Joint Venture

Provisions of IAS-31 provide the use of equity method to account for co-venturer's interest in the jointly controlled entity. Under this, accounting is done by following all the provisions of equity method as discussed in the previous section. However, AS-27 does not suggest this method of consolidation about jointly controlled entity.

Transactions between a Venturer and Its Joint Venture

There might exist certain business transactions—buying and selling of asset or goods between a venturer and the joint venture in which it has interest by virtue of being co-venturer. Profit from such transaction should be recognized in the consolidated financial statement by observing the substance of the transaction.

An asset/stock is the one that has been sold by the venturer but still held by the joint venture and not sold to third party. The venturer should recognize the share of profit only to the extent it belongs to other co-venturers. However, the full amount of loss is to be recognized as calculated on the basis of its interest in the joint venture.

Similarly, when the venturer has purchased an asset/stock from the joint venture and not sold it to a third party instead it is held by it then it should not recognize its share of the profit resulting from the sale of such asset by joint venture. However, the loss is to be recognized immediately.

The accounting for unrealized profit should be done as explained in the previous section while discussing accounting in case of an associate.

Example 6 X and Z are running their separate business and enter into a joint venture namely XZ by contribution capital in 2:3, respectively. During the course of business, Z sells a building of ₹ 6,00,000 and also sells stock worth ₹ 1,00,000 to XZ. Z makes 20% profit on both the transactions. By the end of the year, the stock remains unsold with XZ. Show how Z should recognize unrealized profit in its books of accounts.

Solution

(i) Here total profit on sale of asset is ₹ 1,20,000 out of this 2/5, i.e., ₹ 48,000 is to be recognized as realized profit because it belongs to other co-venturer and rest ₹ 72,000 as unrealized profit as this proportion of the jointly controlled entity belongs to Z itself. While consolidating the financial statements, Z should recognize its share in the asset at ₹ 3,60,000 (3/5 of 6,00,000) less unrealized profit ₹ 72,000.

(ii) Total profit on sale of stock is ₹ 20,000 out of this 2/5 ₹ 8,000 that belongs to other co-venturer is to be recognized in the financial statement of Z and rest ₹ 12,000 is to be recognized as unrealized profit.

Recap 1

So far, we have discussed the following topics:

- Definition of Associate Company
- Preparation of Financial Statements in Case of Associate Company
- Concept of Joint Venture
- Accounting in Case of Joint Venture

Self-assessment

1. Write short notes on the following:
   - Significant vs insignificant influence
   - Significant influence vs control
   - Jointly controlled entities

The following topics will be delved into next:

- Definition of Holding and Subsidiary Company
- Provisions of Indian GAAP Regarding Consolidated Financial Statements
- Provisions of IFRS
- Intra-group Transactions
- Consolidated Financial Statement in Case of Wholly Owned Subsidiary
- Consolidated Financial Statement in Case of Partly Held Subsidiary
- Case

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated financial statements means presenting combined financial statement of holding company and its subsidiaries as if total business by the holding and its subsidiaries is a single business venture and not as a separate legal entities. A company should present standalone financial statements of its own business activities at the same time it has the obligation to present consolidated financial statement by incorporating the financial statements of its subsidiaries in which it has direct or indirect control by virtue of holding more than 50% shareholding with voting rights or otherwise. Consolidation of financial statements by the holding company does not challenge the separate legal and accounting entity of subsidiaries.

The consolidation of financial statements is regulated by the provisions of AS-21 and IAS-27.

Definitions

For the purpose of consolidated financial statement, the following definitions are relevant:

Control

It implies direct or indirect ownership of more than 50% shares with voting rights of the investee company. Control can also be exercised without holding shares with voting right when one company controls the composition of board of directors of another company and the controlling company realizes economic benefits out of such control.

Consolidated financial statements means presenting combined financial statement of holding company and its subsidiaries as if total business by the holding and its subsidiaries is a single business venture and not as a separate legal entities.

Subsidiary Company

The separate business entity that is controlled by another company is called subsidiary company. In case of control through holding shares subsidiary is also called the **investee company.**

Subsidiary company is a separate business entity that is controlled by another company is called subsidiary company.

Holding Company

The company exercising the control over another company is called the **holding company**. The holding company is also called **parent company**. In case of control through holding shares, the holding company is also called **investor company**.

A **holding company** is a company exercising the control over another company is called holding company. The holding company is also called **parent company.** In case of control through holding shares then the holding company is also called **investor company.**

Group

A parent and all its subsidiaries are identified as group these are also called **group companies**.

Consolidated Financial Statements

These are the financial statements of a group presented as if these were a single business entity. Consolidated financial statements include (i) consolidated balance sheet, (ii) consolidated income statement, i.e., consolidated profit and loss account, (iii) notes forming part of consolidated financial statements, (iv) consolidated cash flow statement only when parent company presents its standalone cash flow statement.

Minority Interest

Such part of the net worth of a subsidiary that is not controlled directly or indirectly by a parent company in its subsidiary. Minority interest consists of as follows:

- The amount of equity that is attributable to minority shareholders as on the date of investment by parent company in its subsidiary.
- The movement in the minority's shares since the date a holding and subsidiary relationship has been established.

ILLUSTRATION ZL enterprises holds 80% shares of AB enterprises and rest is held by general public. Here minority interest is 20%. Therefore, while consolidating the financial statements, the minority interest equals to 20%, which should be reported separately in the consolidated financial statement particularly consolidated balance sheet.

Both Indian GAAP and international accounting standards about consolidated financial statements contain similar provisions. However, IFRS is at a divergence with regards to fair value treatment as compared to book value treatment.

CONSOLIDATION PROCEDURE

While consolidating financial statement, the financial statements of the parent and all its subsidiaries should be combined in a line-by line basis. This implies that like items are added together and presented as if these belonged to one single business entity and not to different business entities.

Procedure

To consolidate the financial statement using **line-by line method**, the following steps are taken into consideration:

- The cost of investment incurred by parent company at the time of making the investment in the subsidiary should be eliminated from the consolidated financial statements.
- The total equity of the subsidiary should be eliminated.
- Excess, if any of the investment over the equity proportion should be recognized as **goodwill** and **deficit**, if any should be recognized as **capital reserve** in the consolidated financial statements.
- Minority interest in the assets and liabilities of the subsidiary, if any should be reported separately from the assets and liabilities of the parent in the consolidated financial statements.
- Minority interest in the net income of subsidiary, if any should be reported separately so as to arrive at the net income attributable to the parent company.

Minority shareholders' interest is such part of the net worth of a subsidiary that is not controlled directly or indirectly by a parent company in its subsidiary.

Intra-group Balances and Intra-group Transactions

AS-21 and IAS-27 as well as IFRS-3 on business combination stipulate that intra-group balances and intra-group transactions resulting into unrealized profit/loss should be eliminated while preparing consolidated financial statements. The accounting prudence stipulates that business transaction within the group do not substantiate the realization of profit unless such transaction involves some external party to transaction.

The accounting effect for the elimination of unrealized profit is the same as it has been explained in the previous section of this chapter while discussing the accounting for associate companies.

Consolidated Balance Sheet When the Holding of Parent is Less than 100%

When a parent company holds less than 100% holding in a subsidiary then it should calculate the following:

- Share in net worth of subsidiary company
- Share in post-acquisition profits
- Minority shareholders' interest called minority interest

EXAMPLE 7 On October 1, 2010 Hanging Limited (HL) acquired 1,800 equity shares of ₹ 10 each of Flat Limited (FL) at a total market value of ₹ 25,500. The balance sheet of both the companies on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

(Rupees in crore)

Liabilities	HL	FL	Assets	HL	FL
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,05,000	25,500
			Plant and machinery	75,000	15,000
General reserve	63,000	15,000	Stock	30,000	6,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	30,000	—
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	3,000	1,800
	3,00,000	80,550		3,00,000	80,550

Out of the debtors and bills receivables of HL, ₹ 7,500 and ₹ 2,400, respectively, represent due from FL. Balance of general reserve of FL is as on April 1, 2010 and P & L a/c of FL includes current year's profit of ₹ 6,750. Prepare consolidated balance sheet as on March 31, 2011.

SOLUTION

Consolidated Balance Sheet of HL and FL

(Rupees in crore)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	1,50,000	Land and building	1,30,500
General reserve	63,000	Plant and machinery	90,000
Capital reserve	7,125	Stock	36,000
Consolidated profit	41,025	Debtors	57,750
Minority interest	23,100	Investment (30,000 – 25,500)	4,500
Creditors	42,300	Bills receivables	5,100
Bills payable	18,600	Bank	16,500
		Cash	4,800
	3,45,150		3,45,150

Explanation:

Here HL has acquired the shares in SL on October 1, 2010. Therefore, profits and reserves as on April 1, 2010 and the current year's profit from April 1 to September 30 is to be considered as pre-acquisition profit. Therefore, out of current year's profit ₹ 3,375 (50% of 6,750) is post-acquisition profit.

Out of 3,000 shares of FL, HL holds 1,800 shares, i.e., 3/5 or 60% shareholding.

(i) Calculation of net worth of FL

Paid-up share capital	₹ 30,000
Add: (i) Opening balance of general reserve	₹ 15,000
(ii) Opening balance of profit and loss account	₹ 6,000

(iii) Pre-acquisition profit (6,750 6/12)	₹ 3,375
Net worth	₹ 54,375

(ii) Calculation of goodwill/capital reserve

60% of net worth (54,375 × 60/100)	₹ 32,625
Cost of purchase of investment by HL	₹ 25,500
Capital reserve	₹ 7,125

(iii) Calculation of minority shareholders' interest in FL

40% of net worth (54,375 × 40/100)	₹ 21,750
Add: 40% of post-acquisition profit (3,375)	₹ 1,350
Minority shareholders' interest	₹ 23,100

(iv) ₹ 7,500 has been eliminated from debtors as well as from creditors; similarly, ₹ 2,400 has been eliminated from bills receivables and bills payables.

(v) Calculation of consolidated profit

Profit and loss account balance of HL	₹ 39,000
Add: Share in current year post-acquisition profit	₹ 2,025
Consolidated profit	₹ 41,025

Special Issues in Preparation of Consolidated Financial Statement

Certain special issues, such as reporting date and accounting policies should be addressed properly at the time of consolidating financial statements without this a true and fair presentation of the consolidated financial statements is not possible.

Reporting Date: The reporting date of the parent company and all of its subsidiaries should be the same. If it is not possible to have the same date, an adjustment is to be made and disclosed while preparing consolidated financial statement.

Accounting Policies: Uniform accounting policies should be adopted while consolidating like item and there should not be any deviation in the accounting policies from one accounting period to another accounting period.

Pre-acquisition Profits: Profits of the subsidiary prior to the date of acquisition are called **pre-acquisition profit.** If acquisition is done during a financial year then the proportionate amount of profit upto the date of acquisition is also called pre-acquisition profit. These profits are included in the net worth of the subsidiary.

Post-acquisition Profits: Profits of the subsidiary from the date of acquisition onwards are called **post-acquisition profit.** Theses profits are included in the consolidated balance of profit and loss account to the extent holding company's shareholding in the subsidiary.

Example 8 From the following balance sheet, prepare consolidated balance sheet of Dinesh Limited, which has one subsidiary namely Deepak Limited:

Balance Sheet as on March 31, 2011

(Rupees in crore)

Liabilities	Dinesh	Deepak	Assets	Dinesh	Deepak
Share capital (face value ₹ 100 each)	15,00,000	3,00,000	Land and building	12,00,000	2,00,000
			Plant and machinery	2,00,000	2,00,000
General reserve	2,00,000	—	Investment (2,700 shares of Deepak)	2,70,000	—
Profit and loss a/c	3,00,000	1,05,000	Current assets	5,80,000	1,00,000
Sundry creditors	2,50,000	95,000			
	22,50,000	5,00,000		22,50,000	5,00,000

Deepak Limited had a credit balance of ₹ 45,000 in its profit and loss account as on April 1, 2010. Dinesh Limited acquired shares in Deepak Limited on October 1, 2010.

Solution

Consolidated Balance Sheet of Dinesh Limited and its Subsidiary Deepak Limited

As on March 31, 2011

(Rupees in crore)

Liabilities	Amount	Assets	Amount
Share capital (face value ₹ 100 each)	15,00,000	Land and building	14,00,000
		Plant and machinery	4,00,000
Capital reserve	67,500	Current assets	6,80,000
General reserve	2,00,000		
Consolidated profit	3,27,000		
Minority shareholders' interest	40,500		
Sundry creditors	3,45,000		
	24,80,000		24,80,000

Explanation:

(i) Here Dinesh Limited holds 90% (2,700 out of 3,000) shares of Deepak Limited. Hence, it is not wholly owned subsidiary and a minority interest equal to 10% should be calculated.

(ii) Profit for the year is ₹ 60,000 as out of total balance of ₹ 1,05,000 of profit and loss account 45,000 is the opening balance of profit on April 1, 2010. Pre-acquisition profit includes ₹ 45,000 as on April 1, 2010 and ₹ 30,000 out of ₹ 60,000 that is related to first six months, i.e., pre-acquisition profit. Therefore, post-acquisition profit is ₹ 30,000.

(iii) Calculation of net worth of Deepak Limited

Paid-up share capital	3,00,000
Opening balance of profit and loss account	45,000
Pre-acquisition profit for six months (1,05,000 – 45,000)/2	30,000
Net Worth	3,75,000

(iv) Calculation of goodwill or capital reserve

Cost of 2,700 (90%) shares	2,70,000
90% share in the new worth of Deepak Limited (3,75,000 × 90/100)	3,37,500
Capital reserve	67,500

(v) Calculation of minority shareholders' interest

10% share in net worth (3,75,000 × 10/100)	37,500
Add: share in post acquisition profit (30,000 × 10/100)	3,000
Minority shareholders' interest	40,500

(vi) Calculation of consolidated profit

Balance of profit and loss account of Dinesh Limited	3,00,000
Add: Share in post acquisition profit of Deepak Limited (30,000 × 90/100)	27,000
Consolidated profit	3,27,000

Consolidated Balance Sheet when the Holding of Parent is 100% of the Shares of Subsidiary Company

When a parent company holds 100% holding in a subsidiary then such subsidiary is called **wholly owned subsidiary**. In this situation, the following calculations are done:

Computation of Net Worth of Subsidiary Company

Net worth of wholly owned subsidiary on the date of acquisition, i.e., on the date of investment is calculated as follows:

Paid-up share capital of subsidiary	***
Add: (i) Opening balance of capital and revenue reserves	***
(ii) Opening (credit) balance of profit and loss account	***
(iii) Pre-acquisition profits	***
(iv) Profit on revaluation of assets	***
	***
Less: (i) Opening (debit) balance of profit and loss account	***
(ii) Balance of fictitious assets	***
(iii) Pre-acquisition losses	***
(iv) Loss on revaluation of assets	***
Net worth	***

Computation of Goodwill or Capital Reserve

When the cost of investment is more than the net worth, the difference is recognized as goodwill in the consolidated financial statement. On the contrary, when cost of investment is less than the net worth the difference is recognized as capital reserve in the consolidated financial statement.

Computation of Consolidated Profit

Combined amount of profit of holding company and subsidiary company is called **consolidated profit**. It is calculated as follows:

Opening balance of profit and loss account of holding company	***
Add: (i) Current year's profit of holding company	***
(ii) Post acquisition profit of subsidiary company	***
Consolidated profit	***

Example 9 Hari Limited acquired all the shares of Shyam Limited on April 1, 2010 and the balance sheet of both the companies as on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

Liabilities	Hari	Shyam	Assets	Hari	Shyam
Share capital	1,00,000	60,000	Sundry fixed assets	1,10,000	1,30,000
General reserve (as on April 1, 2010)	40,000	30,000	Investment in shares of Shyam Limited (all the shares)	1,00,000	
Profit and loss a/c	50,000	20,000			
Sundry creditors	40,000	30,000	Current assets	20,000	10,000
	2,30,000	1,40,000		2,30,000	1,40,000

The profit and loss account of Shyam Limited has a credit balance of ₹ 6,000 on April 1, 2010. Prepare consolidated financial statement as on March 31, 2011.

Solution

Consolidated Balance Sheet of Hari Limited and its Subsidiary, Shyam Limited

As on March 31, 2011

Liabilities	Amount	Assets	Amount
Share capital	1,00,000	Sundry fixed assets	2,40,000
General reserve (as on April 1, 2010)	40,000	Goodwill	4,000
Consolidated profit and loss a/c	64,000	Current assets	30,000
Sundry creditors	70,000		
	2,74,000		2,74,000

Explanation:

(i) Here Hari Limited holds 100% shares of Shyam Limited; hence, it is wholly owned subsidiary and there is no need to calculate minority interest.

(ii) Post-acquisition profit of Shyam Limited for the year is ₹ 14,000 (20,000 – 6,000 pre-acquisition profit).

(iii) Calculation of Net Worth of Shyam Limited

Paid-up share capital	60,000
Opening balance of profit and loss account	6,000
Opening balance of general reserve	30,000
Net Worth	96,000

(iv) Calculation of goodwill or capital reserve

Cost of shares	1,00,000
Net worth of Shyam Limited	96,000
Goodwill	4,000

(v) Calculation of consolidated profit

Balance of profit and loss account of Hari Limited	50,000
Add: Share in post-acquisition profit of Shyam Limited (100% share)	14,000
Consolidated profit	64,000

Consolidated Profit and Loss Account

The holding company is required to prepare consolidated profit and loss account by incorporating the items of profit and loss account of subsidiary in line-by-line manner. The following facts should be considered while preparing consolidated profit and loss account:

- Sales and purchase of goods between holding and subsidiary is to be eliminated.
- Interest on debentures and dividend received from subsidiary by holding should be eliminated from both the sides of consolidated profit and loss account.
- Items of expenses/profit shown in the profit and loss account of subsidiary and the corresponding items shown as income/expense in the profit and loss account of holding should be eliminated.
- For share in the pre-acquisition profit of subsidiary, the following journal entry is passed:
  Consolidated profit and loss a/c Dr.
  To Capital reserve a/c
- For minority share of profit in the profit of subsidiary
  Profit and loss a/c Dr.
  To Minority shareholders' interest a/c
- For unrealized profit
  Consolidated profit and loss a/c Dr.
  To Stock reserve a/c
- Proposed dividend if included in the profit and loss appropriation account of subsidiary should be eliminated from the consolidated profit and loss account. The proportion of proposed dividend relating to minority shareholders is to be recognized as follows:
  Consolidated profit and loss a/c Dr.
  To Minority shareholders' interest a/c

Example 10 The following are the profit and loss accounts of Healthy Limited (HL) and Sick Limited (SL) for the year ending March 31, 2010:

Profit and Loss Account for the year ending March 31, 2010

Particulars	Healthy	Sick	Particulars	Healthy	Sick
To Purchase	32,000	14,500	By Sales	38,000	30,000
To Manufacturing expenses	—	8,000			
To Gross profit c/d	8,000	10,000	By Closing stock	2,000	2,500
	40,000	32,500		40,000	32,500
To Sundry expenses	3,000	4,000	By Gross profit b/d	8,000	10,000
To Debenture interest	—	240	By Debenture interest	120	
To Net profit c/d	5,960	5,760	By Interim dividend	840	
	8,960	10,000		8,960	10,000
To Provision for tax	2800	2,400	By Net profit b/d	5,960	5,760
To Interim dividend	—	1,120			
To Proposed Preference dividend	—	120			
To Proposed equity dividend	2,000	1,680			
To Balance c/f	1,160	440			
	5,960	5,760		5,960	5,760

Additional Information:

The following additional information is available:

(i) The issued share capital of SL is 800 equity shares of ₹ 10 each fully paid and 200 6% preference shares of ₹ 10 each fully paid.

(ii) SL incorporated on April 1, 2009 also issued 400 8% debentures of ₹ 10 each.

(iii) On July l, 2009 HL acquired 600 equity shares of SL and half of the debentures of SL.

(iv) During the year 2009–10, SL sold to HL goods for ₹ 3,000 at a price of cost plus 50%.

(v) On March 31, 2010 one fourth of the goods mentioned in (iv) remained unsold with HL.

Prepare consolidated profit and loss account

Solution

Consolidated Profit and Loss Account of HL and its Subsidiary SL

For the year ending March 31, 2010

Particulars	Amount	Particulars	Amount
To Purchase	43,500	By Sales	65,000
To Manufacturing expenses	8,000		
To Gross profit c/d	18,000	By Closing stock	4,500
	69,500		69,500
To Sundry expenses	7,000	By Gross profit b/d	18,000
To Debenture interest	120	By Debenture interest	
To Net profit c/d	10,880	By Interim dividend	
	18,000		18,000
To Provision for tax	5,200	By Net profit b/d	10,880
To Interim dividend	280		
To Capital reserve	608		
To Stock reserve	187		
To Minority interest	650		
To Proposed dividend	2,000		
To Balance c/f	1,955		
	10,880		10,880

Explanation:

(i) Inter-company sale and purchase has been eliminated from both the sides.

(ii) Interest on debenture and interim dividend that belongs to HL has been eliminated from both the sides, whereas minority proportion for both of these items has been shown in the consolidated profit and loss account.

(iii) Net profit of SL after adjusting provision for tax and preference dividend is ₹ 3,240 (5,760 − 2,400 − 120).

(iv) HL acquired 75% shares of SL on July 1, 2009. Therefore, we need to calculate pre-acquisition profit that ₹ 75% of ₹ 810 (3,240 × 3/12), i.e., ₹ 607.60 ~ ₹ 608.

This is to be shown by transferring to capital reserve.

(v) Unrealized profit in the stock of HL out of the goods purchased from SL has been calculated as follows:

Purchase price of one-fourth of goods purchased from SL	₹ 750
Profit (Unrealized) included in these goods (750 × 50/150)	₹ 250
Share of HL in the unrealized profit (250 × 75/100)	₹ 187

Unrealized profit is to be transferred to stock reserve account.

(vi) Calculation of minority shareholders' interest in the profit for the year

25% of the profit for the year, i.e., 25% of 3,240	₹ 810
Add: preference dividend	₹ 120
Less: Share in interim dividend already declared (25% of 1,120)	₹ 280
Minority interest	₹ 650

DISCLOSURE IN CONSOLIDATED FINANCIAL STATEMENTS

Provisions of AS-21 and IAS-27 require the following disclosure by the holding company in the consolidated financial statement:

- A list of all the subsidiaries by giving name, country of incorporation, and proportion of ownership controlled by the holding company.
- Nature of relationship between holding and subsidiary whether it is through the ownership of shares or exercise of control otherwise. It should also disclose as to whether control is direct or indirect.
- Effect of acquisition or disposal of subsidiary on the financial results and discloser about reporting dates of different subsidiaries.

USEFUL INFO

Consolidated Financial Statements and IFRS-3

The provisions of IFRS-3 provide that different assets and liabilities of subsidiaries should be included in the consolidated financial statements at the fair value on the date of acquisition by holding company. Similarly, the minority shareholders' interest should be reported at the proportionate net worth of the subsidiary calculated using fair value of assets and liabilities on the date of acquisition.

SOLVED EXAMPLES

EXAMPLE 11 Hari Limited acquired all the shares of Shyam Limited on April 1, 2010 and the balance sheet of both the companies as on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

Liabilities	Hari	Shyam	Assets	Hari	Shyam
Share capital	1,00,000	60,000	Sundry fixed assets	1,10,000	1,30,000
General reserve (as on April 1, 2010)	40,000	30,000	Investment in shares of Shyam Limited (all the shares)	1,00,000	
Profit and loss a/c	50,000	20,000			
Sundry creditors	40,000	30,000	Current assets	20,000	10,000
	2,30,000	1,40,000		2,30,000	1,40,000

The profit and loss account of Shyam Limited has a credit balance of ₹ 6,000 on April 1, 2010. Prepare consolidated financial statement as on March 31, 2011 after considering the facts on April 1, 2010 sundry fixed assets of Shyam Limited had a fair value of ₹ 1,45,000 and current assets included inventory of ₹ 5,000 that had fair value ₹ 4,000.

SOLUTION

Consolidated Balance Sheet of Hari Limited and its Subsidiary, Shyam Limited

As on March 31, 2011

Liabilities	Amount	Assets	Amount
Share capital	1,00,000	Sundry fixed assets	2,55,000
General reserve (as on April 1, 2010)	40,000		
Capital Reserves	10,000	Current assets	29,000
Consolidated profit and loss a/c	64,000		
Sundry creditors	70,000		
	2,84,000		2,84,000

Explanation:

(i) Here, Hari Limited holds 100% shares of Shyam Limited; hence, it is wholly owned subsidiary and there is no need to calculate minority interest.

(ii) Post-acquisition profit of Shyam Limited for the year is ₹ 14,000 (20,000 – 6,000 pre-acquisition profit).

(iii) As the fair value of fixed assets and inventory has changed; therefore, these should be included at the fair value while calculating net worth.

(iii) Calculation of Net Worth of Shyam Limited

Paid-up share capital		60,000
Add: (i)	Opening balance of profit and loss account	6,000
(ii)	Opening balance of general reserve	30,000
(iii)	Increase in the value of fixed assets	15,000
		1,11,000
Less: Decrease in the value of inventory		1,000
	Net Worth	1,10,000

(iv) Calculation of goodwill or capital reserve

Cost of shares	1,00,000
Net worth of Shyam Limited	1,10,000
Capital reserve	10,000

(v) Calculation of consolidated profit

Balance of profit and loss account of Hari Limited	50,000
Add: Share in post acquisition profit of Shyam Limited (100% share)	14,000
Consolidated profit	64,000

CONSOLIDATED FINANCIAL STATEMENTS—INDIAN GAAP

Indian GAAP represented by AS-21 contains the provision regarding the preparation of consolidated financial statements. The major difference between the provisions of AS-21 and IFRS-3 is that AS-21 considers the incorporation of asset, liabilities, goodwill/capital reserve, and minority interest at the book value as disclosed in the separate financial statements of the subsidiary; whereas IFRS-3 considers fair value for these items while preparing consolidated financial statements.

EXAMPLE 12 From the following balance sheet, prepare consolidated balance sheet of Simple Limited (SL) that has one subsidiary namely ML.

Balance Sheet as on March 31, 2011

Liabilities	SL	ML	Assets	SL	ML
Share capital	15,00,000	3,00,000	Land and building	12,00,000	2,00,000
(face value ₹ 100 each)			Plant and machinery	2,00,000	2,00,000
General reserve	2,00,000	—	Investment (2,700		
Profit and loss a/c	3,00,000	1,05,000	shares of ML)	2,70,000	—
Sundry creditors	2,50,000	95,000	Current assets	5,80,000	1,00,000
	22,50,000	5,00,000		22,50,000	5,00,000

ML had a credit balance of ₹ 45,000 in its profit and loss account as on April 1, 2010. SL acquired shares in ML Limited on October 1, 2010. On this date, land and building of Deepak was valued at ₹ 2,50,000 and plant and machinery at ₹ 1,90,000 only.

SOLUTION

Consolidated Balance Sheet of SL and its Subsidiary ML

As on March 31, 2011

(Rupees in crore)

Liabilities	Amount	Assets	Amount
Share capital (face value ₹ 100 each)	15,00,000	Land and building	14,50,000
Capital reserve	1,03,500	Plant and machinery	3,90,000
General reserve	2,00,000	Current assets	6,80,000
Consolidated profit	3,27,000		
Minority shareholders' interest	44,500		
Sundry creditors	3,45,000		
	25,20,000		25,20,000

Explanation:

(i) Here SL holds 90% (2,700 out of 3,000) shares of ML. Hence, it is not wholly owned subsidiary and a minority interest equal to 10% should be calculated.

(ii) Profit for the year is ₹ 60,000 as out of total balance of 1,05,000 of profit and loss account 45,000 is the opening balance of profit on April 1, 2010. Pre-acquisition profit is ₹ 45,000 as on April 1, 2010 and ₹ 30,000 out of ₹ 60,000 that is related to first six months, i.e., pre-acquisition profit. Therefore, post-acquisition profit is ₹ 30,000.

(iii) Calculation of Net worth of ML

While calculating net worth fair value of land and building and plant and building should be considered. Therefore, increase (₹ 50,000) in the value of land building and decrease (₹ 10,000) in the value of plant and machinery has been considered.

Paid-up share capital	3,00,000
Add: (a) Opening balance of profit and loss account	45,000
(b) Pre-acquisition profit for six months (1,05,000 – 45,000)/2	30,000
(c) Appreciation in the value of land and building	50,000
	4,25,000
Less: Decrease in the value of plant and machinery	10,000
Net Worth	4,15,000

(iv) Calculation of goodwill or capital reserve	
Cost of 2,700 (90%) shares	2,70,000
90% share in the new worth of ML (4,15,000 × 90/100)	3,73,500
Capital reserve	1,03,500
(v) Calculation of minority shareholders' interest	
10% share in net worth (4,15,000 × 10/100)	41,500
Add: share in post acquisition profit (30,000 × 10/100)	3,000
Minority shareholders' interest	44,500
(vi) Calculation of consolidated profit	
Balance of profit and loss account of SL	3,00,000
Add: Share in post acquisition profit of ML (30,000 × 90/100)	27,000
Consolidated profit	3,27,000

Example 13 On April 1, 2010 Hemant Limited (HL) acquired 1,650 equity shares of ₹ 10 each of Fuel Limited (FL) at a total market value of ₹ 29,000. The balance sheet of both the companies on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

(Rupees in crore)

Liabilities	HL	FL	Assets	HL	FL
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,05,000	25,500
			Plant and machinery	75,000	15,000
General reserve	63,000	15,000	Stock	30,000	6,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	30,000	—
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	3,000	1,800
	3,00,000	80,550		3,00,000	80,550

Out of the debtors and bills receivables of FL ₹ 7,500 and ₹ 2,400, respectively represents due from HL. Balance of general reserve of FL as on April 1, 2010 and P & L a/c of FL includes current year's profit of ₹ 6,750. Prepare consolidated balance sheet as on March 31, 2011.

Solution

Consolidated Balance Sheet of HL and FL

(Rupees in crore)

Liabilities	Amount	Assets	Amount
Equity shares of face value ₹ 10 each	1,50,000	Land and building	1,30,500
		Plant and machinery	90,000
General reserve	63,000	Goodwill	950
Consolidated profit	42,712	Stock	36,000
Minority interest	25,988	Debtors	57,750
Creditors	42,300	Investment (30,000 – 29,000)	1,000
Bills payable	18,600	Bills receivables	5,100
		Bank	16,500
		Cash	4,800
	3,42,600		3,42,600

Explanation

Here HL has acquired the shares in SL on April 1, 2010; therefore, profits and reserves as on April 1, 2010 should be considered as pre-acquisition profit. And current year's profit is the post acquisition profit. Out of 3,000 shares of FL, HL holds 1,650 shares, i.e., 55% shareholding.

(i) Calculation of net worth of FL

Paid-up share capital	₹ 30,000
Add: (i) Opening balance of general reserve	₹ 15,000
(ii) Opening balance of profit and loss account (12,750 − 6,750)	₹ 6,000
Net worth	₹ 51,000

(ii) Calculation of goodwill/capital reserve

55% of net worth (51,000 × 55/100)	₹ 28,050
Cost of purchase of investment by HL	₹ 29,000
Goodwill	₹ , 950

(iii) Calculation of Minority shareholders' interest in FL

45% of net worth (51,000 × 45/100)	₹ 22,950
Add: 45% of post-acquisition profit (6,750 × 45/100)	₹ 3,038
Minority shareholders' interest	₹ 25,988

(iv) ₹ 7,500 has been eliminated from debtors as well as from creditors; similarly, ₹ 2,400 has been eliminated from bills receivables and bills payables.

(v) Calculation of Consolidated profit

Profit and loss account balance of HL	₹ 39,000
Add: Share in current year post-acquisition profit	₹ 3,712
Consolidated profit	₹ 42,712

Example 14 From the following balance sheet, prepare consolidated balance sheet of Ram Limited (RL) that has one subsidiary namely Mohan Limited (ML).

Balance Sheet as on March 31, 2011

Liabilities	RL	ML	Assets	RL	ML
Share capital (face value ₹ 100 each)	15,00,000	3,00,000	Land and building	12,00,000	2,00,000
			Plant and machinery	2,00,000	2,00,000
General reserve	2,00,000	—	Investment (including 1,800 shares of ML)	2,70,000	—
Profit and loss a/c	3,00,000	1,05,000			
Sundry creditors	2,50,000	95,000	Current assets	5,80,000	1,00,000
	22,50,000	5,00,000		22,50,000	5,00,000

ML had a credit balance of ₹ 45,000 in its profit and loss account as on April 1, 2010. RL acquired shares in ML on July 1, 2010 at a cost of ₹ 2,00,000.

Solution

Consolidated Balance Sheet of RL and its Subsidiary ML

As on March 31, 2011

Liabilities	Amount	Assets	Amount
Share capital	15,00,000	Land and building	14,00,000
(face value ₹ 100 each)		Plant and machinery	4,00,000
Capital reserve	16,000	Investment (2,70,000 – 2,00,000)	70,000
General reserve	2,00,000	Current assets	6,80,000
Consolidated profit	3,27,000		
Minority shareholders' interest	1,62,000		
Sundry creditors	3,45,000		
	25,50,000		25,50,000

Explanation:

(i) Here RL holds 60% (1,800 out of 3,000) shares of ML; hence, it is not wholly owned subsidiary and a minority interest equal to 40% should be calculated.

(ii) Profit for the year is ₹ 60,000 as out of total balance of 1,05,000 of profit and loss account 45,000 is the opening balance of profit on April 1, 2010. Pre-acquisition profit includes ₹ 45,000 as on April 1, 2010 and ₹ 15,000 out of ₹ 60,000 that is related to first three months, i.e., pre-acquisition profit. Therefore, post-acquisition profit is ₹ 45,000.

(iii) Calculation of net worth of ML

Paid-up share capital	3,00,000
Opening balance of profit and loss account	45,000
Pre-acquisition profit for six months	15,000
Net Worth	3,60,000

(iv) Calculation of goodwill or capital reserve

Cost of 1,800 (60%) shares	2,00,000
60% share in the new worth of ML (3,60,000 × 60/100)	2,16,000
Capital reserve	16,000

(v) Calculation of minority shareholders' interest

40% share in net worth (3,60,000 × 40/100)	1,44,000
Add: share in post acquisition profit (45,000 × 40/100)	18,000
Minority shareholders' interest	1,62,000

(vi) Calculation of consolidated profit

Balance of profit and loss account of RL	3,00,000
Add: Share in post acquisition profit of ML (45,000 × 60/100)	27,000
Consolidated profit	3,27,000

Example 15 Hari Limited (HL) acquired 90% shares of Shyam Limited (SL) on April 1, 2010 and the balance sheet of both the companies as on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

Liabilities	HL	SL	Assets	HL	SL
Share capital	1,00,000	60,000	Sundry fixed assets	1,10,000	1,30,000
General reserve (as on April 1, 2010)	40,000	30,000	Investment in shares of Shyam Limited (90% shares)	90,000	
Profit and loss a/c	50,000	20,000			
Sundry creditors	40,000	30,000	Current assets	30,000	10,000
	2,30,000	1,40,000		2,30,000	1,40,000

The profit and loss account of Shyam Limited has a credit balance of ₹ 6,000 on April 1, 2010. The fair value of sundry fixed assets on the date of acquisition is ₹ 1,00,000. Prepare consolidated financial statement as on March 31, 2011.

Solution

Consolidated Balance Sheet of Hari Limited and its Subsidiary Shyam Limited

As on March 31, 2011

Liabilities	Amount	Assets	Amount
Share capital	1,00,000	Sundry fixed assets (1,10,000 + 1,30,000 – 30,000)	2,10,000
General reserve (as on April 1, 2010)	40,000		
Consolidated profit and loss a/c	62,600	Goodwill	30,600
Minority shareholders' interest	8,000	Current assets	40,000
Sundry creditors	70,000		
	2,80,600		2,80,600

Explanation:

(i) Here Hari Limited holds 90% shares of Shyam Limited; hence, it is not a wholly owned subsidiary and there is a need to calculate minority interest.

(ii) Post-acquisition profit of Shyam Limited for the year is ₹ 14,000 (20,000 – 6,000 pre-acquisition profit).

(iii) Calculation of Net Worth of Shyam Limited

Paid-up share capital	60,000
Opening balance of profit and loss account	6,000
Opening balance of general reserve	30,000
	96,000
Less: decrease in the value of fixed assets	30,000
Net Worth	66,000

(iv) Calculation of goodwill or capital reserve

Cost of shares	90,000
90% Net worth of Shyam Limited	59,400
Goodwill	30,600

(v) Calculation of consolidated profit

Balance of profit and loss account of Hari Limited	50,000
Add: Share in post acquisition profit of Shyam Limited (90% of 14,000)	12,600
Consolidated profit	62,600

(vi) Minority shareholders' interest

Share in net worth (10% of 66,000)	6,600
Share in post acquisition profits (10% of 14,000)	1,400
Minority shareholders' interest	8,000

Key Terms

Insignificant vs significant influence
Joint venture
Group companies
Control
Holding company
Minority shareholders' interest
Associate company
Subsidiary company

Final Recap

- **Consolidate financial statements** are like merged financial statements of two separate business entities that are bound either directly or indirectly by the relationship of the holding company and the subsidiary company.
- **Significant influence** through investment of the investor company exists only when investor company holds the shares more than or equal to 20% but not exceeding 50% shares of the investee company.
- A **joint venture** is the outcome of a contractual agreement between two or more entities resulting into a jointly controlled economic activity for the realization of economic benefits.
- **Jointly controlled operations** are recognized when a separate corporate entity or partnership firm is not established by the co-venturers rather each venturer contributes its resources—property, plant, equipment, inventory, etc. to carry out the economic activities covered under the jointly controlled operations.
- **Jointly controlled assets** involve the use of certain common assets for the economic benefit of all the venturers. Such common asset is purchased and owned jointly by all the co-venturers specifically purchased for the joint venture activities.
- A **jointly controlled entity** is the one that is established as a separate entity for the purpose of joint venture.
- **Consolidated financial statements** means presenting combined financial statement of holding company and its subsidiaries as if total business by the holding and its subsidiaries is a single business venture and not as a separate legal entities.
- **Subsidiary company**: The separate business entity that is controlled by another company is called subsidiary company. When the control through holding shares then subsidiary is also called the **investee company**.
- **Holding company**: The company exercising the control over another company is called the **holding company**. The holding company is also called the **parent company.** When control is through holding shares then the holding company is also called the **investor company.**
- **Group** : A parent and all its subsidiaries are identified as group these are also called **group companies**.
- **Minority Interest**: Such part of the net worth of a subsidiary that is not controlled directly or indirectly by a parent company in its subsidiary.
- **Reporting Date**: The reporting date of parent company and all of its subsidiaries should be the same. If it is not possible to have the same date, an adjustment is to be made and disclosed while preparing consolidated financial statement.

- **Accounting Policies**: Uniform accounting policies should be adopted while consolidating like item and there should not be any deviation in the accounting policies from one accounting period to another accounting period.
- **Pre-acquisition Profits**: Profits of the subsidiary prior to the date of acquisition are called pre-acquisition profit. If acquisition is done during financial year then the proportionate amount of profit upto the date of acquisition is also called **pre-acquisition profit**. These profits are included in the net worth of the subsidiary.
- **Post-acquisition Profits**: Profits of the subsidiary from the date of acquisition onwards are called **post-acquisition profits**. Theses profits are included in the consolidated balance of profit and loss account to the extent holding company's shareholding in the subsidiary.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. HL holds 25% shares and 100% debentures of VL. Then which of the following is the relationship between HL and VL?
   (a) VL is associate company of HL. (b) VL is subsidiary of HL.
   (c) HL is subsidiary of VL. (d) None of these.
2. HL holds 51% shares and 10% debentures of VL. Then which of the following is the relationship between HL and VL?
   (a) VL is associate company of HL. (b) VL is subsidiary of HL.
   (c) HL is subsidiary of VL. (d) None of these.
3. When one company holds less than 20% shares with voting rights of another company, then the relationship between both the companies is considered as
   (a) Holding and subsidiary
   (b) One company having significant influence on another
   (c) Associate companies
   (d) Group companies
   (e) None of these
4. When one company has insignificant influence over another, then which of the following accounting standards is followed by the investor company to report investment?
   (a) AS-13 (b) AS-27 (c) AS-31 (d) AS-21
5. When one company has significant influence over another, then which of the following international accounting standards is followed by the investor company to report investment?
   (a) IAS-13 (b) IAS-27 (c) IAS-31 (d) IAS-28
6. For which of the following transactions, unrealized profit is eliminated?
   (a) Downstream business transaction (b) Upstream business transaction
   (c) Both of these (d) None of these
7. Consolidated financial statements are guided by the provisions of
   (a) AS-21 and IAS-27 (b) AS-13 and IAS-27
   (c) AS-27 and IAS-13 (d) AS-21 and IAS-31

DESCRIPTIVE QUESTIONS

1. Explain the following:
   (a) Significant influence
   (b) Control
   (c) Group companies

2. How unrealized profit is recognized in the consolidated financial statements?
3. Explain the provisions of Indian accounting standards regarding intra-group transactions.
4. Write short notes on the following:
   (a) Minority shareholders' interest (b) Joint venture

Numerical Problems

1. On April 1, 2010, Bush Limited (BL) purchased 40% equity shares of Huss Limited (HL) at a cost of ₹ 2,40,000. The equity of HL on this date comprised (a) equity share capital ₹ 3,00,000, (b) securities premium ₹ 2,00,000, (c) reserve and surplus ₹ 1,00,000.

   During the year 2010–11, GHL earned a net profit of ₹ 1,00,000 out of which 60% was distributed as dividend among equity shareholders. Show how BL should account for its investment in HL.
2. Taking the data of Problem 1, consider that BL purchased 40% equity of HL at a cost of ₹ 3,00,000 and there was no difference between the book value and fair value of the assets. Then show how goodwill is to be recognized. If we further assume that the fair value of net assets increased by ₹ 1,00,000 over the given net book value of asset ₹ 6,00,000, then show how goodwill is to be recognized.
3. Gee Limited (GL) is an associate of Jee Pee Limited (JPL). During the year GL sold goods of selling price ₹ 1,00,000 to JPL. On March 31, 2011 closing stock of JPL comprised stock amounting to ₹ 30,000 out of the goods purchased from GL. Financial statements of GL disclose a gross profit margin of 20% for the year 2010–11, whereas JPL has gross profit margin of 25%. Show how unrealized profit is to be eliminated by JPL on March 31, 2011 when JPL holds 40% shares of GL.
4. Suppose in Problem 3, JPL sold a machinery to GL, on which it earned a profit of ₹ 80,000. The useful life of the asset is five years. JPL holds 40% equity in GL. Show how unrealized profit is to be recognized in the year 2010–11.
5. On March 31, 2011 Hanging Limited (HL) acquired 3,000 equity shares of ₹ 10 each of Flat Limited (FL) at a total market value of ₹ 35,000 crore. The balance sheet of both the companies on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

(Rupees in crore)

Liabilities	HL	FL	Assets	HL	FL
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,05,000	25,500
			Plant and machinery	75,000	15,000
General reserve	63,000	15,000	Stock	30,000	6,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	35,000	---
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	4,000	7,500
			Cash	3,000	1,800
	3,00,000	80,550		3,00,000	80,550

Out of the debtors and bills receivables of HL ₹ 7,500 crore and ₹ 2,400 crore, respectively represents due from FL. Land and building of FL has fair value ₹ 30,000 crore and plant and machinery has fair value of 12,000 crore. Prepare consolidated balance sheet as on March 31, 2011.

Answers

Multiple Choice Questions

1. (a), 2. (b), 3. (e), 4. (a), 5. (b), 6. (c), 7. (a)

Numerical Problems

1. Initial recognition at ₹ 2,40,000 subsequent recognition ₹ 2,56,000.
2. Goodwill when book value is considered is ₹ 60,000 and ₹ 20,000 when fair value is considered.
3. Unrealized profit to be eliminated ₹ 2,400.
4. Unrealized profit to be eliminated ₹ 32,000 and to be amortized over five years.
5. Net worth ₹ 59,250 crore.

CASE

Inter-Corporate Investment and Accounting Issues

In the year 2010, Link Limited (LL) acquired substantial stake in Monk Limited (ML). However, financial accountant could not understand the difference between substantial stake and earlier investment in ML. He continued to show the investment as earlier as if ML was an associate of LL.

This point was challenged by assessing officer in the income tax department and he returned the individual financial statements of both the companies. The statements are as follows:

Balance Sheet as on March 31, 2011

(Rupees in crore)

Liabilities	LL	ML	Assets	LL	ML
Share capital	15,00,000	3,00,000	Land and building	12,00,000	2,00,000
(face value ₹ 100 each)			Plant and machinery	2,00,000	2,00,000
General reserve	2,00,000	1,25,000	Investment	3,70,000	—
Profit and loss a/c	3,00,000	—	(including 3,000 shares of		
Sundry creditors	2,50,000	95,000	Deepak)		
			Current assets	4,80,000	1,00,000
			Profit and loss a/c		20,000
	22,50,000	5,20,000		22,50,000	5,20,000

Additional information

(i) LL acquired the investment at a cost of ₹ 3,10,000 in ML on October 1, 2010.
(ii) The general reserve of ML as displayed in the balance sheet is as on the date of acquisition.
(iii) ML incurred a loss of ₹ 20,000 for the year.
(iv) The fair value of land and building of LL and ML has increased by 20% over the book value and for plant and machinery there has been an increase by 10% for LL but a decrease by 20% for ML.
(v) Both the companies provided depreciation of land and building by 5% and on plant and machinery by 10%.

Discussion Questions

(i) Prepare consolidated financial statement as if fair value is not given.
(ii) Prepare consolidated financial statement when fair value is given as above.
(iii) How should LL report the investment in its financial statements when it has only 30% of ML at a cost of ₹ 95,000?
(iv) How should LL should prepare consolidated financial statement when it holds 80% shares of ML acquired at ₹ 2,50,000?

The McGraw-Hill Companies

CHAPTER 17

Accounting Standards and IFRS

Learning Objectives

After reading this chapter, you will be able to

- Know about the international accounting standards issued till 2001
- Define Indian GAAP issued by ICAI as Indian accounting standards
- Gain an insight into the IFRS announced since the year 2001
- Distinguish between IFRS and Indian GAAP

Convergence between Respective GAAP and IFRS

The implementation of IFRS is required to set the transition date and the first reporting date. It also requires the companies to present at least one comparable set showing comparative financial statement presented under Indian GAAP and under IFRS so as to facilitate proper interpretation.

Convergence with IFRS in India

ICAI has set the first transition date April 2010. From this date, the companies should start adopting IFRS and first reporting date has been set as March 2012 by which first set of financial statements as per IFRS should be published by Indian companies. In the month of March 2011 ICAI has issued the draft of near final Ind-AS leading to the compliance of convergence with IFRS.

Convergence with IFRS in USA

Securities and Exchange Commission (SEC) has issued the guidelines about the adoption of IFRS by the companies in USA. It has decided a timeline year 2014. By this date, the companies are required to shift from US GAAP (US globally accepted accounting policies) to IFRS in a gradual manner. SEC plans to have complete adoption of IFRS by the year 2016.

INTERNATIONAL ACCOUNTING STANDARDS

International accounting standards have been developed by International Accounting Standard Board (IASB). IASB has been established by International Accounting Standard Committee (IASC). This board is responsible for the standard setting that is to be followed across the globe. The main objective of the board is to develop uniform set of accounting standards that are understandable and enforceable globally and are based on high quality accounting parameters. The board was established in the year 2001 as an integral part of IASC.

Composition of IASB (International Accounting Standard Board)

IASB comprises 14 members with a provision to increase the number of members to sixteen latest by July 1, 2012. To have a fair representation of all the continents for the development of uniform accounting standards, the pattern of selection of members is as follows:

- Four members from Asia/Oceania region
- Four members from Europe
- Four members from North America
- One member from Africa
- One member from South America
- Two members appointed from any area, subject to maintaining the overall geographical balance

The main qualification for membership of the IASB shall be professional competence and practical experience in accounting or related field.

Prominent Features of IASB Working Procedure

IASB develops different accounting standards after considering a wide range of parameters and opinion of experts from different segments of industry and academia. The prominent features about the working of IASB are as follows:

Transparency and Accessibility

Before adding topics for the development of accounting standards, an extensive research work is carried out. The outcome of research work is discussed with the constituents in IASB meetings. IASB holds meeting with the members and experts of Standard Advisory Council (SAC), International Financial Reporting Interpretations Committee (IFRIC) and IASB working groups. The purpose of holding such meetings is to have transparency in the process of standard setting and provide accessibility for all the concerned experts and related entities.

Extensive Consultation and Responsiveness

The IASB solicits views and suggestions through open consultation with a variety of experts before setting the standards. The formal process of setting the standards involves (i) field visits to develop the matter concerning development of accounting standards, (ii) development of draft documents and discussion papers, (iii) inviting public comment on discussion papers and exposure drafts, (iv) arrange public hearing on the draft documents and research work.

Before giving final draft of accounting standards, detailed discussions in public meetings is carried so as to have view of all the experts as well as affected parties.

Accountability

IASB assumes full accountability about making certain provisions mandatory and certain other being non-mandatory. It also explains the reason for announcing non-mandatory provisions. The standards once announced are reviewed regularly so as to bring the amendments if required to adapt with the changing business, legal and operating environment.

Standard Setting Stages

Before announcing final draft of the standard, each standard passes through a rigorous procedure that involves as follows:

- Setting the agenda
- Project planning
- Development and publication of a discussion paper
- Development and publication of an exposure draft
- Development and publication of an IFRS Procedure after an IFRS is issued

Outcome

The outcome of the process mentioned earlier is in the form of IFRS. Although GAAP as enforced in different countries are not much different from IFRS developed by IASB still there are certain deviations that might make the universal presentation and interpretation of financial statement difficult. Therefore, IASB has specified that gradually all the GAAP across the globe should make a transition to IFRS.

Till the year 2001, 41 international accounting standards (IAS) were issued:

> Till the year 2001, 41 international accounting standards (IAS) were issued.

- IAS-1 Presentation of Financial Statements
- IAS-2 Inventories
- IAS-7 Statement of Cash Flows
- IAS-8 Accounting Policies, Changes in Accounting Estimates and Errors
- IAS-10 Events after the Reporting Period
- IAS-11 Construction Contracts
- IAS-12 Income Taxes
- IAS-16 Property, Plant and Equipment
- IAS-17 Leases
- IAS-18 Revenue
- IAS-19 Employee Benefits
- IAS-20 Accounting for Government Grants and Disclosure of Government Assistance
- IAS-21 The Effects of Changes in Foreign Exchange Rates
- IAS-23 Borrowing Costs IAS-24 Related Party Disclosures
- IAS-26 Accounting and Reporting by Retirement Benefit Plans
- IAS-27 Consolidated and Separate Financial Statements
- IAS-28 Investments in Associates
- IAS-29 Financial Reporting in Hyperinflationary Economies
- IAS-31 Interests in Joint Ventures
- IAS-32 Financial Instruments: Presentation
- IAS-33 Earnings per Share

- IAS-34 Interim Financial Reporting
- IAS-36 Impairment of Assets
- IAS-37 Provisions, Contingent Liabilities and Contingent Assets
- IAS-38 Intangible Assets
- IAS-39 Financial Instruments: Recognition and Measurement
- IAS-40 Investment Property
- IAS-41 Agriculture

ACCOUNTING STANDARD SETTING IN INDIA

In India, the Institute of Chartered Accountants of India (ICAI) constituted in April 1997 a separate body namely Accounting Standard Board (ASB) with the aim to draft Indian accounting standards that are abbreviated as 'AS' and harmonize the accounting policies and Indian GAAP with international accounting standards that are abbreviated as 'IAS'.

Composition of ASB

Experts from different industry groups, financial institutions, government representatives, professionals and representative of regulatory authorities are nominated as members in the board to be deliberate on the issues about standard setting. Apart from these members, certain elected members from the board of ICAI and different committees of ICAI are included in the board.

Accounting Standards Setting Process

The process adopted for the development of accounting standards has been designed in such a manner so as to bring out generally acceptable accounting policies in the form of accounting standards. The standards developed should help in providing sufficient information to different interested parties and stakeholder in financial statements. The brief description of the process is as follows:

- Identification of broad area for the development of accounting standard
- Constitution of the study group by ASB to prepare preliminary draft
- Discussion on the preliminary draft and revision of the draft, if any
- Circulation of the preliminary draft among the council members and external bodies involved in or affect by the accounting standard setting process
- Inviting views of external bodies and discussion groups
- Finalization of the exposure draft of the proposed accounting standards
- Issue of exposure draft and inviting public comments
- Finalization of exposure draft by ASB and presentation to ICAI council for approval
- Approval by ICAI council and announcement of accounting standard

Present Status

Till the year 2010, 32 Indian accounting standards (AS) have been issued.

The outcome of standard setting process in India is that there are 32 accounting standards at present:

- AS-1 Disclosure of Accounting Policies
- AS-2 Valuation of Inventories

- AS-3 Cash Flow Statements
- AS-4 Contingencies and Events Occurring after the Balance Sheet Date
- AS-5 Net Profit or Loss for the Period, Prior Period Items and Changes in
- Accounting Policies
- AS-6 Depreciation Accounting
- AS-7 Construction Contracts
- AS-8 Accounting for Research and Development (Withdrawn pursuant to AS-26 becoming mandatory)
- AS-9 Revenue Recognition
- AS-10 Accounting for Fixed Assets
- AS-11 The Effects of Changes in Foreign Exchange Rates
- AS-12 Accounting for Government Grants
- AS-13 Accounting for Investments
- AS-14 Accounting for Amalgamations
- AS-15 Employee Benefits
- AS-16 Borrowing Costs
- AS-17 Segment Reporting
- AS-18 Related Party Disclosures
- AS-19 Leases
- AS-20 Earnings Per Share
- AS-21 Consolidated Financial Statements
- AS-22 Accounting for Taxes on Income
- AS-23 Accounting for Investments in Associates in Consolidated Financial Statements
- AS-24 Discontinuing Operations
- AS-25 Interim Financial Reporting
- AS-26 Intangible Assets
- AS-27 Financial Reporting of Interests in Joint Ventures
- AS-28 Impairment of Assets
- AS-29 Provisions, Contingent Liabilities and Contingent Assets
- AS-30 Financial Instruments: Recognition and Measurement
- AS-31 Financial Instruments: Presentation
- AS-32 Financial Instrument: Disclosure

Recently ICAI has introduced near final Ind-AS series leading to the convergence with IFRS. These have been discussed in Appendix-III.

Compliance with Accounting Standards

Accounting standards issued by ASB under the consultation and approval by ICAI have a legal status and every company subject to the coverage of the standards is required to abide by the provisions of accounting standards while preparing its books of accounts and presenting annual accounts—financial statements. Section 211 of Companies Act, 1956 requires that every company should comply with the necessary accounting standards while presenting its balance sheet and profit and losses account. Companies are also required to report the deviation from accounting standard, if any while presenting financial statements.

Recap 1

So far, we have discussed the following topics:

- International Accounting Standards—the process making accounting standards
- Indian GAAP represented by accounting standards—process of making accounting standards

Self-assessment

1. Discuss the standard setting process in India.
2. Discuss the standard setting process of IASB.

The following topics will be delved into next:

- IFRS
- The process of IFRIC in setting IFRS
- IFRS-1 to 8
- Benefits of IFRS implementation
- Convergence between GAAP and IFRS
- Differences between IFRS and Indian GAAP
- Case

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

International Financial Reporting Standards (IFRS) is like a single quality-oriented universally accepted set of accounting policies. Once implemented across the globe, it will facilitate easy understanding and interpretation of financial statements irrespective of the country to which the company belongs.

International Financial Reporting Interpretations Committee (IFRIC) assists IASB in bringing improvement in the financial reporting with the help of timely identification, discussion and resolution of financial reporting issues within the framework of IFRS. The main purpose of IFRIC is to publish IFRS that are applicable globally and it also insists upon gradual transition from GAAP (generally accepted accounting practices) to IFRS. IFRIC staff maintains a regular liaison with the committees of different countries who are responsible for the introduction of GAAP in the respective countries. The purpose is to give proper representation to each country and have universal applicability of IFRS.

Constituents of IFRS

IFRS comprises the following:

- IFRS issued after year 2001
- IAS issued before year 2001
- Interpretations originated and released by IFRIC after the year 2001

Benefits of IFRS Implementation

- Once implemented completely, IFRS is likely to offer the benefits, such as
- Comparability of financial statement of companies belonging to two or more different countries.
- Facilitate consolidation of financial statements of group companies.
- To bring harmony in the efforts of country-specific standard setters and IFRIC.
- Cutting down the cost of formulation and implementation of accounting standards across the globe.

- Facilitate entry and working of multinational companies across the globe without any accounting hindrances.

From the year 2001 till the year 2011, **eight IFRS** have been issued.

Outcome

The rigorous process of IFRIC in developing IFRS has given the following IFRS:

- IFRS-1 First-time Adoption of IFRS
- IFRS-2 Share-based Payment
- IFRS-3 Business Combinations
- IFRS-4 Insurance Contracts
- IFRS-5 Non-current Assets Held for Sale and Discontinued Operations
- IFRS-6 Exploration for and Evaluation of Mineral Resources
- IFRS-7 Financial Instruments: Disclosures
- IFRS-8 Operating Segments

IFRS-1: First-time Adoption of IFRS

IFRS-1 contains the details about first time adoption of IFRS and transition from GAAP to IFRS. It specifies the objectives of bringing IFRS and the plan about transition from respective GAAP to IFRS.

The objective of IFRS is to ensure that a business entity prepares and presents its financial statements by following IFRS so as to have (i) transparency for the users and the results are comparable across the periods, (ii) a suitable time frame should be provided for the first time adoption of IFRS, (iii) the cost of adopting IFRS shall not exceed its benefits.

Main Provisions of IFRS-1

The starting point for the adoption of IFRS requires the adoption of the following by a business entity:

- Recognition of all assets and liabilities as per IFRS
- Derecognition of items of assets and liabilities that are not permitted by IFRS
- Reclassification of items of assets and liabilities as per IFRS
- Apply IFRS in measuring all recognized assets and liabilities

IFRS-2: Share-based Payment

IFRS-2 specifies the parameters about reporting and disclosure of share-based payment transaction in the financial statements. It requires a business entity to report in its profit and loss account and in the financial position the effect of share-based payment transactions, such as option granted to employees or other parties to be settled in cash, other assets and equity instruments.

Main Provisions

It covers the following share-based transactions:

- Share-based payment for the goods and services purchased by the entity.
- Cash-settled share-based payment transaction. These are the transactions for which measurement of cash settlement for goods and services procured is measured by considering the price of equity instruments of the business entity.
- Transaction of purchase of goods and services for which settlement is to be done either in cash or in the equity instrument of the business entity.

Measurement Issues

A business entity reporting share-based payment transactions should

- Measure the goods and services procured at the fair value of these goods or services, if fair value of these cannot be established then the fair value of the equity instrument issued or to be issued is to be used for the measurement of goods and services procured. This provision is equally applicable for transactions with employees and with third parties.
- It is further specified that for the goods and services measured by reference to the fair value of equity instrument granted, the IFRS does not recognize the concept of vesting conditions, other than market conditions in estimating fair value.
- The fair value of equity instrument issued is to be estimated by considering the market price of the instrument issued, if market value is not available reliably then the fair value should be estimated using adequate valuation measurement techniques.

Disclosure Requirement

IFRS requires that a proper disclosure about the type and nature of share-based payment granted to employees and other parties, the manner of arriving at the fair value should also be disclosed. The financial statement should also disclose the effect of share-based plan on reported profit and loss for the year.

IFRS-3: Business Combinations

This IFRS focuses as to how an acquirer should report—recognize and measure different assets acquired and liabilities assumed under business combination. It specifies the manner in which consolidated financial statements should be presented by an acquirer/investor company.

Main Provisions

While reporting consolidated financial statements or combined financial statement after the business combination, different assets acquired and liabilities assumed by the acquirer should be reported in the consolidated financial statement at the fair value of these items on the date of acquisition. Similarly, minority shareholders' interest, if any, should also be disclosed the fair value used for reporting assets and liabilities.

However, there are certain exceptional situations, such as (i) items resulting from lease agreement, (ii) items relating to other IFRS, such as IFRS-2 about share-based payments, IFRS-5 about non-current assets held for sale and discontinuing operations in which fair value effect is not to be considered.

Disclosure Requirement

The acquirer should disclose material information in the consolidated financial statements so as to assist the user in carrying out interpretation from consolidated financial statements. It should disclose financial effects of business combinations that occurred during the current financial and adjustments regarding reporting date made in the combined financial statements.

IFRS-4: Insurance Contracts

An **insurance contract** is the one under which one party called **insurer** gives an insurance to another party called **insured or policy holder** to cover the risk of property or life in the event of happening of trigger events. IFRS-4 has been introduced to provide a framework for accounting by an insurer; it deals about the accounting provision regarding the reporting and disclosure of insurance policies and related assets and liabilities. It does not apply to the assets and liabilities addressed by IAS-39 about financial instruments recognition and measurement.

Main Provision

The main provisions are as follows:

- Only the provision for claims that exist on the reporting date should be made and not for the expected claim that might result from certain future outcomes like in case of catastrophe bonds.
- An adequacy test for the insurance liabilities assumed and impairment test for the assets acquired under insurance contracts should to be carried out regularly.
- Insurance liabilities should be reported in the financial statements until these are discharged or derecognized.
- Introduction of accounting policy involving re-measurement of insurance liabilities using current market interest rates should be adopted by the insurer regularly at every balance sheet.

Disclosure Requirements

An insurer should disclose accounting policies adopted and the market interest rate used for the valuation of insurance assets and liabilities. The insurer should disclose the facts in a manner so as to assist the user in making true and fair assessment of insurer's financial liability and the extent of risk assumed under insurance contracts.

IFRS-5: Non-current Assets Held for Sale and Discontinued Operations

The objective of this IFRS is to provide a framework for reporting non-current assets that are held for sale like financial instruments and investment property.

Main Provisions

- The assets that are held for sale should be reported in the annual accounts as follows:
- These should be reported at lower of cost or fair value on the reporting date.
- The cost to sell and depreciation, if any, should be adjusted from the reported amount.
- These assets should be reported separately from other assets.
- Assets related to the discontinued operations should also be reported separately.

Disclosure Requirement

Financial statements should disclose the basis for identifying an asset as held for sale or classified as the asset relating to discontinuing operation.

IFRS-6: Exploration for and Evaluation of Mineral Resources

Exploration expenditures are incurred by the companies in connection with the technical feasibility of mining of mineral resources. The IFRS has been introduced to provide a framework about the recognition and measurement of exploration expenditures.

Main Provisions

It provides that

- A business entity should determine suitable accounting policy for classifying exploration assets as cash-generating units.

- Policy for impairment test for the assets acquired under exploration activities.
- If the carrying amount of exploration asset exceeds its recoverable value then it should be impaired so as to have true presentation of financial position and impairment loss should be recognized.

Disclosure Requirement

The financial statements should disclose the criterion for the recognition of exploration assets and their measurement. The criterion for impairment test should also be specified so as to have true and fair interpretation.

IFRS-7: Financial Instruments: Disclosures

This IFRS has been introduced with a view to provide a framework for disclosure of different financial instruments in the financial statement so as to assist the users in carrying out proper interpretation of the annual accounts.

Main Provisions

The provisions have been provided with a view to assist fair interpretation of financial statements. These are as follows:

- Financial statements should disclose the criterion for quantitative and qualitative criteria for classification of different financial instrument as financial assets, financial liabilities, equity instrument and others.
- The provisions also require that the risk management practices regarding financial instruments adopted by management of the company and the impact of such practices on the financial position should be disclosed properly.

IFRS-8: Operating Segments

The IFRS contains the provisions about the presentation of different segments in which the company engages itself in the business operations. The purpose is to assist the stakeholders in carrying out proper interpretation of business environment in which the business entity operates.

Main Provisions

Every business entity is required to provide the following information in its financial statements:

- Information about different operating segments of the company should be disclosed properly in the financial statements.
- Disclosure about products, services, geographical areas and major customers to which the business entity caters.
- Profit and loss from different segments should be disclosed separately so as to assess the financial performance appropriately
- Impact of business conditions concerning different operating segments should also be disclosed.

Disclosure Requirements

The financial statements should disclose the criterion for the identification of different operating segments and recognition as well as measurement principles followed in arriving at the profit and loss from each of the reported operating segments.

IFRS IMPLEMENTATION—CONVERGENCE BETWEEN GAAP AND IFRS

IFRS is like a universal language of accounting to being uniformity in GAAP of different countries. Adoption and implementation of IFRS worldwide is increasing day by day. So far, around 150 countries have shown their inclination to adopt IFRS by the early implementation date, i.e., by the end of 2011. The implementation of IFRS requires to set the transition date and the first reporting date. It also requires the companies to present at lease one comparable set showing comparative financial statement presented under Indian GAAP and under IFRS so as to facilitate proper interpretation.

Adoption of IFRS in USA

Securities and Exchange Commission (SEC) has issued the guidelines about the adoption of IFRS by the companies in USA. It has decided a timeline year 2014. By this date, the companies are required to shift from US GAAP (US globally accepted accounting policies) to IFRS in a gradual manner. SEC plans to have complete adoption of IFRS by the year 2016.

Adoption of IFRS in India

In the year 2006, ICAI in India expressed its acceptance for the implementation of IFRS. To comply with this, ICAI has started IFRS convergence project in India that specifies that all the relevant accounting standards in compliance with IFRS shall be introduced and implemented from the timeline of April 2011. **In compliance to this Ind-AS have been proposed by ICAI. These have been discussed in Appendix-III**.

> **Transition date** is the date when companies should start making convergence with IFRS.

ICAI has set the first transition date April 2010. From this date, companies should start adopting IFRS and the first reporting date has been set as March 2012 by which the first set of financial statements as per IFRS should be published by Indian companies.

Initially listed companies will be required to company with IFRS. The Ministry of corporate affairs of Government of India has constituted two high-powered committees to give feedback to government about the implementation status and make the implementation possible by the early transition date and early reporting date.

Adoption of IFRS in Europe

European countries have made the implementation form April 2005 onwards so as to meet the deadline of convergence of European GAAP with IFRS at an early implementation date.

> **First reporting date** is the date when companies should present first financial statement as per IFRS.

INDIAN GAAP VS IFRS

Although IFRS issued by IFRIC at by and large at uniformity with Indian GAAP still there is an improvement in IFRS over Indian GAAP. The prominent differences are listed out in Table 17.1.

TABLE 17.1 Differences between IFRS and Indian GAAP

Point of Difference	IFRS	Indian GAAP
Components of financial statements	■ Statement of financial position ■ Statement of comprehensive income ■ Cash flow statement ■ Statement of change in equity ■ Notes to accounts	■ Balance sheet ■ Profit and loss account ■ Cash flow statement ■ Notes to accounts
Format of financial position statement	No specific format	Format as per Schedule VI of Companies Act, 1956
Format of income statement	IAS-1 specifies the format of income statement	Format as per schedule VI of Companies Act, 1956
Cash flow statement	Mandatory for all	Exempted for certain entities
Extra ordinary items	It prohibits the presentation of these items	These items are mandatory
Goodwill	It is subject to annual impairment test	To be amortized in five year's time
Intangible assets	Measured at fair value	Measured at cost
Consolidated financial statements	Valuation and presentation at fair value	Valuation and presentation at book value
Change in depreciation method	Prospective implementation	Retrospective implementation
Lease of land and building	Contains provisions about it	Does not contain provisions about it
Initial direct cost in lease and implicit interest rate	These costs are considered while calculating implicit interest rate	These costs are not considered while calculating implicit interest rate
Inception and commencement of lease	Differentiates between these two dates	Does not differentiate between these two dates

Once complete implementation of IFRS is made mandatory, there will exist no difference between accounting standards of different countries.

KEY TERMS

International Accounting Standard Board
International Financial and Reporting Standards
Accounting Standard Board
Generally Accepted Accounting Policies (GAAP)

FINAL RECAP

- International accounting standards have been developed by the International Accounting Standard Board (**IASB**). IASB has been established by the International Accounting Standard Committee (IASC).
- **IFRS** is like a universal language of accounting to being uniformity in GAAP of different countries.

- There are 41 international accounting standards (**IAS**) issued before the year 2001.
- There are **eight IFRS** issued since the year 2001.
- There are 32 Indian accounting standards (AS) issued so far called **Indian GAAP**.
- **ICAI** has set the first transition date April 2010. From this date, the companies should start adopting IFRS and first reporting date has been set as March 2012 by which the first set of financial statements as per IFRS should be published by Indian companies.
- It has decided a timeline year 2014. By this date, the companies are required to shift from **US GAAP** (US globally accepted accounting policies) to IFRS in a gradual manner. **SEC plans** to have complete adoption of IFRS by the year 2016.
- European countries have made the implementation form April 2005 onwards so as to meet the deadline of convergence of **European GAAP** with IFRS at an early implementation date.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. How many members are there in the committee of IASB for standard setting?
   (a) 10 (b) 12
   (c) 14 with a provision to increase to 16 (d) None of these
2. Till the year 2001, how many international accounting standards has been issued?
   (a) 41 (b) 32 (c) 29 (d) None of these
3. Till date, how many Indian accounting standards has been issued by ICAI?
   (a) 41 (b) 32 (c) 29 (d) None on these
4. From the year 2001 to 2010, how many IFRS have been issued?
   (a) 41 (b) 8 (c) 32 (d) None of these
5. First transition date for IFRS in India is
   (a) April 2010 (b) March 2012 (c) April 2011 (d) None of these
6. First reporting date for IFRS in India is
   (a) April 2010 (b) March 2012 (c) April 2011 (d) None of these

DESCRIPTIVE QUESTIONS

1. Discuss how accounting standards are set by ICAI in India.
2. Differentiate between IFRS and Indian GAAP.
3. Discuss the prominent differences between Indian accounting standard on business combination and IFRS on business combination.
4. Discuss the provisions of IFRS and Indian GAAP dealing with lease accounting.

Answers

Multiple Choice Questions

1. (c), 2. (a), 3. (c), 4. (b), 5. (a), 6. (b)

CASE

Gradual Investment in Shares of Companies and Accounting Issues—IFRS vs. Indian GAAP

Till April 1, 2009, Honk Limited and Ferry Limited were associate companies, Honk holding only 5% shares in Ferry. On March 31, 2010, Honk's stake in Ferry increased to 25% and the following was the balance sheet of both the companies on this date:

Balance Sheet as on March 31, 2010

(Rupees in crore)

Liabilities	Honk	Ferry	Assets	Honk	Ferry
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,25,000	35,500
			Plant and machinery	85,000	25,000
General reserve	83,000	15,000	Stock	50,000	6,000
P & L a/c	39,000	12,750	Debtors	48,000	28,250
Creditors	44,000	20,800	Investment	5,000	—
Bills payable	22,000	19,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	13,000	800
	3,38,000	1,07,550		3,38,000	1,07,550

On October 1, 2010, the total holding of Honk Limited became 1,800 equity shares of ₹ 10 each of Ferry Limited at a total investment value of ₹ 25,500. The balance sheet of both the companies on March 31, 2011 is as follows:

Balance Sheet as on March 31, 2011

(Rupees in crore)

Liabilities	Honk	Ferry	Assets	Honk	Ferry
Equity shares of face value ₹ 10 each	1,50,000	30,000	Land and building	1,05,000	25,500
			Plant and machinery	75,000	15,000
General reserve	63,000	15,000	Stock	30,000	6,000
P & L a/c	39,000	12,750	Debtors	45,000	20,250
Creditors	36,000	13,800	Investment	30,000	—
Bills payable	12,000	9,000	Bills receivables	3,000	4,500
			Bank	9,000	7,500
			Cash	3,000	1,800
	3,00,000	80,550		3,00,000	80,550

Out of the debtors and bills receivables of Honk Limited, ₹ 7,500 and ₹ 2,400, respectively, represent due from Ferry Limited. Balance of general reserve of Ferry Limited is as on April 1, 2010 and P & L a/c of Ferry Limited includes current year's profit of ₹ 6,750. On the date of acquisition, the fair value of assets of Ferry Limited was as follows:

(i) Land and building ₹ 40,000
(ii) Plant and machinery ₹ 22,000
(iii) Bills receivable from outside debtors amounting to ₹ 500 are irrecoverable.

Discussion Questions

(i) How will Honk show the investment as at March 31, 2010?
(ii) Prepare the consolidated financial statement as per the provision of Indian GAAP regarding presentation of consolidated financial statements.
(iii) Prepare the consolidated financial statement as per provision of IFRS regarding presentation of consolidated financial statements.

CHAPTER

18

Accounting for Leases

Learning Objectives

After reading this chapter, you will be able to

- Learn the concept of lease finance
- Familiarize yourself with the provisions of AS-19 and IAS-17
- Calculation of lease rent
- Know accounting for lease

IAS-17 vs AS-19: Accounting for Leases

The provisions of international accounting standard IAS-17 and Indian accounting standard AS-19 contain similar accounting provision for lease transactions. The provision about classification of lease, accounting provisions and recognition of profit, loss, asset and liability are similar except the following differences:

Calculation of implicit interest rate: AS-19 does not recognize initial direct cost while calculating implicit interest rate but IAS-17 includes it for the calculation of this rate for leasing of land.

Lease for land and building: AS-19 does not provide for such lease but IAS-17 provides for this type of lease.

Inception of lease and commencement of lease term are two different concepts in IAS-17 but AS-19 provides only for inception of lease.

INTRODUCTION

Lease is an outcome of agreement between the lessor (owner of asset) and the lessee (user or tenant) whereby the lessor allows in return for the payment of lease rent on the use of asset by the lessee over a period of time. Under lease, the title to the asset is not transferred in favour of the lessee; however, risk and reward related to be leased asset get transferred in the favour of lessee and he/she has the obligation to return the asset to the lessor on the expiry of lease period. The use of asset by the lessee is subject to **lease covenants**, such as

- Situation and condition in which the asset is to be used
- Lease period—primary and secondary period
- Terms and conditions for the payment of the lease rent
- Rights and obligations of the lessee with regards to risk and reward relating to asset
- Legal recourse in the event of breach of lease agreement or default by the lessee/lessor
- Other situation/asset-specific legal clauses

Transfer of Title vs Transfer of Risk and Reward

Title transfer implies the execution of legal documents evidencing ownership of the asset in favour of the beneficiary. Usually, the beneficiary is the **natural/legal owner** or **purchaser of the asset**. The beneficiary in whose favour title gets transferred is the legal owner of the asset and owns risk and reward resulting from the ownership of the asset. Ownership-related risk and rewards can be transferred without the transfer of title.

Risk with reference to an asset implies probability of loss resulting from the use of the asset, such as loss due to idle capacity, obsolescence, changes in economic and operating conditions and related aspects. **Reward** implies the realization of economic benefits resulting from the use of asset, such as revenue generation, appreciation in the value of asset, savings in expenses and related aspects. These are called **ownership-related risk and reward** that can be transferred in favour of another party without executing the transfer of title. **Lease agreement** is the prominent financial instrument to execute transfer of ownership-related risk and reward without transferring the title to asset.

CLASSIFICATION OF LEASE

Primary classification of lease is based on the extent to which ownership-related risk and reward are transferred in favour of the lessee. However, the lease can be classified on the basis of prominent lease covenants also.

Finance Lease

Finance lease is a lease that substantially transfers asset-related risk and reward in favour of the lessee. Title transfer in favour of the lessee is not important. **Substantial transfer of risk and reward** implies that the lessee is to reap out all the benefits and the risk associated with the use or possession of the asset covered in lease agreement. Usually, this type of lease is non-cancelable and for a longer time period covering almost 75% of the useful life of the asset.

Operating Lease

A lease agreement that does not substantially transfer asset-related risk and reward in favour of the lessee is identified as **operating lease**. The lease agreement has the provision for cancellation by either party under the terms and conditions specified in the lease deed. Office equipments, computers, cranes and machinery are the prominent assets for which operating lease is executed.

Exotic Operating Lease—Operating Lease with Add-on Features

An **operating lease agreement** in which only the right to use the asset is passed on to lessee is called **plain vanilla operating lease.** The same operating lease becomes **exotic operating lease** when all or any of the following add-on features are included in the lease agreement:

Wet vs Dry Lease Clause Under wet lease clause, the lessor is responsible to provide for the repair, maintenance and insurance of the asset on lease and it is called **wet lease.** But under a dry lease clause, the lessee is responsible to cover the repair, maintenance and insurance of the asset on lease and it is called **dry lease.**

Replacement and Renovation Clause A lease agreement in which the lessor has the obligation to replace or renew the asset subject to the terms and conditions of lease agreement is called **operating lease with upgradation clause.** Such lease reduces obsolescence risk for the lessee and it is economical too.

Extension Clause A lease agreement that provides the lessee with an option to extend the lease period on the expiry of the agreed lease duration. Such extension is subject to the terms and conditions of the lease agreement.

Form vs Substance Argument—Finance Lease vs Operating Lease

Whether a lease agreement is to be classified as finance lease or operating lease much depends upon the substance as compared to the legal form of the lease deed (agreement). While making classification incidence of transfer asset-related risk and reward is emphasized more as compared to the emphasis on the incidence of title transfer.

Cancellation Clause

A **cancelable lease** that transfers all the risk and rewards related to asset in favour of the lessee is to be identified as **finance lease**. On the contrary, cancelable lease that does not transfer such risk and reward in favour of the lessee is to be classified as **operating lease**.

Title Transfer Clause

A lease agreement that eventually provides for the transfer of title to asset in favour of the lessee is to be identified as **finance lease**.

Option to Purchase the Leased Asset

A lease agreement that envisages the lessee with an option to purchase the leased asset at a price that is sufficiently lower than the fair value of the asset.

Significantly Longer Lease Period

The duration of lease is for a significantly longer time period covering substantial part of the economic life of the leased asset whether title to asset is transferred or not. Such lease is termed as **finance lease.**

Present Value of Lease Rent Criterion

When the present value of lease rent substantially covers the fair value of the asset in the inception of the lease, the lease is termed as **finance lease**.

Specialized Nature of Asset

When the lease asset has been developed with the specific requirement of the lessee and it does not have secondary market for sale then lease is usually non-cancelable and to be identified as **finance lease.**

Provision for Secondary Lease Period

A lease agreement that can be extended beyond the primary lease period that too at a substantially lower lease rent is identified as **finance lease.**

Sale and Leaseback

A **leasing activity** in which the original owner of the asset sells the asset to another party with the condition to take the same asset on lease is called **sale and leaseback**. Here, the erstwhile owner becomes the lessee and the buyer becomes the lessor. Such lease offers the following benefits:

- The erstwhile owner (lessee) unlocks his/her investment in the asset and uses the asset too.
- It is a mechanism to pass depreciation tax shield from the erstwhile owner to the lessor.
- Due to depreciation tax shield for the lessor, he/she may charge lower than the normal lease rent.

Cross Border Lease

When the lessee and the lessor are domiciled in different countries, it results into a cross boarder lease. Such lease is regulated by the tax laws and accounting standards of both the countries in which the lessor and the lessee are domiciled.

Big Ticket Lease

A lease agreement whether finance lease or operating lease that involves a high value asset is called **big ticket lease**, such as lease of airbus, aircraft, dam, ships, roads, highways and power plants.

LEASE-RELATED TERMS—IAS-17

The following are the additional terms relevant to lease transactions as per the provisions of IAS-17 as published by the Committee on International Accounting Standards (originally issued in December 1997, amended in December 2003, effective from April 2005).

Non-cancelable Lease

A non-cancelable lease is the one that cannot be cancelled in routine business situation, however it can be cancelled if any or all of the conditions from among the following are fulfilled:

(a) With the permission of the lessor
(b) If some contingency occurs relating to the leased asset or economic benefits from the leased asset
(c) When the lessee enters into a new lease agreement for the similar asset with the same lessor
(d) When the lessee makes an additional payment as agreed at the inception of lease

Inception of Lease vs Commencement of Lease

The **inception of the lease** transaction is the earlier of the date of lease agreement and the date of commitment by the parties to the provisions of the lease agreement. At the **inception of lease**, (a) lease is classified as finance lease or operating lease and (b) in case of finance lease, the initial measurement of finance lease is carried out.

The **commencement of lease term** is in the form that the lessee can exercise his/her right with respect to the use of the leased asset. On this date, the initial recognition of leased asset as asset, liability as well as recognition of expenses and income relating to leased asset is done.

Lease Term—Non-Cancelable Lease Term

It is the lease term for which the lessee has agreed at the inception of lease to use the leased asset. This also includes further period after the initial lease term, i.e., secondary lease term for which the lessee has the option to extend the lease term, only when it is sure that the lessee will exercise the option to extend the lease term for secondary lease term.

Minimum Lease Payments (MLPs) from the Viewpoint of Lessee

MLPs for the lessee include the following:

- Lease rents to be paid by the lessee over the entire lease term
- Any residual value guaranteed by the lessee or some other party on behalf of the lessee to the lessor.

But it *does not include* the following:

- Contingent rent
- Servicing costs and taxes either paid by the lessee or reimbursed by the lessee to the lessor.

If the lessee has the option to purchase the asset at a price lower than the fair value and exercise of such option is almost sure then this exercise price should also be included in minimum lease payments.

Minimum Lease Payments (MLPs) from the Viewpoint of the Lessor

MLPs for the lessor include the following:

- Lease rent to be paid by the lessee to the lessor over the entire lease term.
- Guaranteed residual value by (i) the lessee, (ii) another party on behalf of the lessee or (iii) a third party unrelated to the lessor but capable to make the payment of guaranteed residual value.

If the lessee has the option to purchase the asset at a price lower than the fair value and exercise of such option is almost sure then this exercise price should also be included in minimum lease payments.

Contingent Rent

It is that portion of the total lease payments that is not fixed in amount at the inception of the lease transaction but is subject to the changes in certain factors, such as future sales revenue, level of use of leased asset, certain price indices and interest rates prevalent in the market but not related to time decay. Like a provision to make the lease payment subject to the output realized by the lessee from the use of the leased asset.

Fair Value

It is the value at which an asset can be exchanged or a liability can be settled between the willing buyer and the seller at an arm's length negotiation.

Economic Life

Economic life is not specific to a particular lessee but it is an aggregate of the life relating to multiple users. It can be any of the following:

- The period over which an asset is expected to generate economic benefits for one or more users.
- The number of units or measurable output expected to be realized by one or more users.

Useful Life

It is the remaining lease period from the commencement of the lease term over which the economic benefits are expected to be realized by the lessee. This time period is specific to the particular lessee.

Guaranteed Residual Value

For Lessee The amount guaranteed by the lessee or some another party on behalf of the lessee to the lessor to be paid at the end of the lease term.

For Lessor The amount guaranteed by the lessee or some another party that is not related to the lessor and such third party is capable of making the payment of such guaranteed amount at the end of the lease term.

Unguaranteed Residual Value

It is such portion of the total residual value to be realized by the lessor from the leased asset that the realization of this amount is not assured or guaranteed by a party related to the lessor.

Initial Direct Costs vs Indirect Costs

Initial direct costs are the costs directly related to the initiation of lease transaction. These costs could have been avoided had the lease transaction not been initiated, such as cost specifically incurred in preparing lease document and legal fee for the lease agreement.

Indirect costs are such costs that are incurred in routine by the lessee or the lessor for executing business activities. These costs are apportioned to lease transaction by using reasonable basis of apportionment, such as expenses of legal department or expenses of administrative department.

Both of these costs are incurred by the lessee and the lessor in their business and accounted for in the books of accounts as per the accounting standards applicable for lease transactions.

Executory Costs—Service Costs and Taxes

Executory costs include repairs, maintenance, insurance, servicing expenses, taxes and certain other costs relating to leased asset incurred either by the lessee or the lessor. These may be with or without recourse to the lessor.

Gross Investment

Gross investment in the lease is the sum total of (a) total minimum lease payments receivable by the lessor and (b) unguaranteed residual value to be realized by the lessor.

Net Investment

Net investment in the lease is the discounted value of gross investment discounted at the implicit interest rate in the lease transaction.

Implicit Interest Rate for the Lessor

In a lease transaction, **implicit interest rate** for the lessor is that discount rate at which the total present value of (a) minimum lease payments and (b) unguaranteed residual value becomes equal to the sum total of (a) the initial fair value of the leased asset and (b) initial direct cost of the lessor, if any. Such discount rate is calculated using internal rate of return (IRR) method.

Unearned Finance Income

It is the difference between the gross investment in lease assets and net investment in leased asset.

Lessee's Incremental Borrowing Rate of interest

It is such borrowing rate of interest that the lessee would have paid had he/she resorted to borrowing the funds at the inception of the lease to finance the purchase of the asset.

Example 1 Jindal Aluminum Limited (JAL) acquired a machinery from Jagson Enterprises (JE) for a lease term of four years, which covers almost complete economic life of the asset. The lease commences on April 1, 2009 and will expire on March 31, 2013. The fair value of the machine at the commencement of the lease term is ₹ 4,00,890 and JAL is required to pay to JE an annual lease rent of ₹ 1,20,000 per annum and a guaranteed residual value of ₹ 30,000 at the end of the lease term. Calculate implicit interest rate.

Solution

(i) Fair value of the leased asset on April 1, 2009 is ₹ 4,00,890.

(ii) Total minimum lease payments from the viewpoint of JAL are ₹ 5,10,000 (1,20,000 × 4 + 30,000).

Therefore, the implicit rate of interest will be the rate at which total minimum lease payments from the viewpoint of JAL equals this fair value. It shall be calculated as follows:

Fair value = Present value of annual lease rent (ALR) + present value of guaranteed residual value

Present value of total minimum lease payments = $1{,}20{,}000 \times PVIFA_{r,4} + 30{,}000 \times PVIF_{r,4}$

PVIF = present value interest factor at a particular rate, i.e., 'r' for fourth year

PVIFA = present value interest factor for an annuity at a particular rate, i.e., 'r' for four year

By using trial and error approach, we first make a trial at the rate of 10%

Present value of total minimum lease payments = $1{,}20{,}000 \times 3.170 + 30{,}000 \times 0.683$

Present value of total minimum lease payments = $3{,}80{,}400 + 20{,}490 = 4{,}00{,}890$

This present value equals the initial fair value. Therefore, the implicit rate of interest for the lessee is 10% per annum.

FINANCE LEASE IN THE FINANCIAL STATEMENTS OF LESSEE

A finance lease is non-cancelable and for a longer period approximating the useful life of the asset. The following are the provision for accounting for it in the financial statements of the lessee:

Initial Recognition

- Initially, lease is recognized as an asset at lower of the fair value of the leased asset or present value of minimum lease payments and a corresponding liability at the same amount in the balance sheet.
- If initial fair value of the asset exceeds the present value of lease rents in the beginning then both asset and liability should be recognized at the present value of lease rents payable over the lease term.
- The present value is to be calculated at the implicit interest rate in the lease transaction or the lessee's incremental borrowing cost, whichever can be estimated reasonably.

Initial direct costs that are attributable to the preparing the agreement for finance lease or in procuring the leased asset should be included in the initial cost of the leased asset.

Apportionment of Lease Payments

Lessee should apportion the lease payments between finance charge called **interest payment** and reduction in the outstanding liability on account of regular payment of lease rent. While allocating finance charge across the lease period, some form of approximation may be adopted so as to have as far as possible relevant apportionment of total finance charge. The present value is to be calculated at the implicit rate of interest from the viewpoint of the lessee or lessee's incremental borrowing interest rate. Whichever can be estimated reasonably.

Example 2 Taking the data of Example 1, apportion the total lease payments between finance charge and outstanding liability.

Solution The total amount of minimum lease payments is to be allocated between finance charges, i.e., interest payment and reduction in the liability relating to leased asset using the implicit rate of interest of 10%. It shall be done as follows:

Year	Opening balance of liability	Annual lease payment	Interest	Principal in lease payment	Closing balance of liability
2009–10	4,00,890	1,20,000	40,089 (400890 × 0.10)	79,911 (1,20,000 – 40,089)	3,20,979 (4,00,890 – 79,911)
2010–11	3,20,979	1,20,000	32,098 (320979 × 0.10)	87,902 (1,20,000 – 32,098)	2,33,077 (3,20,979 – 87,902)
2011–12	2,33,077	1,20,000	23,307 (2,33,077 × 0.10)	96,693 (1,20,000 – 23,307)	1,36,384 (2,33,077– 96,693)
2012–13	1,36,384	1,20,000	13,638 (1,36,384 × 0.10)	1,06,362 (1,20,000 – 13,638)	30,022 (1,36,384– 1,06,362)
Total		4,80,000	1,09,132	3,70,868	

The closing balance of liability at the end of 2012–13 is ₹ 30,022 as compared to the guaranteed residual value of ₹ 30,000 the difference of ₹ 22 is on account of approximation.

Here the lessee should disclose the leased asset initially at ₹ 4,00,890 and a corresponding liability at the same value. Out of the annual lease rent, the interest portion as shown in the table should be expensed to profit and loss account in the respective financial year and the principal amount should be recognized in reducing the liability in each of the year with the relevant amount as shown in the table.

Subsequent Measurement—Depreciation

After the initial recognition and measurement, the asset acquired on lease should be measured as follows:

- Depreciation on leased asset is to be provided subject to the provisions of AS-6 and AS-10 that are applicable for owned assets (these have been discussed in the chapter on fixed asset of this book).
- If the lessee does not plan to own the asset by end of the lease term then the initial carrying cost should be fully depreciated over the lease term or useful life of the asset, whichever is shorter; otherwise, the asset is to be depreciated over its useful life.

Impairment of Asset

Recognition of impairment loss and reversal of impairment loss is to be carried out by adopting the provisions of AS-10 and AS-6 as it is applicable for owned assets (these have been discussed in the chapter on fixed asset of this book).

Disclosure in Financial Statements

Specific requirements with regards to the disclosure about assets acquired on lease are as follows:

- Assets acquired under finance lease should be presented separately from the owned assets.
- Financial statements should accompany a statement showing reconciliation between total minimum lease payments on the date of balance sheet and their present value.
- Total lease payments payable along with their present value should be disclosed over the time scale, such as payable (i) not later than one year, (ii) later than one year but not later than five years and (iii) later than five years.
- Contingent lease rent recognized as an expense to profit and loss account during the year and the amount of sub-lease payment expected to be received during the coming years should be disclosed.
- Terms and conditions applicable for the purchase of the asset acquired on lease.
- Terms and conditions for the renewal of the lease agreement, if any.
- Restriction under the lease agreement as to the use of asset.

OPERATING LEASE IN THE FINANCIAL STATEMENTS OF LESSEE

Operating lease does not provide for the title transfer in favour of the lessee. At the same time, ownership-related risk and rewards are not transferred substantially. Therefore, the lessee does not disclose the asset acquired on lease in its balance sheet. However, lease payment is recognized as follows:

Recognition of Lease Payment as an Expense

Minimum lease payment relating to an operating lease should be recognized as an expense to profit and loss account over the lease term either using **straight line method** or any other suitable method that is more representative of the pattern of economic benefits realizable from the asset. The pattern of lease payment is not significant in allocating total lease payments over the lease term.

Example 3 Zigna Limited (ZL) acquired machinery from Alok Healthcare (AH) on operating lease for a period of three years. The lease rent payable by ZL are ₹ 50,000; ₹ 1,10,000 and ₹ 1,40,000 during three years, respectively. Show how ZL should recognize the lease rent in its accounts.

Solution Here total lease rent of ₹ 3,00,000 (50,000 + 1,10,000 + 1,40,000) should be allocated over the lease term of three years using straight line method; therefore, every year ₹ 1,00,000 is to be expensed to profit and loss account. As the actual lease payment in each of the year does not equal ₹ 1,00,000; therefore, the difference between ₹ 1,00,000 and actual lease rent paid in each of the year should be recognized either as a liability or an asset in the balance sheet. This will be as follows:

Year	Lease payment	Expense in profit and loss account	Asset	Liability
First	50,000	1,00,000		50,000
Second	1,10,000	1,00,000		40,000
Third	1,40,000	1,00,000		nil

The liability in the first year should be classified as long-term liability as it is not sure as to when it will be adjusted or settled. In the second year, ₹ 40,000 should be recognized as current liability.

Disclosure

The lessee should disclose the following facts in its financial statement:

- The total of minimum lease rent payable in future relating to non-cancelable operating lease should be disclosed as to payable (i) not later than one year, (ii) later than one year but not later than five years, and (ii) later than five years. And basis of such allocation over the lease term.
- Lease payment recognized in the profit and loss account separately disclosing minimum lease payment and contingent rent, if any.
- Sub-lease payment recognized as income to profit and loss account.
- The total amount to be received from the sub-lease of the asset acquired under non-cancelable operating lease.
- A general description of the lessee's significant leasing arrangements.
- Restrictions imposed by the lessor with respect to the use of asset acquired on lease.

Recap 1

So far, we have discussed the following topics:

- Definition of Lease
- Terms Relevant to Lease
- Classification of Leases
- Accounting for Lease in the Financial Statements of Lessee

Self-assessment 1

1. Explain the concept of finance lease and how it is different from operating lease.
2. How is operating lease to be recognized in the financial statements of lessee?

The following topics will be delved into next:

- Accounting for Lease in the Financial Statements of Lessor
- Sales and Lease Bank Transaction and Accounting for It
- Manufacturer or Dealer–Lessor and Related Accounting Concepts
- Differences in IAS-17 and AS-19
- Case

FINANCE LEASE IN THE FINANCIAL STATEMENTS OF LESSOR

The lessor passes his/her asset to the lessee to be used over the lease term in return of regular lease payments paid by the lessee. The provisions of AS-19 and IAS-17 contain the provisions about accounting and disclosure in the financial statement of both the lessee and the lessor. A **finance lease** is the one in which the lessor passes in favour of the lessee the risk and rewards relating to the ownership of the asset eventually the lease agreement might or might not provide for the title transfer at the end of the lease term. A finance lease is for a significantly longer-term period covering almost complete useful life of the asset and is usually non-cancelable in the routine course of business.

Initial Recognition

The lessor's investment in the leased asset and lease payment should be recognized as follows:

Principle Amount and Lease Payments

(i) **Net investment** in the asset given on lease, i.e., the principal amount, should be recognized in the balance sheet as receivables.

(ii) **Total lease payment receivable** over the lease term should be allocated over the lease term so as to reflect the realization of periodic return on the net investment outstanding in the leased asset.

(iii) **Lease payment for the accounting year** should be reduced from the principle amount and unearned interest income as per the allocation adopted in (ii) above.

Initial Direct Costs and Indirect Costs

The lessor incurs **initial direct costs**, such as legal fee and administrative expenses, in arranging for the lease agreement. These expenses are like routine expenses to generate finance income on the lessor's investment in the leased asset; therefore, these should be recognized either (i) as an expense in the income statement in the year in which initial recognition is done, or (ii) should be allocated using finance income receivable over the lease term on a suitable basis. **Indirect costs** are certain administrative, legal and selling expenses incurred by the lessor in routine for conducting its business of lease financing. Using an appropriate method of appropriation, these indirect costs should be apportioned to the lease transaction.

Guaranteed Residual Value

In certain lease transactions, the lessor is assured about the realization of a minimum guaranteed residual value of the asset given on lease. Such assurance might either be given by the lessee or some third party. This guaranteed residual value is considered at the time of estimating gross investment in leased asset.

Estimated Unguaranteed Residual Value The amount of variation in the guaranteed residual value is defined as **unguaranteed residual value**. The estimated unguarnateed residual value of the leased asset should be reviewed regularly and variation, if any in the value should be recognized as follows:

Reduction in Unguaranteed Residual Value

- Income allocation over the remaining lease term should be revised if there is any reduction in the estimated unguaranteed residual value.
- Any reduction with respect to the amount already accrued should be recognized immediately.

Upward Adjustment in Unguaranteed Residual Value

An upward adjustment in estimated unguaranteed residual value should not be made.

Example 4 Jagat Limited (JL), a lease finance company, leased a transport vehicle to Zig-Zag Transport Company (ZRL) the initial cost of the vehicle on April 1, 2008 is ₹ 12,00,000. The lessee, ZRL has agreed to pay equated lease rent at the end of each of the year over next four years. At the end of the lease term, ZRL has the option to buy the vehicle at an estimated residual value of ₹ 1,50,000. The agreement of lease provides that either ZRL will buy the vehicle at the end or will arrange for an alternate buyer to buy the vehicle at the estimated residual value. The commercial rate of interest applicable for the lessor is 12% per annum. Estimate minimum lease rent acceptable to the lessor. Also calculate gross and net investment.

Solution Here minimum lease rent acceptable to the lessor will be such amount of equated annual lease rent the present value of which becomes equal to the lessor's cash outflow less present value of guaranteed residual value. It should be calculated as follows:

$$\text{Initial cost of vehicle} - \text{Present value of residual value} = \text{ALR} \times \text{PVIFA}_{r,n}$$

Here, ALR = annual lease rent, and PVIFA = present value interest factor for an annuity at given commercial rate of interest '*r*' for lease term '*n*'.

$$12,00,000 - (1,50,000 \times 0.636) = \text{ALR} \times 3.037$$
$$11,04,600 = 3.037\text{ALR}$$

i.e., ALR = 11,04,600/3.037 = ₹ 3,63,714.19 ~ 3,63,714 per annum over four years lease term

Gross investment in leased asset is sum total of minimum lease payments receivable and unguaranteed residual value; therefore, it is ₹ 16,04,856 (1,50,000 + 3,63,714 × 4)

Net investment in lease asset is present value of gross investment in lease asset discounted at the incremental borrowing cost applicable of the lessor. Therefore, it is ₹ 11,99,999.40 ~ 12,00,000. This is equal to initial cost, i.e., fair value of the vehicle ₹ 12,00,000. The lessor should disclose the lease asset at the net investment amount and unearned finance income is the difference between gross investment and net investment it should be recognized initially at ₹ 4,04,856 (16,04,856 − 12,00,000).

Balance Sheet as on April 1, 2008

Liabilities	Amount	Assets		Amount
		Gross receivable from asset given on finance lease		
		Gross investment	16,04,856	
		Less: Unearned Income	4,04,856	
		Net investment	12,00,000	12,00,000

Example 5 Using the data of Example 4, allocate the receivable from finance lease as to finance income and reduction in principal amount of the receivables to be recognized by the lessor over the lease term of four years.

Solution The gross amount of receivables is to be allocated over the lease term of four years using implicit interest rate, which is equal to incremental borrowing cost of the lessor. It is as follows:

Year (1)	Opening balance of receiv-ables (2)	Annual lease payment (3)	Interest, i.e., finance income (4)	Reduction in receiv-ables (5)	Closing balance of receivables (6)
2008–9	12,00,000	3,63,714	1,44,000 (12,00,000 × 0.12)	2,19,714 (3,63,714 − 1,44,000)	9,80,286
2009–10	9,80,286	3,63,714	1,17,634 (9,80,286 × 0.12)	2,46,080 (3,63,714 − 1,17,634)	7,34,206 (9,80,286 − 2,46,080)
2010–11	7,34,206	3,63,714	88,105 (7,34,206 × 0.12)	2,75,609 (3,63,714 − 88,105)	4,58,597 (7,34,206 − 2,75,609)
2011–12	4,58,597	3,63,714	55,032 (4,58,597 × 0.12)	3,08,682 (3,63,714 − 55,032)	1,49,915 (4,58,597 − 3,08,682)

Explanation:

(i) The amount of closing receivables is ₹ 1,49,915, which can be considered equal to guaranteed residual amount of ₹ 1,50,000. The difference is due to approximation effect.

(ii) Finance income as given in column (4) is to be recognized to profit and loss account in respective financial year and the amount of unearned income should be reduced by the amount shown to profit and loss account.

(iii) Net amount of receivables is to be reduced by the amount as shown in column (5) in the respective financial year.

Balance Sheet as on March 31, 2009 (Asset side only)

Assets		Amount
Gross receivable from asset given on finance lease		
Gross investment	12,41,142	
Less: Unearned interest income	2,60,856	9,80,286

Note: Gross investment is the difference between opening gross investment and the amount of lease payment received during the year.

Balance Sheet as on March 31, 2010 (Asset side only)

Assets		Amount
Gross receivable from asset given on finance lease		
Gross investment	8,77,428	
Less: Unearned interest income	1,43,222	7,34,206

Balance Sheet as on March 31, 2011 (Asset side only)

Assets		Amount
Gross receivable from asset given on finance lease		
Gross investment	5,13,714	
Less: Unearned interest income	55,117	4,58,597

Balance Sheet as on March 31, 2012 (Asset side only)

Assets		Amount
Gross receivable from asset given on finance lease		
Gross investment	1,50,000	1,50,000

OPERATING LEASE IN THE FINANCIAL STATEMENTS OF LESSOR

A **lease transaction** that is not a finance lease is termed as **operating lease**. Usually, operating lease transaction (i) is for a short term as compared to the useful life of the asset given on lease, (ii) is cancelable by giving due notice as per the terms of the lease agreement, (iii) might have upgradation clause and (iv) might have wet lease clause. These types of lease does not provide for title transfer in favour of the lessee. *Operating lease is like giving and taking of the asset on rent*, for example computers, transport and passenger vehicles, equipment, construction equipment and accessories, such as road rollers and excavators.

AS-19 and IAS-17 provide for the accounting of operating lease.

Operating Lease—Initial Recognition

As there is no provision for title transfer of the leased asset in favour of the lessee, therefore, the lessor should recognize such asset in its balance sheet as a **fixed asset**.

Lease Income

The lease income should be recognized as income in the income statement over the lease term on straight line basis or using some more representative basis reflecting the allocation corresponding to the realization of economic benefits from the leased asset.

Initial Direct Costs

The direct costs, such as legal fee, valuation charges and administrative charge incurred by the lessor in arranging the lease transaction is to be recognized as revenue expenses in generating income from leasing business. These expenses should either be *expensed in the income statement* in the year in which the operating lease is recognized initially or should be allocated in proportion to lease rents recoverable during the lease period is considered as **deferred revenue expenses**.

Depreciation and Impairment of Leased Asset

Depreciation policy with regards to leased asset should be according to the depreciation policy applicable to similar assets held by the lessor. Depreciation and impairment of leased assets should be recognized as per the provision of AS-6 depreciation accounting and AS-10 accounting for fixed assets.

Operating Lease—Disclosure in Financial Statement

The lessor should disclose the following in its financial statement:

- Gross carrying amount, the accumulated depreciation, impairment loss and reversal of impairment loss should be disclosed separately in the balance sheet for each class of asset.
- Depreciation, contingent expenses, impairment loss and reversal of impairment loss show in the income statement should be disclosed separately for each class of asset given on operating lease.
- The aggregate amount of future minimum lease payment along with the segregation as to receivable in (a) not later than one year, (b) later than one year but not later than five year, and (c) later than five years.
- A general disclosure about the lease agreement and accounting policy adopted with regards to the lease rent and related expenses.

Example 6 Murti Finance and Leasing (MFL) buys passenger vehicles and gives these passenger vehicles on lease to corporate clients. It purchased 10 cars costing ₹ 6,00,000 each on April 1, 2007 and provided these cars on lease for a period of two years to one of its client Jims International (JI) by incurring direct costs ₹ 30,000 attributable to the lease agreement. Each car is estimated to realize a salvage value of ₹ 1,20,000 at the end of the economic life of 6 years. JI will be charged a lease rent of ₹ 1,25,000 per annum per car to be paid at the end of each of the year. The cars are subject to straight line depreciation method. Show how MFL should recognize these cars in its financial statements.

Solution As the lease term is for two years as compared to the economic life of 6 years of the cars, therefore, it should be classified as operating lease these should be recognized as follows:

(i) Cars should be shown as an asset on lease at the initial cost, i.e., ₹ 60,00,000.

(ii) Initial direct cost ₹ 30,000 is to be expensed to profit and loss account in the year 2007–8. Alternatively, it can be apportioned equally over the lease term of two years. In the opinion of author, apportionment over the lease term is more appropriate.

(iii) As every year, the same amount of lease rent ₹ 12,50,000 is being received, therefore, it should be shown as income to profit and loss account in each of the two years without any adjustment.

(iv) Depreciation on cars ₹ 8,00,000 {80,000 per car per annum, i.e., (6,00,000 − 1,20,000)/6}

ACCOUNTING OF LEASE FOR MANUFACTURER OR DEALER–LESSOR

A manufacturer or dealer of certain capital goods or equipments might provide these on lease apart from outright sale to its customers, such as manufacturer of computers, software, surgical equipments, building, dam and infrastructure. Such lease may be **finance lease** or **operating lease**. *The accounting for operating lease is done as it is applicable for a normal **operating lease** agreement discussed in the earlier section.*

The accounting for asset given on **finance lease** should be done as discussed below.

Finance Lease

The finance lease by a manufacturer or dealer–lessor generates two type of income for the lessor:

- The profit or loss equal to the profit or loss had the lease transaction been an outright sale of the asset at the normal selling price. Such profit or loss should be adjusted for applicable discount or allowances.
- Finance income over the lease term.

AS-19 and IAS-17 provide the following accounting provisions with respect to finance lease.

Initial Recognition

Sales

- Sales for the asset given on lease is to be recognized by the manufacturer or dealer–lessor as per the accounting policy applicable for outright sale by the manufacturer or dealer.
- Such sales is to be recognized initially at the **fair value of asset**; however, if the present value of minimum lease payments calculated using commercial rate of interest is more than the initial fair value then it should be recognized at such **present value**.
- The cost of sales for the leased assets is the cost less present value of unguaranteed residual value, if any.

Profit or Loss on Sale The difference between sales revenue and cost of sales should be recognized as profit. The **profit or loss** is to be recognized in the books of accounts as per the accounting policies of the company as applicable for rest of the outright sales. However, when artificially lower interest rate is applied in calculating the lease rent, the profit is to be recognized by considering normal commercial interest rate.

ARTIFICIALLY LOWER INTEREST RATE VS COMMERCIAL INTEREST RATE

Sometimes, a manufacturer or dealer–lessor discounts the lease rental using a lower rate of interest as compared to usual commercial interest rate. Low interest rates are offered to boost up sales. This change in rate increases the present value of the assets resulting into a higher amount of profit on sales recognized for such lease transaction. However, the maximum amount of profit recognized on such sales transaction shall not exceed the profit had the discounting been done using commercial interest rate.

Initial Direct Costs

These are such costs that are directly attributable to the asset given on finance lease by the manufacturer or dealer–lessor, such as direct marketing cost and administrative expenses related to lease activities. These expenses are considered as the expenses relevant for generating sales resulting from these lease transaction. Therefore, these should be expensed to profit and loss account in the year in which these are incurred.

Disclosure in Financial Statements

According to the provisions of AS-19 and IAS-17, disclosure parameters for this the lessor are the same as applicable for the lessor in case of a finance lease as discussed earlier.

SALE AND LEASEBACK TRANSACTIONS

A **sale and leaseback transaction** involves the sale of an asset by the owner of the asset with the condition to take the same asset on lease from the purchaser. Here, the erstwhile owner of the asset becomes the lessee and the present buyer of the asset becomes the lessor. In this type of lease, transactions sales price of the asset and lease rent are interdependent because the complete deal is a package and not independent of each other. The accounting for such lease transaction is done as per the provisions of AS-19 and IAS-17; however, **profit or loss on sale of asset** should be recognized as follows:

Sale and Leaseback Transaction Resulting into Finance Lease

The difference between the sale price and carrying amount of the leased asset under consideration is profit or loss. Such profit or loss should not be recognized to income statement immediately; rather it should be deferred over the lease period in the proportion of depreciation applicable for the leased asset.

Impairment loss if any is to be used to reduce the carrying amount as provided under AS-10.

EXAMPLE 7 Simson Limited (SL) has a mining equipment with carrying amount ₹ 1,20,000 and useful life of the equipment is 5 years. On April 1, 2006 SL enters into a package deal with a Sigma Finance Limited (SFL) whereby it sells the equipment to SFL with the condition to take the equipment on lease by paying an annual lease rent of Rs 40,000 per annum. The incremental borrowing cost of SL is 12% per annum. Show how vendor–lessee should recognize it in its books of accounts.

SOLUTION As the lease term equals the useful life of the asset, therefore, it is to be identified as **finance lease.**

(i) The fair value of the asset under package deal is the present value of the lease rentals to be paid over the lease term it is ₹ 1,44,200 (40,000 × 3.605).

(ii) On April 1, 2006 SL should recognize the asset and liability at ₹ 1,44,200.

(iii) ₹ 1,44,200 should be allocated as depreciation over five years at the rate of ₹ 28,840 per annum.

(iii) As the fair value is more than the carrying amount the difference ₹ 24,200 is to be recognized as profit and amortized over the lease term of five years on straight line basis resulting into an annual profit of ₹ 4,840.

(iv) Annual debit of depreciation ₹ 28,840 and annual credit of profit ₹ 4,840 results into an annual debit to profit and loss account ₹ 24,000. This is equal to the amortization of present carrying cost ₹ 1,20,000 over five years period.

Balance Sheet as on March 31, 2007 (Asset side only)

Assets		Amount
Asset on Lease	1,44,200	
Less: Accumulated depreciation	28,840	
Less: Deferred profit (24,200 – 4,840)	19,360	96,000

Sale and Leaseback Transaction Resulting into Operating Lease

The difference between sales value and carrying amount is profit or loss.

(i) If a sale and leaseback transaction is at the fair value then profit or loss resulting from the transaction should be recognized immediately to profit and loss account.

(ii) If sales value is less than the fair value of the asset at the time of lease transaction the profit or loss should be recognized to profit and loss account immediately. However, if the loss is compensated through the lease rentals that are lower than the normal lease rentals (market price), the loss should be amortized over the lease period.

(iii) If sales value is more than the fair value then profit and loss relating to excess sales value over and above the fair value should not be recognized to profit and loss account immediately; rather it should be deferred and amortized over the lease term.

Example 8 On April 1, 2009, a company is having an asset at a carrying amount ₹ 9,50,000 with fair value ₹ 11,00,000 and it has entered into a package deal with one of the finance companies to sell the asset with the condition to take it back on operating lease for a period of five years. How profit or loss is to be recognized in the books of vendor–lessee in each of the following situations?

(i) Sales value is ₹ 11,00,000.
(ii) Sales value is ₹ 10,50,000.
(iii) Sales value is ₹ 11,50,000.
(iv) Sales value is ₹ 8,75,000.
(v) Sales value is ₹ 8,75,000 and lease rentals have been set at a price lower than market price.

Solution

(i) As sales value is equal to fair value, therefore, profit of ₹ 1,50,000 (11,00,000 − 9,50,000) should be recognized to profit and loss account in the year 2009–10.
(ii) As the sales value is less than the fair value, the profit ₹ 1,00,000 (10,50,000 − 9,50,000) should be recognized to profit and loss account in the year 2009–10.
(iii) As the sales value is more than the fair value out of the total profit of ₹ 2,00,000, ₹ 50,000 (excess of sales value over the fair value) should be deferred over the lease term of five years and rest of the profit ₹ 1,50,000 should be recognized to profit and loss account in the year 2009–10.
(iv) Here, sales value is less than the fair value. Therefore, the total loss of ₹ 75,000 (9,50,000 – 8,75,000) should be recognized to profit and loss account in the year 2009–10.
(v) Here, sales value is less than the fair value this is to be compensated by keeping the lease rentals at lower than the market lease rentals; therefore, the loss ₹ 75,000 should be deferred and amortized over the lease term of five years.

Disclosure—Sale and Lease Bank Transaction

The disclosure requirement for both the lessee and the lessor are the same as discussed in the earlier section while discussing about finance and operating lease.

COMPARISON OF IAS-17 AND AS-19

Although the provisions of both of these standards are alike with respect to different aspect related to lease transactions, there are certain differences in both of these, which are elaborated below.

Lease Hold Land and Building

Lease of land and land and building do not fall in the ambit of the provisions of accounting standard AS-19 but international accounting standard IAS-17 contains the provisions for lease of land and land and building.

Classification of Lease—IAS-17

Lease of land and building may be classified as finance lease or operating lease.

Operating Lease and Accounting Effect

Land has an indefinite life. Therefore, a lease transaction of land and building should be recognized as operating lease if lease agreement does not provide for title transfer in favour of the lessee at the same time, it is not likely to include the substantial transfer of risk and reward related to land in favour of the lessee. Downpayment called **upfront premium** made by the lessee at the inception of lease should be recognized as pre-paid lease payment to be amortized over the lease term on the basis of pattern of economic benefits likely to be realized from the leased asset.

The total amount of minimum lease payments should be apportioned between land portion and building portion using an appropriate basis. And if possible, the lease of both of these should be classified as two set of lease agreements. If the amount apportioned to the lease of land is immaterial then it should be regarded as one common lease agreement.

The amount of rent relevant for each year should be expensed to profit and loss account in the year in which it is paid.

Finance Lease and Accounting Effect

When lease agreement provides for the title transfer in favour of the lessee at the end of the lease term, the lease of land and building should be recognized as finance lease and should be accounted for in accordance with the provisions as applicable to finance lease.

Inception of Lease and Commencement of Lease

AS-19 does not differentiate between the inception of lease and commencement of lease, whereas IAS-17 differentiates between both of these. According to IAS-17, there might be a time gap between the inception of the lease—time when lease is classified as finance lease or operating lease and the commencement of lease—when the lessee can exercise his/her right to use the leased asset.

Initial Direct Costs

The provisions of both the standards are same for the recognition of initial direct costs.

Interest Rate Implicit in the Lease

IAS-17 considers present value of initial direct cost for arriving at interest rate implicit in the lease agreement. Accordingly, in a lease transaction implicit interest, rate for the lessor is that the discount rate at which the total present value of (a) minimum lease payments and (b) unguaranteed residual value becomes equal to the sum total of (a) the initial fair value of the leased asset and (b) initial direct cost of the lessor, if any. Such discount rate is calculated using internal rate of return (IRR) method.

AS-19 does not consider initial direct cost for arriving at interest rate implicit in the lease agreement.

Rest of the provisions are same in both the accounting standards.

SOLVED EXAMPLES

Example 9 Deepak Enterprises (DE) acquired a machinery from Jagat Enterprises (JE) for a lease term of five years that covers almost complete economic life of the asset. The lease commences on April 1, 2009 and will expire on March 31, 2014. The fair value of the machine at the commencement of the lease term is ₹ 4,98,660 and JAL is required to pay to JE an annual lease rent of ₹ 1,60,000 per annum and government has assured to pay JE a guaranteed residual value of ₹ 50,000 at the end of the lease term. Calculate implicit interest rate.

Solution

(i) Fair value of the leased asset on April 1, 2009 is ₹ 4,98,660 and
(ii) Total minimum lease payments from the viewpoint of JAL are ₹ 8,50,000 (1,60,000 × 5 + 50,000).

Therefore, the implicit rate of interest will be the rate at which total minimum lease payments from the viewpoint of JAL equals this fair value. It shall be calculated as follows:

Fair value = Present value of annual lease rent (ALR) + present value of unguaranteed residual value

By using trial and error approach, we first make a trial at the rate of 18%.

Present value of total minimum lease payments = 1,60,000 × 3.127 + 50,000 × 0.437 = ₹ 5,22,170, this is more than the fair value; therefore, we need to try a higher rate.

By using trial and error approach, we now make a trial at the rate of 20%.

Present value of total minimum lease payments = 1,60,000 × 2.991 + 50,000 × 0.402 = ₹ 4,98,660 this is equal to the fair value; therefore, the implicit rate for the lessor is 20%.

Example 10 Taking the data of Example 9, apportion the total lease payments between finance charge and outtanding liability for lessee.

Solution The total amount of minimum lease payments is to be allocated between finance charges, i.e., interest payment and reduction in the liability relating to leased asset using the implicit rate of interest of 20%. It shall be done as follows:

Year	Opening balance of liability	Annual lease payment	Interest	Principal in lease payment	Closing balance of liability
2009–10	4,98,660	1,60,000	99,732	60,268	4,38,392
2010–11	4,38,392	1,60,000	87,678	72,322	3,66,070
2011–12	3,66,070	1,60,000	73,214	86,786	2,79,284
2012–13	2,79,284	1,60,000	55,857	1,04,143	1,75,141
2013–14	1,75,141	1,60,000	35,028	1,24,972	50,169
Total		8,50,000	3,51,509	4,48,494	

Closing balance of liability at the end of 2013-14 is 50,169 as compared to the unguaranteed residual value of ₹ 50,000 the difference of ₹ 169 is on account of approximation.

Here lessee should disclose the leased asset initially at ₹ 4,98,660 and a corresponding liability at the same value. Out of the annual lease rent interest portion as shown in the table should be expensed to profit and loss account in the respective financial year and principal amount should be recognized in reducing the liability in each of the year with the relevant amount as shown in the table.

Example 11 ZEN Limited (ZL) acquired a machinery from Ashok Healthcare (AH) on operating lease for a period of three years. The lease rent payable by ZL are ₹ 2,10,000; ₹ 1,20,000 and ₹ 2,40,000 during three years, respectively. Show how ZL should recognize the lease rent in its accounts.

SOLUTION Here total lease rent of ₹ 5,70,000 should be allocated over the lease term of three years using straight line method; therefore, every year ₹ 1,90,000 is to be expensed to profit and loss account. As the actual lease payment in each of the year does not equal ₹ 1,90,000; therefore, the difference between ₹ 1,90,000 and actual lease rent paid in each of the year should be recognized either as a liability or an asset in the balance sheet. This will be as follows:

Year	Lease payment	Expense in profit and loss account	Asset	Liability
First	2,10,000	1,90,000	20,000	
Second	1,20,000	1,90,000	—	50,000
Third	2,40,000	1,90,000		Nil
Total	5,70,000	5,70,000		

The asset in the first year should be classified as long-term asset as it is not sure as to when it will be adjusted or settled. In the second year, ₹ 50,000 should be recognized as current liability.

KEY TERMS

Title transfer
Finance lease
Guaranteed vs unguaranteed residual value
Risk and reward
Dry vs wet lease
Contingent rent
Operating lease
Big ticket lease
Minimum lease payments

FINAL RECAP

- **Lease** is an outcome of agreement between the lessor (owner of asset) and the lessee (user or tenant) whereby the lessor allows in return for the payment of lease rent the use of asset by the lessee over a period of time.
- **Finance lease** is a lease that substantially transfers asset-related risk and reward in favour of the lessee. Title transfer in favour of the lessee is not important. Substantial transfer of risk and reward implies that the lessee is to reap out all the benefits and the risk associated with the use or possession of the asset under covered in lease agreement.
- **Operating lease agreement** does not substantially transfer asset-related risk and reward in favour of the lessee is identified as operating lease. The lease agreement has the provision for cancellation by either party under the terms and conditions specified in the lease deed.
- A **leasing activity** in which the original owner of the asset sells the asset to another party with the condition to take the same asset on lease is called **sale and leaseback**.
- The **inception of the lease** transaction is the earlier of the date of lease agreement and the date of commitment by the parties to the provisions of the lease agreement.
- The **commencement of lease term** is the form which the lessee can exercise his/her right with respect to the use of leased asset, on this date, the initial recognition of the leased asset as asset, liability as well as recognition of expenses and income relating to leased asset is done.
- **Minimum lease payments** for lessee include the following:
  - Lease rents to be paid by the lessee over the entire lease term
  - Any residual value guaranteed by lessee or some other party on behalf of the lessee to the lessor.

  But it *does not include* the following:
  - Contingent rent
  - Servicing costs and taxes either paid by lessee or reimbursed by the lessee to the lessor.
  - If the lessee has the option to purchase the asset at a price lower than the fair value and exercise of such option is almost sure then this exercise price should also be included in minimum lease payments.

- **Minimum lease payments** for the lessor includes (i) lease rent to be paid by the lessee to the lessor over the entire lease term, (ii) guaranteed residual value by (a) the lessee, (b) another party on behalf of lessee or (c) a third party unrelated to the lessor but capable to make the payment of guaranteed residual value. It also includes guaranteed purchase price to be paid by the lessee at the end of the leaser term to purchase the leased asset.
- **Contingent rent** is that portion of the total lease payments that is not fixed in amount at the inception of the lease transaction but is subject to the changes in certain factors, such as future sales revenue, level of use of leased asset, certain price indices and interest rates prevalent in the market but not related to time decay.
- **Fair value** is the value at which an asset can be exchanged or a liability can be settled between willing buyer and seller at an arm's length negotiation.
- **Economic life** is not specific to a particular lessee but it is aggregate of the life relating to multiple users. It can be any of the following:
  - The period over which an asset is expected to generate economic benefits for one or more users.
  - The number of units or measurable output expected to be realized by one or more users.
- **Useful life** is the remaining lease period from the commencement of the lease term over which the economic benefits are expected to be realized by the lessee. This time period is specific to the particular lessee.
- Guaranteed residual value for lessee is the amount guaranteed by the lessee or some another party on behalf of the lessee to the lessor to be paid at the end of the lease term.
- **For Lessor** is the amount guaranteed by the lessee or some another party that is not related to the lessor and such third party is capable of making the payment of such guaranteed amount at the end of the lease term .
- **Unguaranteed residual value** is such portion of the total residual value to be realized by the lessor from leased asset. Realization of this amount is not assured or it is guaranteed by a party related to the lessor.
- **Initial direct costs** are the costs directly related to the initiation of lease transaction. These costs could have been avoided had the lease transaction not been initiated, such as cost specifically incurred in preparing lease document and legal fee for the lease agreement.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. A lease agreement which does not has the provision for title transfer but entails substantial transfer of risk and reward related to lease in favour of the lessee should be classified as
   (a) Finance lease (b) Operating lease
   (c) Sale and lease bank (d) None of these
2. In a dry operating lease, who among the following is responsible to bear repairs, maintenance and insurance costs?
   (a) Lessor (b) Lessee
   (c) Both of these in equal proportion (d) None of these
3. Under sale and lease bank transaction involving finance lease, the recognition of profit or loss from the transaction should be
   (a) As deferred income or loss over the lease term
   (b) As an expense in the year of inception of lease
   (c) Subjective as per the accounting policy of the vendor–lesseee
   (d) None of these
4. In a sale and leaseback transaction who becomes the lessee?
   (a) Erstwhile owner (b) Present owner
   (c) Depends upon the agreement (d) None of these

5. In a wet operating lease, who among the following is responsible to bear repairs, maintenance and insurance costs?
   (a) Lessor (b) Lessee
   (c) Both of these in equal proportion (d) None of these

Descriptive Questions

1. Explain the term 'lease'. Explain how different lease transactions are classified under the provisions of accounting standards applicable in India.
2. Accounting standards world over have similar provisions; still there exist certain differences from country to country. In view of this, discuss the differences between Indian accounting standards and international accounting dealing with the accounting for leases.
3. Write short notes on the following:
   (a) Sale and leaseback
   (b) Big ticket lease
   (c) International lease
4. Explain the provisions about lease accounting in the books of a manufacturer or dealer–lessor.
5. Explain the concept of finance lease and how it is different from operating lease.
6. What are exotic lease agreements and how these are different from plain vanilla lease agreements?

Numerical Problems

1. Jeevan Limited (JL) a lease finance company leased a transport vehicle to Zubin Transport Company (ZTC). The initial cost of the vehicle on April 1, 2008 is ₹ 16,00,000. The lessee– ZTC has agreed to pay equated lease rent at the end of each of the year over next four years. At the end of the lease term, ZTC has the option to buy the vehicle at an estimated residual value of ₹ 2,00,000. The agreement of lease provides that either ZTC will buy the vehicle at the end or will arrange for an alternate buyer to buy the vehicle at the estimated residual value. The commercial rate of interest applicable for the lessor is 10% per annum. Estimate the minimum lease rent acceptable to the lessor.
2. Using the data of Problem 1, allocate the receivable from finance lease as to finance income and reduction in principal amount of the receivables to be recognized by the lessor over the lease term of four years.
3. Sigma Limited (SL) has a mining equipment with carrying amount ₹ 4,20,000 and useful life of the equipment is 5 years. On April 1, 2007, SL enters into a package deal with a Sampat Finance Limited (SFL) whereby it sells the equipment to SFL with the condition to take the equipment on lease by paying an annual lease rent of ₹ 1,40,000 per annum. The incremental borrowing cost SL is 14% per annum. Show how vendor–lessee should recognize it in its books of accounts.
4. Jagat Limited (JL) acquired a machinery from Simran Enterprises (SE) for a lease term of eight years that covers almost complete economic life of the asset. The lease commences on April 1, 2009 and will expire on March 31, 2017. The fair value of the machine at the commencement of the lease term is ₹ 4,42,800 and JL is required to pay to SE an annual lease rent of ₹ 80,000. Calculate implicit interest rate.

Answers

Multiple Choice Questions

1. (a) 2. (b) 3. (a) 4. (a) 5. (a)

Numerical Problems

1. ₹ 4,61,640
2. Interest ₹ 1,60,000; ₹ 1,29,836; ₹ 96,656 and ₹ 60,157, respectively in year one to four. Principal ₹ 3,01,640; ₹ 3,31,804; ₹ 3,64,984 and ₹ 4,01,483, respectively from year one to four. Approximation difference ₹ 89.
3. ₹ 4,80,620 is fair value
4. 9% per annum

CASE

Reaping the Benefits of Lease Transaction

Silver Queen Limited (SQL) is having a majority of its operations in export processing zone (EPZ). The provisions of government provide that a company established in EPZ is not required to pay tax on its profits for initial eight years from the date of commencement of business. SQL is a subsidiary of Gold King Limited (GKL). GKL is in the main commercial area of Maharashtra and is liable to pay tax at the rate of 30% on its profits. The finance manager of SQL had recently scrutinized the provisions of income Indian accounting standard relating to lease accounting. He noticed that a company can enter into a 'sale and leaseback' transaction, which generates multiple benefits in single transaction, i.e., it can enjoy the use of the asset and at the same time can generate cash resources by selling the asset. Another benefit is in the form of lower lease rentals as compared to commercial lease rentals.

To reap the benefits of this type of lease transaction, SQL enters into a package deal whereby SQL sells main frame computer to GKL at a sales value of ₹ 50 lakh and agrees to take the main frame computer on lease for 10-years' period. The carrying amount and fair value of the main frame computer are ₹ 45 lakh and ₹ 48 lakh, respectively. GKL has an implicit cost 16% per annum.

Discussion Questions

1. Assuming that your are the finance manager of SQL, show how the transaction should be recognized initially in the books of SQL and GKL.
2. Calculate the minimum acceptable lease rent for GKL.
3. Had SQL not entered into a sale and leaseback deal, then what would have been the tax implication for GKL?

CHAPTER 19

Reporting Financial Performance and Corporate Governance

Learning Objectives

After reading this chapter, you will be able to

- Know about the provisions of IFRS and Indian GAAP about annual report
- Comprehend corporate governance
- Understand segment reporting and stipulation of IFRS and Indian GAAP
- Identify related party disclosure
- Define EPS and provisions of IFRS and Indian GAAP
- Gain an insight into the global reporting initiative

Diclosure in Corporate Financial Reports

Corporate financial report, i.e., annual report, usually should disclose the following:

- A complete set of financial statements—the balance sheet, the income statement, cash flow statement, explanatory notes to accounts, statement of changes in equity
- Report of statutory/external auditor's report
- Board of director's report
- Management discussion and analysis
- Corporate governance report
- Voluntary disclosure

The objective of corporate financial reporting is to keep different stakeholders informed about the financial performance as well as future business scenario of business enterprises.

Inclusion of certain more facts (such as segment reporting, related party disclosure, presentation of different calculation of EPS, corporate social responsibility report and discontinuing operations) enhance the quality of disclosure and decision usefulness of the annual report presented by the reporting corporate entity.

INTRODUCTION

The financial performance of a company particularly publicly traded company is to be disclosed before different stakeholders so as to apprise them about the profit-earning capability, financial strength, vision of management, future prospects about the functioning of the company and related aspects. All this is presented in the form of **corporate financial performance report called annual report.**

Corporate financial report includes financial as well as non-financial performance parameters.

As companies work on the fundamental of separation of management, therefore, the disclosure of these facts with transparency and full disclosure becomes more important so as to assist different stakeholders about the factual status and assist in the analysis of financial performance.

Disclosure of Information Contents and Stakeholders

The main focus in the presentation of annual report is to maintain high quality standards of transparency and disclosure. Practically, a company, i.e., management of a company should disclose all the material information—price sensitive as well as other information to its shareholders, i.e., owners and other stakeholders of the company so as to disclose before them the real financial position and expected future scenario of the company's working.

Price-sensitive information is such a set of information that when made public is likely to have an influence on the share price of the company. Not only shareholders use this information but moneylenders, banks and financial institutions, suppliers, debenture holders, government and certain regulatory bodies also use information contained in the annual report. All these are called **stakeholders of business entity**.

USEFUL INFO

Stakeholders in a company—Publicly traded company

A publicly traded company is the one whose securities—shares and debentures are available for trading on a recognized stock exchange. Different entities listed in the following get influenced by the working and financial performance of these companies. Therefore, these are called **stakeholders** in a company:

(a) Shareholders
(b) Management and Staff (employees)
(c) Suppliers and creditors
(d) Government, tax authorities and regulators
(e) Intermediaries
(f) Present and prospective customers
(g) Prospective investors
(h) Banks and financial institutions

Note: The list is only illustrative and not exhaustive.

Quality of Disclosure

All the financial reports, i.e., the annual report of the company should be prepared in such a manner so as to provide sufficient information for each category of the stakeholder in a company. Apart from the content of annual report, it is the quality of disclosure represented by (i) level of disclosure and (ii) level of transparency influence the decision-making by the stakeholders. It also helps making a fair evaluation of the financial performance and financial position of the company.

Level of Disclosure

While preparing the annual report, the management of the company should try including sufficient information to assist the stakeholder in decision-making. This implies having full disclosure of the facts but the interpretation of word full disclosure is highly subjective in nature. One approach of being open and accessible suggests the disclosure of all facts that might influence the decision-making by different stakeholders, but the another approach of maintaining secrecy suggests that certain strategic information should not be disclosed publicly as it might have an adverse impact on the working of the company. The competitors might make advantage out of such information if disclosed in the annual report.

Disclosing too little of information is also harmful as it leads to interpretational distortions by the interpreter, whereas disclosing too much of the information is harmful as it might result in the misuse of the information.

Therefore, the annual report should contain as par as possible sufficient information that ought to be made public and not all the information of the company.

Transparency

Transparency implies presentation of the information as far as possible in self-explanatory manner. At the same time, there should not be any significant time decay between the generation of information in the company and its presentation/publication. This implies that the management of the company should disclose the information as early as possible so as to assist the stakeholders to have advantage out of such information.

Transparency implies presentation of the information as far as possible in self explanatory manner at the same without any time decay.

DICLOSURE IN CORPORATE FINANCIAL REPORTS—ANNUAL REPORT

Corporate financial report, i.e., annual report, usually should disclose the following:

- A complete set of financial statements—the balance sheet, the income statement, cash flow statement, explanatory notes to accounts, statement of changes in equity
- Report of statutory/external auditor's report
- Board of director's report
- Management discussion and analysis
- Corporate governance report
- Voluntary disclosure

The scope of financial statement by following the provisions of Indian GAAP does not include the statement of changes in equity. However, the provisions of IFRS-3 insist upon the presentation of this statement.

Complete Set of Financial Statements

Introduction

Financial statements are important documents apprising the user not only about the financial position of the company but about the vision of the management and future plans of the company. These comprise the balance sheet, the profit and loss account also called **income statement** and the **cash flow statement**. These financial statements disclose the financial information as well as set a standard for maintaining the same.

USEFUL INFO

From April 2011 onwards companies are required to present balance sheet and income statement as per the new schedule VI to Companies Act 1956. This has been discussed in Appendix-III of the book.

Balance Sheet

The **balance sheet** is a static statement that discloses the information about assets, liabilities and equity of the company on the reporting date. It is static in the sense it discloses the position of as on the date and not for the whole financial year. Usually, it is prepared at the end of the financial year. However, the listed companies have the obligation to prepare and publish quarterly and half-yearly balance sheet also. Companies always publish balance sheet in a comparative form disclosing the status of assets, liabilities and equity as at the end of current financial year as well as at the end of previous financial year also. The comparative presentation facilitates an easy and ready reference for horizontal comparison. The balance sheet holds the answer to the question: *"What does a company own and owe at the end of the financial year?"*

Profit and Loss Account/Income Statement

The profit and loss account is prepared for the year ending that implies the presentation of revenue and expenses for the year to arrive at the profit for the year. It discloses the financial outcome of the annual activities in the form of profit or loss for the financial year. The appropriation of profit is shown by preparing profit and loss appropriation account.

> **Profit and loss appropriation account** is like a link between revenue items and capital items, such as assets and liabilities.

Cash Flow Statement

Cash flow statement depicts the movement of cash and its equivalents during previous 12 months, i.e., between two balance sheet dates. It depicts as to what were the sources of cash and where it was applied. It discloses the sources and application of cash and its equivalents in segment wise manner by disclosing separately cash flow from operations, cash flow from investment activities, and cash flow from financing activities. Although it is an analysis of the past financial statements, it facilitates in planning for cash for the coming financial year.

Explanatory Notes to Accounts

Company Act, 1956 and various accounting standards and provisions of IFRS stipulate the disclosure of significant notes to accounts that are necessary for transparency and disclosure. These include the disclosure of significant accounting policies adopted while preparing and presenting the financial statements. These assist the users in making correct interpretation about the financial results and financial position of the company.

Statement of Changes in Equity

This statement is a comprehensive statement disclosing the information about the changes that might have taken place in the amount of equity since the last balance sheet date. It helps in assessing the stake of equity owners in the overall financial structure of the company.

> Company audit by an independent external auditor is a mandatory requirement.

Report of Statutory/External Auditor's Report

Audit of books of accounts and financial statements of a company by an independent external auditor is a regulatory requirement, therefore, it is called **statutory** as well as **external audit**. The annual report of the company should also disclose the external auditor's report. The report by an external auditor might be a qualified or unqualified one. **Qualified report** means reporting deficiencies noticed by the auditor, whereas the unqualified report is the clean report. **Auditor's report** is the value addition from the standpoint of transparency and full disclosure because the external auditor is required to evaluate the quantitative and qualitative facts disclosed in the annual report particularly financial statements.

Board of Director's Report

Section 217 sub-section 2A of Companies Act, 1956 requires that every annual report containing financial statements should be accompanied by **director's report** so as to explain the financial results and authenticate these results. The report should authenticate the following facts:

- Financial results
- Summary of previous financial year's results
- Details of dividend declaration
- Details about depository system
- Summary about capital and finance
- Summary of deposits
- Transfer to investor education and protection fund
- Summary report on subsidiary companies
- Summary on auditor's report
- Disclosures
- Director's responsibility statement

Director's Responsibility Statement

The board of directors of the company should confirm the following facts:

- In the preparation of the annual accounts—final accounts all the applicable accounting standards have been followed and there has been no significant departure from these standards.
- Required accounting policies were applied so as to give true and fair view about the financial position and financial results of the company.
- Due care has been taken for the maintenance of accounts records and books of accounts as specified in the Companies Act, 1956.
- That the company has prepared annual account by following going concern concept.

Management Discussion and Analysis

Every business is subject to changing business environment, business strategies and policies are framed by considering such environment. The strategies are always framed to identify opportunities from the environment external to the company as well as fight against the threats posed by the external environment. The annual report of the company should include a separate note on discussion about these strategies so as to explain the rational for adopting particular business strategies and policies in the interest of development and growth of the company in future. This discussion and analysis include the following:

Business Overview

It discloses the progress of the company's business during the previous financial year and assessment by management about future business scenario in the changing business environment in the economy.

Industry Structure and Development

Herein, changes in the structure of the industry are discussed and analysed with the view to identify opportunities and threats for the company in the coming year. It also deals with the status and development of life cycle of the industry.

Financial Performance as a Measure of Operational Performance

The management of the company particularly top management should discuss about the key factors contributing to the financial performance and measures adopted by the company to manage its financial targets. Herein, progress of the operational performance is analysed by management by considering standalone financial statements.

Opportunities and Risks

Identification of opportunities by management and assessment of the risk involved in such opportunities are discussed in detail. Herein, management also identifies threats to the working of the company such threats might originate from economic, competitive and national as well as international business scenario.

Internal Control Systems and Their Adequacy

Internal control measures adopted to improve functional efficiency, cost cutting measures, quality control, internal audit and related measures are discussed in this. The management also discusses about the adequacy of internal control system adopted by the company during the year.

> Management discussion and analysis is to enhance the quality of information contained in the annual report.

Material Development in Human Resources/Industrial Relations

Development in the human resources and status of industrial relations of the company is presented in this section.

Comments on the Performance of Major Subsidiaries

Subsidiaries are also like an integral part of the parent company. Therefore, the management should explain the performance of major subsidiaries so as to justify the existence of the subsidiaries.

Comment on Financial Performance on a Consolidated Basis

Consolidated financial statements are presented by the parent company. The management should explain the effect on the financial performance of the company in the consolidated form as if it was a single entity.

Cautionary Statement

It describes the company's objectives, projections, estimates, expectations, important factors that could make a difference to the company's operations in light of the constraints posed by the changing business environment in which the company operates.

Corporate Governance Report

Corporate governance encompasses the combination of laws, regulations, rules and business practices that enable the corporate houses to attract capital and discharge its obligation to society. Corporate governance brings in the element of value addition to the disclosure and transparency of the financial statements.

The precise meaning of corporate governance is to disclose the managerial practices, duties and functional responsibilities of strategic management team in achieving organization mission, objectives and goals. Corporate governance practices result in (a) greater management accountability, (b) credibility and (c) increased public confidence in the financial results of the company.

> **Corporate governance** encompasses the combination of laws, regulations, rules and business practices that enable the corporate houses to attract capital and discharge its obligation to society.

USEFUL INFO

Contents of Corporate Governance Report

- Company's philosophy on corporate governance
- The Board of Directors
- Audit Committee

- Remuneration Committee
- Investor's Grievance Committee
- Other Committees
- Subsidiary Companies
- General Body Meetings
- Disclosure
- Means of Communication
- General Information for Members
- Declaration by the CEO under Clause 49 of the listing agreement regarding adherence to the code of conduct
- Practicing company secretaries' certificate on corporate governance

Corporate Governance at Hero Honda Limited

The following abstracts about corporate governance at Hero Honda Limited have been taken from the annual report of Hero Honda Limited for the financial year 2009–10.

Corporate governance phrase

"It is your company because it belongs to you—shareholders. The chairman and the directors are your fiduciaries and trustees. Their objective is to take the business forward in such a way that it maximizes your long-term value."

Corporate governance philosophy

Hero Honda's philosophy of corporate governance stems from a belief that the company's business strategy and plans should be consistent with the welfare of all its stakeholders, including shareholders. Good corporate governance practices enable a company to attract financial and human capital. In turn, these resources are leveraged to maximize long-term shareholders' value. Hero Honda is interested in preserving the interests of society at large.

Pillars of corporate governance

Good corporate governance by Hero Honda is ensured with the help of the following four pillars:

- Transparency
- Full disclosure
- Independent monitoring
- Fairness to all specially to minority shareholders.

Compliance

Corporate governance practices at Hero Honda are visible as it has adopted the following with respect to corporate governance:

- A competent management team at the helm of affairs
- Optimum combination of executive and non-executive including independent directors in the board of directors
- Stable environment for management and employees to discharge their duties
- Internal control system is in place so as to ensure efficient utilization of assets and safeguarding assets from unauthorized use or disposition of these assets
- Audit committee comprising four independent, non-executive and professionally qualified directors
- The company has comprehensive and effective risk management system that ensures timely identification of all the risk and mitigation of the risk in accordance with the risk management policy of the company.

Good Corporate Governance

Corporate governance describes all the influences affecting the institutional processes, including those for appointing the controllers, managers, regulators involved in organizing the production and sales of goods and services. The quality of corporate governance is often the distinguishing factor between companies that advance competitively and those lag behind. Usually, there is a positive correlation between good corporate governance and maximization of value for the shareholders and for rest of the stakeholders.

Corporate Governance at HCL Technologies Limited

The following facts have been extracted from the interim financial report of HCL Technologies Limited for the quarter ending December 31, 2010.

Board of Directors

There are eight directors in the board of the company out of which 75%, i.e., six are independent directors. One is the promoter director who is designated as Chairman & Chief Strategy Officer and one is the executive director who is designated as the Vice Chairman and CEO of the company.

The board of directors of the company meets atleast four times a year and the maximum time gap between any two meetings does not exceed four months.

Audit Committee

The company has four professionally independent directors in its audit committee. The audit committee of the company meets atleast four times a year and the maximum time gap between any two meetings does not exceed four months.

Subsidiary Companies

During the quarter ended December 31, 2010, none of the subsidiaries of the company was a material non-listed Indian subsidiary company, as prescribed in Clause 49 of the listing agreement.

Disclosure

As a part of good corporate governance, the company discloses the following facts:

- Basis of related party transactions
- Disclosure of accounting treatment to material financial items
- Board disclosures
- Proceeds from public issues, rights issues, preferential issues, etc.
- Remuneration of directors
- Management discussion and analysis
- Detail of shareholders

CEO/CFO Certification

The certificate as stipulated under the Clause 49 of listing agreement is included in the annual report for the year 2009–10.

Report on Corporate Governance

A report on corporate governance is included in the annual report for the year 2009–10 providing all the requisite information prescribed in the listing agreement.

Compliance

The company obtained a certificate from the statutory auditors regarding compliance of conditions of corporate governance for the year 2009–10 as stipulated in Clause 49 of the listing agreement. The same was disclosed in the annual report for the year 2009–10.

Voluntary Disclosures

Voluntary disclosures implies the disclosure of such fact that are not mandatory by any of the law or regulatory requirements. Companies disclose several other facts and information so as to keep different stakeholders informed about the activities of the company and future scenario. These might include financial information or certain other information disclosing the facts to enhance the reliability and transparency of the annual report.

As these are not mandatory, therefore, there is no specific format and detail of contents to be discussed under it.

Interim Financial Reporting—A Voluntary Disclosure

Introduction

Reporting financial performance in between the year for a period less than a full year is defined as **interim financial reporting** by the company. **Interim financial report** means presentation of either a complete set of financial statements or condensed set of financial statements for a period less than 12 months. Presentation of interim financial report by a company in India is not mandatory; however, a company may opt to present and publish such reports. The provisions of AS-25 describe the format and contents of interim reports, if any to be presented by a company.

Provisions of AS-25

The provisions of AS-25 under Indian GAAP have been announced so as to have uniformity of interim financial reports presented by a company.

Minimum Components of Interim Financial Report

At the discretion of a company, the company may either choose to present complete set of financial statements as specified under annual report and discussed earlier or condensed set of financial statements as explained in the following. The provisions of accounting standard stipulate the following financial statements at the minimum should be included in an interim financial report:

- Condensed balance sheet
- Condensed profit and loss account (income statement)
- Condensed cash flow statement
- Notes forming the part of accounts that are either in the form of explanatory notes or as an integral part of financial statements.

Form and Contents of Interim Financial Report

- If a company prepares complete set of financial statements in its interim financial report then the requirements regarding form and contents are at par with those applicable for the presentation of financial statements in its annual report.
- If a company chooses to present condensed set of financial statements in its interim financial report then such condensed set of financial statements should have all those headings as presented by it in its annual report.

Period for Interim Financial Report

Interim financial report should be presented for the following reporting period:

- Balance sheet at the end of current interim period and a comparative balance sheet for the corresponding period of the previous year.
- Profit and loss account for the current interim period, and cumulatively for the current financial year to the date, with comparative statement of profit and loss for the comparable interim period.
- Cash flow statement cumulatively for the current financial year to date with a comparative statement for the comparable year-to-date period of the immediately preceding financial year.

However, in case of highly seasonal business financial information for 12 months immediately preceding the interim period and for a comparable period of the previous financial year should be presented to facilitate comparison.

Materiality

While presenting interim financial report, only the items that are material in nature and that are likely to influence the decision of stakeholders should only be presented in interim financial statements.

DISCLOSURE QUALITY

Apart from the magnitude of information disclosed in the annual report, it is the quality of the information disclosed that creates an impact on the value addition in the information disclosed in the annual report. Quality has a very subjective meaning but the most common parameters for testing the quality of information disclosed in the annual report are as follows:

- Appropriateness of information for decision-making
- Quantum of information to suffice the base for decisions making
- Interpretational value of information

The annual report must disclose the following facts to enhance the quality of information disclosed therein:

- Enterprise external environment analysis
- Internal environment analysis
- Business critical success factors
- Competitive advantages and disadvantages
- Mission
- Target
- Quantitative target
- Company's overall strategy
- Consistency of corporate strategy
- Monitoring of the company's strategy
- Strategic goals of business unit
- Strategy of business units
- Strategic action plan implemented in previous year
- Plan of action to be taken next year

SEGMENT REPORTING

The purpose of presenting annual report is to apprise the stakeholders about the financial as well as non-financial performance of the company. To enhance the quality of disclosure and add a value to the disclosed information, companies have the regulatory obligation to adopt segment reporting. **Segment reporting** implies the disclosure of financial highlights relating to different business and geographical segments in which a corporate entity operates.

Introduction

There are the companies that have more than one business segment—providing different nature of products and services or operate in more than one geographical segment—diverse geographical environment or multiple location. These segments are different from each other in terms of probability of earning, risk prospects, business environment, working conditions, demand and supply constraints, etc. Therefore, reporting financial performance resulting from each segment distinctly becomes unavoidable so as to facilitate proper analysis and interpretation of financial statements.

Provisions of IAS-14 and AS-17 contain the details about segment reporting by a company. The objectives of such reporting are as follows:

- To facilitate better understanding of the financial performance
- For an accurate assessment of risk and return of the business entity
- To make more informed decisions about the business entity as a whole

The segment reporting serves the purpose of providing exclusive details about the profitability and risk profile of each segments in which the business entity operates.

Segments

IAS-14 and AS-17 provide the following two segments:

- Business segment
- Geographical segment

Business Segment

A **business segment** is a separately identifiable component or divisions of a business enterprises that is engaged in providing an individual product or services that are different in nature from the products and services provided by other divisions of the business enterprise. The distinction between different business divisions as business segments should be made on the basis of the following facts:

- The nature of products or services offered
- The category of customers served by each of the business divisions
- The nature of production process or production/distribution cycle
- The nature of the regulatory environment, if any

The primary focus in identifying business segment is to consider the risk profile and operational profile for the products and services. Products of similar risk and operational profile should be kept in same business segment however these might differ in nature from each other, whereas product of different risk and operational profile should be kept in different segments.

A **business segment** is separately identifiable component or divisions of a business enterprise that is engaged in providing an individual product or services that are different in nature from the products and services provided by other divisions of the business enterprise.

Illustration GVK Power and Infrastructure Limited has three business segments, i.e., energy, transportation and urban infrastructure. The risk, regulatory and operational profile of all these segments is significantly different from one another. Therefore, these have been identified as **business segments**.

In certain cases, the identification of business segment depends upon the perception of management, such as segmentation of utility vehicles divisions and passenger car vehicles as separate business segment. Like air conditioners divisions and refrigeration division of an electrical equipment company may be considered as different business segments.

In Table 19.1, we present segments as adapted from the annual reports presented by different companies for the year 2008–09. The list is illustrative and not exhaustive.

Table 19.1 *Corporate India and Segment Reporting—an Illustrative List*

Name of Company	Segments	% in Total Revenue
3M India	(i) Industrial and transportation business (ii) Safety, security and protection services business (iii) Health care business (iv) Display and graphics business (v) Consumer and office business	45.00 17.80 15.40 12.90 8.90
Aditya Birla Nuvo	(i) Life insurance and financial services (ii) Telecom (iii) Textile garments and rayon (iv) Insulators (v) Carbon black (vi) Fertilizers	53.90 18.50 13.10 2.40 6.40 5.70
Balmer Lawrie	(i) Industrial Packaging (ii) Travel and tours (iii) Logistics, infrastructure and services (iv) Greases and lubricants (v) Others	32.40 30.30 16.70 14.70 5.90
Orient Paper & Industries	(i) Cement (ii) Electrical consumer durables (iii) Paper	55.40 29.80 14.80
Kesoram Industries	(i) Cement (ii) Tyres (iii) Rayon, TP and Chemicals	38.10 56.70 5.20

Geographical Segment

A **geographical segment** is a distinct division of a business entity that operates in distinct economic environment or operates in different geographical location that is significantly distinct from other division. The following facts should be considered while identifying geographical segments:

- Nature of economic and political conditions
- Relationships between operations in different geographical location/areas
- Proximity of operations
- Exchange control regulations
- Underlying currency risk.

The identification of geographical segment should be done by considering either the location of production facilities installed by a business entity or on the basis of location of customers. For a company, one geographical segment might include a country or a continent depending upon the changes in the economic environment, political environment, exchange control regulation and currency risk. Usually, each country is identified as one single geographical segment because the critical factors discussed earlier are likely to change across the countries.

A **geographical segment** is a distinct division of a business entity that operates in distinct economic environment or operates in different geographical location that is significantly distinct from other division.

Identification of Segments

Identification of business segment or **geographical segment** is governed by (i) regulatory aspects as specified in the accounting standards and (ii) philosophy and vision of the management team of a company.

How a business segment or geographical segment is to be identified cannot be made spell bound. It all depends upon the ideology and philosophy of management about managing the business efficiently. Although regulatory provisions in the form of accounting standards specify the criterion for the identification of business and geographical segments, managerial skills, prudence and vision are the critical factors in identifying segments.

The first test for identifying a particular segment is to find whether a particular product or service needs a separate identification from the viewpoint of managerial decision-making, revenue generation, expenses, regulatory environment, are related facts.

ILLUSTRATION India Bulls having broking divisions and real estate divisions also. Both need to be identified as separate business segments. Similarly, for Hero Honda producing scooty and motorcycle, both are two wheelers keeping both in one business segment or in different business segment depends upon the vision and management style of the management team. Both of these can be differentiated on the basis of customer segment as scooty is targeted at women and motorcycle at men.

Once it seems logical to identify a segment from the viewpoint of management then it should be reported in the annual report so as to apprise different stakeholders about revenue generation and business performance of each of the segment. The provisions of **AS-17 and IAS-14** specify only the outer periphery for the identification of these segments on the basis of the following:

- Proximity or distinctness of product and services tested on several parameters
- Proximity or distinctness of geographical location of production units or customer
- Proximity or distinctness of economic and political environment.

IDENTIFYING REPORTABLE SEGMENTS

The task of identify business segments and geographical segments depends on the nature of risk and return governing the operations of the business enterprises and the pattern of internal reporting to directors, managing director, chief executive officer in assisting them to facilitate the evaluation of business performance and to help in designing business strategies. The identification of reporting segments helps the managerial team to formulate financing, competition and investment strategies At the same time, such reporting helps external stakeholders to understand the business performance in a more logical manner.

The reporting segments identified by a business entity are classified as (i) primary reporting segment and (ii) secondary reporting segment.

Primary and Secondary Reporting Segments

The provisions of IAS-14 and AS-17 describe as to which segment should be the primary reporting segment and which one to be the secondary reporting segment. The provisions are as follows:

- When risk and return of a business entity are strongly affected by differences in the products and services it produces and by the difference in the geographical areas in which it operates. At the same time, the reporting to internal management is also done using both the segmentations. Then it should identify the *business segment as primary reporting segment and geographical segment as secondary reporting segment.*
- When risk and returns of a business enterprise are affected by both the segments but reporting to internal management does not follow any pattern; rather it is a random reporting. Then the business enterprise should identify whether the risk and return are related more to differentiation in products or to geographical location, depending upon this judgement one segment is to be selected as primary reporting segment and another one as secondary segment.

Reportable Segments

AS-17 and IAS-14 do not require a business enterprise to include the information about each and every business and geographical segment identified by it; rather the identification of reportable segments is necessary.

Accordingly, a business segment and geographical segment should be identified as reporting segment if

- its revenue from sales to external customers and from transactions with other segments is 10% or more of the total revenue, external and internal, of all segments, or
- its segment result, whether profit or loss, is 10% or more of (a) the combined results of all segments in profit, or (b) the combined result of all segments in loss, whichever is greater in absolute amount or
- the combined result of the segment assets are 10% or more of the total assets of all segments.

While identifying reporting segments, the threshold limit of 10% is the major criterion as specified earlier. But at the same time, the total external revenue attributable to all the reportable segments should not be less than 75% of the aggregate revenue both internal and external. This implies that the company should keep on identify reportable segments till the time total revenue from reportable segments does not reach the specified limit of 75% whether the threshold limit of 10% is met or not.

Segment Accounting Policies

The segment reporting should be done by using the accounting policies adopted by the management in preparing the financial statements of the business enterprises as one single entity. There should not be any deviation in the accounting policies in reporting about different segments.

Disclosure

IAS-14 and AS-17 require that the annual report should disclose both primary reportable segment and secondary reportable segment.

Primary Reportable Segment

The following should be disclosed about primary reportable segment:

- Segment revenue—internal and external
- Segment results
- Total carrying amount of segment assets and segment liabilities
- Total costs incurred during the reporting period on the acquisition of assets to be used for a period more than one year
- Total intangible and intangible assets of the segment
- Total amount of depreciation
- Total amount of cash and non-cash expenses other than depreciation for each of the segment.

Secondary Reportable Segment

The reporting enterprises should disclose the following about secondary reportable segment:

- If primary reportable segment is business segment, it should report the following additional information:
  - Segment revenue from external customers by geographical area or location of customers separately for each geographical segment whose sales revenue meets the threshold criterion of 10% of the enterprise's total sales revenue.
  - The total carrying amount of segment assets by each geographical segment whose asses meet the threshold criterion of 10% of all the geographical segments.

    - The total cost incurred to acquire segment assets for each of the geographical segment whose assets are 10% or more of the total assets of all the geographical segments.
- If primary reportable segment is geographical segment, it should report the following additional information:
    - Segment revenue from external customers for each of the business segment that meets the threshold criterion of 10% of the enterprise's total sales revenue.
    - The total carrying amount of segment assets by each business segment whose asses meet the threshold criterion of 10% of all the business segments.
    - Total cost incurred to acquire segment assets for each of the business segment whose assets are 10% or more of the total assets of all the business segments.

Other Disclosures

Apart from disclosing primary and secondary reportable segments, a business entity is required to disclose the following additional facts about different segments:

- As far as possible inter-segment transfer should be recognized at the normal price as it would be applicable for transfer to external party. The basis of pricing for inter-segment transfer should be disclosed with the logic for such pricing.
- The change in accounting policies for segment reporting that might have a significant impact on the reported revenue, assets, expenses and profits of different segments.
- Impact on profit of the changes in the accounting policies.
- Information about changes in segments, if any and reasoning for such changes.

Segment Reporting—Indian GAAP

Under Indian GAAP, AS-17 stipulates the provisions and disclosure requirement regarding segment reporting. The provisions contained in this accounting standard are at par with the provisions stipulated in IAS-14.

Recap 1

So far, we have discussed the following topics:
- Corporate Financial Reports
- Contents of Annual Report
- Provisions of IAS , IFRS and AS Regarding Corporate Financial Reporting
- Corporate Governance
- Segment Reporting

Self-assessment

1. Write short notes on the following:
   (a) Contents of annual report
   (b) Criterion for making segmentation under Indian GAAP

The following topics will be delved into next:
- Related party disclosure
- Provision of IFRS and AS regarding related party disclosure
- Provision of IFRS and AS regarding discontinuing operations
- EPS and stipulation of IFRS and AS about it
- Global reporting initiative and sustain-able development report
- Corporate social responsibility report of L & T
- Case

RELATED PARTY DISCLOSURE

IAS-24 and AS-18 require that the annual report of the company should disclose the facts about related party so as to apprise the evaluators about the impact of related party information on the financial performance of the company. The provisions of AS-18 were made mandatory from April 1, 2004, whereas the provisions of IAS-24 were made mandatory from January 1, 2005.

Definitions

The provisions of both of these accounting standards have defined the following parameters:

Related Parties

Two or more parties are considered to be related if at any time during the reporting period one party has the ability to control by virtue of an agreement or the implementation of law the other party or exercise significant influence over the operating and financial decisions.

USEFUL INFO

Exclusion from related party—Not to be deemed as related party

- Two companies simply because they have a director in common
- Two companies having common customer, supplier, franchiser, distributor or general agent in common
- Two companies that have common bank, trade union, public utilities and government departments

Related Party Transactions

Any transfer of resources between related parties irrespective of the facts that a price is charged for such transfer or not.

Control

The ownership directly or indirectly of more than one half of the voting power of an enterprise by another enterprise. It also encompasses the control of the composition of board of directors or control over the operating and financial decisions of one company by another company.

Key Management Personnel

Those persons who have the authority and responsibility for planning, directing and controlling the activities of the reporting enterprise.

Key management personnel are those persons who have the authority and responsibility for planning, directing and controlling the activities of the reporting enterprise.

Close Members of Family and Relative

In relation to an individual means, the spouse, son, daughter, brother, sister, father and mother who may be expected to influence, or be influenced by, that the individual in his/her dealings with the reporting enterprise.

Objectives of Related Party Disclosure

Provisions of AS-18 and IAS-24 specify the following objectives regarding related party disclosure:
- Disclosure of related party relationships
- Disclosure of transactions between a reporting enterprise and its related parties.

Scope of Related Party Disclosure

The provisions of related party disclosure require the disclosure of relationship and the transactions between reporting enterprise and the related parties. Usually, the following transactions between a reporting company and
- its subsidiaries/holding companies
- its associate companies
- group companies to which it belongs
- its joint ventures
- its key management personnel
- individuals owning directly or indirectly a significant voting power in the reporting company, its subsidiaries/holding company.
- its directors or CEO (chief executive officer)
- remuneration paid to key management personnel by disclosing the category of employees and the remuneration paid to them

Related Party Disclosure—Indian GAAP and International Accounting Standard

As per the provisions of AS-18 and IAS-24, a company is required to disclose in its annual report the following facts about related parties:
- Name of the transacting related party and the description of relationship between the parties
- Nature of transaction including volume in amount and other measurements
- Other parameters about the related party transactions that might influence the decision-making by stakeholders
- Outstanding amount and amount written off relating to related party transaction
- The measurement basis for related party transaction
- The details of significant contracts with the related parties

Such disclosure helps the stakeholder in making an informed decision about the company.

DISCONTINUING OPERATIONS

IAS-35 and AS-24 contain the provisions regarding disclosure about discontinuing operations of a business enterprise. In March 2004, IFRIC introduced IFRS-5, which replaced the provisions of IAS-35. In March 2011, ICAI has also introduced draft of Ind-AS-105 about discontinuing operations. It has been discussed in Appendix-III .

Discontinuing Operation—Definitions

Discontinuing operation should be recognized when a business enterprise disposes a business segment or geographical segment either entirely or substantially resulting into abandonment of control by the reporting enterprises. Normal sale of assets that does not result into abandonment of control over the business segment or geographical segment is not to be recognized discontinuing operation. Such discontinuing might occur on account of the following:

- Demerger or spin-off
- One off or piece meal sale of a segment resulting into loss of control by reporting entity
- Termination through abandonment

Objective

The primary objective of disclosing discontinuing operations is to facilitate informed decisions by the stakeholders. The provisions of AS-24 to be read along with Ind-AS 105 and IAS-35 (now IFRS-5) specify the following objectives:

> "The objective of disclosing information about discontinuing operation by reporting entity is to establish principle for reporting information about discontinuing operations, thereby enhancing the ability of users of financial statements to make projections of the enterprise's cash flows, earning-generating capacity, and financial position by segregating information about discontinuing operations from information about continuing operations.
>
> —Adapted from AS-24 and IAS-35

The purpose of having an accounting standard on discontinuing operations is to keep the stakeholders informed about the business/geographical segments being abandoned by the reporting enterprise and implication of such discontinuation on the cash flow-generating, profit-earning and other operating and financing operations on the reporting enterprises.

Discontinuing operation should be recognized when a business enterprise disposes a business segment or geographical segment either entirely or substantially resulting into abandonment of control by the reporting enterprises.

Scope

The provisions of IAS-35 and now IFRS-5 insist about disclosing the following facts about discontinuing operations:

- A description of the discontinuing operation alongwith business/geographical segment to which such discontinuing operation is related.
- The date of announcement of plan for discontinuation and the expected timing by which discontinuation plan is likely to be completed.
- The carrying amount of total assets and liabilities to be disposed off or to be demerged.
- The amount of revenue, expenses/losses relating to the operation being discontinued.
- The net amount of consideration received or receivable from discontinuing operation.
- The amount of loss or profit resulting from such discontinuing of business operation.

Apart from these the reporting enterprise is required to disclose the material facts that are likely to affect its operational and financial operation after discontinuing operation is implemented.

Disclosure Manner

Although the provisions of IAS-35 and IFRS-5 do not contain as how the disclosure about discontinuing operation is to be presented in the annual report; yet it is interpreted that only the financial implication in the form of loss or gain should be disclosed distinctly in the financial statements and rest of the details should be given in the following aspects where it is deemed appropriate:

- In the management discussion and analysis
- In the explanatory notes

- In the director's report
- In the notes to financial statements

Discontinuing Operations and Indian GAAP—AS-24

Apart from the definition and objective mentioned earlier, the following are the exclusive provisions of AS-24 very soon to be read alongwith Ind-AS-105 regarding discontinuing operations:

Initial Disclosure Event

Initial disclosure event earlier one out of the following:

- Date of agreement between the reporting enterprises and other party resulting into a binding sale agreement that can be identified as discontinuing operation
- Date on which board of director of reporting enterprises has announced or approved such discontinuing operation alongwith detailed plan of action for discontinuing operation.

Recognition and Measurement

The recognition and measurement of different assets and liabilities being disposed off on account of discontinuing operations is to be carried out on the basis of relevant accounting standards about impairment of assets, derecognition of assets and liabilities and derecognition of equity instrument, whichever applicable. All these have been discussed in detail in the respective chapters on fixed assets, current assets, investments, liabilities and equity instrument of this book.

Apart from the derecognition of assets and liabilities, profit or loss on disposal of assets and liabilities should also be recognized by the following the provisions about recognition and measurement of income and expense resulting from sale or impairment of assets:

Other Disclosures

The following additional facts should be disclosed with regards to discontinuing operations:

- Net selling price of assets and net settlement amount of liabilities.
- Gain or loss recognized on the disposal of assets or settlement of liabilities.
- Financial and operational impact of the operation being discontinued.

All these disclosures whether under IFRS-5 or AS-24 should start from the early date of recognizing discontinuing operation and continue till the completion of discontinuing operation.

EARNING PER SHARE (EPS)

Potential ordinary share is the one that is likely to come into existence in the near future on account conversion of certain securities or likely exercise of an option granted by the reporting enterprise.

Earning per share (EPS) is a measurement to carry out financial performance of the business enterprises from equity shareholders perspective. It apprises the shareholders about the amount of profit earned by the enterprise on each equity share. The common formulae to calculate EPS is

EPS = (Profit after tax – Preference dividend amount)/Number of equity shares

Provisions of IAS-33 and AS-20

The provisions of IAS-33 and AS-20 are similar in nature these specify the following with respect to EPS:

Objectives

The primary objective of the determination and disclosure of EPS is to improve the quality of information contained in the annual report and asset in evaluating and comparing the financial performance of reporting entity. The standard applies to the business entities whose shares are publicly traded or likely to be traded very soon.

Definitions

Ordinary share is an equity instrument that is subordinate to rest of the category of shares, this implies residual claim of ordinary shareholders. These are also called **equity shares**. These refer to existing and outstanding equity shares on reporting date.

Potential ordinary share is the one that is likely to come into existence in the near future on account conversion of certain securities or likely exercise of an option granted by the reporting enterprise.

Presentation

The provisions of IAS-33 specify that the annual report should present the following:

Basic Earning per Share **Basic earning per share** is calculated by considering current year's profit or loss that is attributable to equity shareholders and weighted number of equity shares for the reporting period. The amount of current year's profit attributable to equity shareholders is arrived at by adjusting preference dividend and tax thereon from profit after tax for the reporting period; whereas weighted number of equity shares for the reporting period is the weighted average of number of ordinary (equity) shares outstanding by considering time element as the weight for the calculation of weighted average number of equity shares.

> Basic earning per share =(PAT − post tax amount of preference dividend)/ weighted average number of ordinary shares

Basic earning per share = (PAT – post tax amount of preference dividend)/ weighted average number of ordinary shares

Here the number of ordinary shares is the one actually outstanding during the year without considering prospective ordinary shares.

Diluted Earning per Share **Diluted earning per share** is calculated by considering dilution in the reported equity earning on account of prospective ordinary shares and the weighted number of ordinary shares after considering prospective ordinary shares on account of conversion, bonus, rights or exercise of the option due in the reporting period.

> Diluted earning per share = (Diluted PAT − post tax amount of preference dividend)/ diluted weighted average number of ordinary shares

Diluted earning per share is calculated by considering all the dilutive effect with respect to earning attributable to ordinary shareholders as well as to the weighted average number of ordinary shares outstanding. Dilution results in the reduction in the earning per share or an increase in loss per share.

The dilution is accounted on account of potential ordinary shares likely to come into existence on account of potential conversion, expected issue of bonus shares and related aspects.

Diluted earning per share = (Diluted PAT − post tax amount of preference dividend)/ diluted weighted average number of ordinary shares

Here the number of ordinary shares is the one actually outstanding during the year including prospective ordinary shares likely to originate on account of conversion or bonus issue.

Retrospective Adjustments When the number of ordinary shares or potential ordinary shares is likely to increase or decrease on account of capitalization of profit—bonus issue, share split or consolidation of shares then the calculation of basic EPS and diluted EPS should be made from retrospective effect.

EPS calculated by making this retrospective adjustment is called **adjusted EPS**. This is calculated by considering weighted average number of shares resulting subsequently and applying these numbers to equity shareholders' earning reported on earlier date.

Adjusted EPS = (Equity shareholder' earning as on prior year/weighted average number of equity shares calculated as at the end of current year)

Adjusted EPS = (Equity share-holder's earning as on prior year/ weighted average number of equity shares calculated as at the end of current year)

Example 1 On April 1, 2010, X Limited had 1,00,000 equity shares and it has profit after tax attributable to equity shareholders of ₹ 5,00,000. During the year 2010–11 on July 1, 2010, it issued 20,000 new shares and on January 1, 2011, 30,000 more shares were issued on conversion. The reported profit after tax attributable to equity shares for the year ending 2010–11 was ₹ 8,20,000. Calculate basic EPS.

Solution Basic EPS on April 1, 2010 is to be calculated as follows:
Earning attributable to equity share holders = ₹ 5,00,000
Number of ordinary shares = 1,00,000
Basic EPS = ₹ 5 (5,00,000/1,00,000)
Basic EPS on March 31, 2011is to be calculated as follows:
Earning attributable to equity share holders = ₹ 8,20,000
Weighted average number of ordinary shares has been calculated as follows:
Number of ordinary shares from April 1 to June 30 (3 months) = 1,00,000
Number of ordinary shares from July 1 to December 31 (6 months) = 1,20,000
Number of ordinary shares from January 1 to March 31 (3 months) = 1,50,000
Weighted average number of ordinary shares
$= 1,00,000 \times 3/12 + 1,20,000 \times 6/12 + 1,50,000 \times 3/12 = 1,22,500$
Basic EPS = ₹ 6.69 (8,20,000/1,22,500)

Example 2 A company has 3,600 equity shares on April 1, 2010 on August 31, 2010 company issued 1,200 more shares and on February 1, 2011 it bought back 600 shares. Calculate weighted average number of equity shares on March 31, 2011.

Solution

Date	Number of shares outstanding in the beginning	Increase or decrease	Number of shares outstanding at the end	Duration in months
April 1, 2010	3,600	nil	3,600	5
August 31, 2010	3,600	1,200	4,800	5
February 1, 2011	4,800	(600)	4,200	2

Weighted average number of equity shares on March 31, 2011
$= 3{,}600 \times 5/12 + 4{,}800 \times 5/12 + 4{,}200 \times 2/12 = 4{,}200$ equity shares

Indian GAAP and EPS

The provisions of Indian GAAP on EPS represented by AS-20 are at par with the provisions of IAS-33 with the difference about the following disclosure requirements:

Disclosure

AS-20 provides the following specific disclosure apart from the disclosure of basic EPS, diluted EPS, ordinary shares and potential ordinary shares the following additional fact should also be disclosed:

- If profit and loss account contains extraordinary items, such as prior period items the basic as well as diluted EPS should be presented by excluding the effect of such items.
- A reconciliation statement to reconcile profit after tax as disclosed by the income statement and used as numerator in the formulae for the calculation should be presented in the annual report.
- The calculation of weighted average number of ordinary shares and potential ordinary shares with the nominal value of these shares.

GLOBAL REPORTING INITIATIVES

The global reporting initiative (GRI) is a framework of internationally accepted guidelines and principles for companies and business entities to report on (i) corporate responsibility, and (ii) sustainable development report by the reporting enterprise. It has emerged as a facilitating agent in building a new environment for reporting corporate financial performance to facilitate informed decision by stakeholders. It is more qualitative in nature rather than being quantitative. Qualitative in the sense, it discloses the initiatives taken by the reporting enterprises with respect to corporate responsibility, such as corporate social responsibility report. It also encompasses vision of management about future business development and the means to sustain such development.

It can be viewed as an additional discipline in reporting corporate responsibility and a statement about the sustainability of the development of the business enterprise in the changing environment. It also requires the disclosure of corporate initiatives to maintain or enhance sustainability of the development for the company as well as for society at large.

Global Earth Summit in Rio de Janeiro in the year 1992 insisted upon the adoption of **sustainable development** by corporate houses. This can be ensured by providing protection to society in the form of environmental protection by maintain the developmental activities of corporate houses. Global reporting initiative insists upon including sustainable development report in the corporate annual report.

Corporate Responsibility—Corporate Social Responsibility

This implies the disclosure of corporate initiative in discharging its responsibility towards certain external stakeholders, such as society and employees and related entities. Companies take initiative to provide conducive environment for the society as well as to their employees. Companies spend significant resources to provide the following facilities to their employees and society at large:

- Provide health services and health education to its employees.
- Provide educational facilities to its employees.

- Provide clean and green environment for society as well as for its employees.
- Provide transport facilities to its employees to attend their duties.
- Ensure environment protection for employees and for society at large.
- Development of surroundings relating to the work area of business enterprises.

CORPORATE SOCIAL RESPONSIBILITY REPORT OF LARSEN & TOUBRO (L & T) LIMITED

The following are the extracts of Corporate Social Responsibility Report from 64th Annual Report of L & T for the year 2008–09.

Today's choices can lighten tomorrow's compulsions

L & T is one of the first engineering and construction companies in India to publish its report on corporate sustainability. The company and its people are committed to living and doing business in a manner that will ensure sustained well-being for all.

A Key to the Future

L & T has set up construction skills training institute at Ahmedabad, Bangalore, Chennai, Delhi and Panvel to turn dropouts into contributing members at their families and of society at large. The institutes ensure a steady supply of skilled labour to the construction industry, helping it sustain its momentum.

Health

Around its factories, offices in the colonies and other places, the company has initiated health awareness programme to educate its employees as well as public at large about health awareness, environment conservation and related issues. The company's programme on HIV/AIDS prevention initiatives include creating awareness camps targeted at high risk-groups and motivating them for voluntary test and check-up.

Education

The company has adopted several municipal schools in the vicinity of its factories, offices and residential premises of its staff. This is an initiative to educate the society at large.

Environment

The company has taken significant initiative to reduce the consumption of energy at its factories. Anti-pollution measures help minimize the impact of industrial processes on the environment.

Sustainable Development Report

Sustainable development implies achieving desired corporate goals and objective within the limited resources by having optimum use of the resources by ensuring **global well being**. Sustainable development focuses on the benefits for the company as well as for the society at large. The sustainable development initiatives focus on the initiatives of the company in providing better products and services to its present and prospective customer. At the same time, it encompasses the initiative of the business enterprise in enhancing brand value and foster research and development for providing improved goods and services that otherwise may not be made available to society at large.

Sustainable development also implies taking initiative with respect to the following:

- Efforts in reducing operating costs and improve efficiencies.
- Develop innovative products and services for having an access to new market segment.
- Improving brand value and corporate image.
- Recruitment and retentions of excellent employees.
- Better utilization of investor's capital and create a scope for further accessibility to capital market.

- Enhance the public value of the company by implementing qualitative initiatives for product development, protection to society and optimum use of resources.
- Reduce liabilities through integrated risk management practices.

Sustainable Development Issues

The code of conduct for sustainability report provides that a corporate house should ensure sustainable development by focusing on the following three:

- **Economic** It includes efforts of the company with respect to research and development, protection of wages and other benefits for the employees, improving labour productivity and generating the scope for further employment. The company should disclose financial implication as well as qualitative aspects of the initiatives taken by it.

- **Environmental** Corporate initiatives with respect to environment protection within the company as well as outside the company for society and nation at large it should disclose financial and qualitative measures taken by the company to protect and improve the working environment by implementing anti pollution facilities.

- **Social** Ensuring labour and human rights, customer care, discharging social responsibility of the company towards the society by providing education, transport and health facilities to employees and society at large.

Global reporting initiative in the form of corporate social responsibility and sustainable development report is more qualitative in nature rather than quantitative.

SOLVED EXAMPLES

Example 3 On April 1, 2010 Jee Limited (JL) has 180 crore shares outstanding of face value ₹ 10 fully paid up. On January 31, 2011, it issued 60 crore more shares of face value ₹ 10 and ₹ 5 paid up. Calculate weighted average number of shares for calculating EPS.

Solution

- Number of fully paid shares from April 1, 2010 to January 31, 2011 (10 months): ₹ 180 crore
- Number of new shares 50% paid-up amount issued on January 31, 2011: ₹ 60 crore
- Total number of shares from February 1, 2011 to March 31, 2011 (2 months): ₹ 180 crore fully paid and ₹ 60 crore partly paid (paid-up proportion 0.50)
- Weighted average number of shares on March 31, 2011
  $= (180 \times 10/12) + (180 + 60 \times 0.5) \times 2/12 = 185$ crore shares

Example 4 Profit after tax attributable to equity shares on March 31, 2010 is ₹ 18,00,000 and on March 31, 2011 is ₹ 60,00,000. The number of shares outstanding on March 31, 2010 was 40,00,000. On October 1, 2010, the company issued bonus shares in the ration of 2:1 by capitalization of profits. Calculate basic EPS on March 31, 2010 as well as adjusted EPS on this date and basic EPS on March 31, 2011.

Solution

(i) Number of equity shares on March 31, 2010 is 40,00,000 and equity shareholders' earning is ₹ 18,00,000 the basic EPS on this date is
$= 18,00,000/40,00,000 =$ ₹ 0.45

(ii) Bonus issue is in 2:1; which implies that the company will issue two new shares for every one existing shares. Therefore, the new shares to be issued pursuant to bonus issue is 80,00,000 (40,00,000 × 2). As bonus shares are issued by converting accumulated profit into paid amount and do not result into inflow of cash for company, due to conversion of profits these are always pari-pasu, i.e., at par with existing shares, therefore, these are to be considered as if these existed in the beginning of the year as well.

(iii) Now total number of shares after the bonus issue becomes 1,20,00,000 shares (40,00,000 + 80,00,000). And equity shareholders' earning on March 31, 2011 is ₹ 60,00,000. Now basic EPS on March 31, 2011 is
= 60,00,000/1,20,00,000 = ₹ 0.50

(iv) Adjusted EPS on March 31, 2010 should be calculated by using earning on March 31, 2010, i.e., ₹ 18,00,000 and weighted average number of shares on March 31, 2011
= 18,00,000/1,20,00,000 = ₹ 0.15

EXAMPLE 5 A company has profit after tax of ₹ 10,00,000 on April 1, 2011 with number of shares outstanding 5,00,000 of face value ₹ 10 each fully paid. On this date, there were 10,000 12% convertible debentures of face value ₹ 100 each convertible into 10 equity shares of face value ₹ 10 each fully paid the conversion is due during the year. Tax rate for company is 30%. Calculate basic EPS on April 1, 2011 and diluted EPS on the same date.

SOLUTION

- On April 1, 2011 PAT attributable to equity shareholders: ₹ 10,00,000
- Number of equity shares outstanding on this date: 5,00,000
- Basic EPS on this date = ₹ 2 (10,00,000/5,00,000)
- Amount of interest on debentures: ₹ 1,20,000 (10,00,000 × 12/100)
- After the conversion before tax, earning will increase by ₹ 1,20,000 and after tax earning by ₹ 84,000 (1,20,000 − 1,20,000 × 30/100).
- Therefore, diluted PAT on April 1, 2011 = ₹ 10,84,000 (10,00,000 + 84,000)
- Diluted number of shares on April 1, 2011: 6,00,000 (5,00,000 + 1,00,000)
- Diluted EPS on April 1, 2011 = 10,84,000/6,00,000 = ₹ 1.81

EXAMPLE 6 PAT on April 1, 2010 is ₹ 1,20,000 with outstanding weighted average number of shares 50,000 of face value ₹ 10 each and fair value per share for the year 2010–11 is ₹ 20 per share. Weighted number of shares resulting from option due during the year 2010–11 is 10,000 with an exercise price of ₹ 15 per share. Calculate basic EPS and diluted EPS on April 1, 2010.

SOLUTION:

- PAT on April 1, 2010: ₹ 1,20,000
- Weighted average number of shares on this date: 50,000
- Basic EPS on April 1, 2010 = 1,20,000/50,000 = ₹ 2.40
- Weighted number of shares resulting from option is 10,000 at an exercise price of ₹ 15, whereas fair value is ₹ 20 this implies the effective number of shares resulting from option is = 10,000 – (10,000 × 75/100) = 2,500
- Here 10,000 shares will be issued receiving a total payment of ₹ 1,50,000, whereas actually these should have been at a total value of ₹ 2,00,000. Therefore, only 2,500 shares (2,00,000 − 1,50,000)/20 is considered to be issued without consideration.

- Weighted number of shares after the exercise of the option is 50,000 + 2,500 = 52,500 this is to be taken as diluted number of shares for calculating diluted EPS
- Diluted EPS on April 1, 2010 is = 1,20,000/52,500 = ₹ 2.29

KEY TERMS

Corporate financial report—annual report
Segment reporting
Reportable segment
Diluted EPS
Sustainable development report
Corporate governance
Business segment
Discontinuing operations
Adjusted EPS
Geographical segment
Basic EPS
Global reporting initiative
Corporate social responsibility

FINAL RECAP

Price sensitive information is such set of information that when made public is likely to have an influence on the share price of the company.

Apart from shareholders, other stakeholders in a company are moneylenders, banks and financial institutions, suppliers, debenture holders, government and certain regulatory bodies.

Quality of disclosure represented by (i) level of disclosure and (ii) level of transparency influence the decision-making by the stakeholders.

Transparency implies presentation of the information as par as possible in self explanatory manner at the same time there should not be any significant time decay between the generation of information in the company and its presentation/publication.

Corporate financial report, i.e., annual report, usually should disclose the following:

- A complete set of financial statements—balance sheet, income statement, cash flow statement, explanatory notes to accounts, statement of changes in equity
- Report of statutory/external auditor's report
- Board of director's report
- Management discussion and analysis
- Corporate governance report
- Voluntary disclosure

The **balance sheet** is a static statement that discloses the information about assets, liabilities and equity of the company on the reporting date.

The **profit and loss account** is prepared for the year ending that implies the presentation of revenue and expenses for the year to arrive at the profit for the year.

Cash flow statement depicts the movement of cash and its equivalents during previous 12 months, i.e., between two balance sheet dates.

Statement of changes in equity is a comprehensive statement disclosing the information about the changes that might have taken place in the amount of equity since the last balance sheet date.

Qualified report audit report means reporting deficiencies noticed by the auditor where unqualified report is the clean report.

Corporate governance practices result in (a) greater management accountability, (b) credibility and (c) increased public confidence in the financial results of the company.

A **business segment** is separately identifiable component or divisions of a business enterprises that is engaged in providing an individual product or services that are different in nature from the products and services provided by other divisions of the business enterprise.

A **geographical segment** is a distinct division of a business entity that operates in distinct economic environment or operates in different geographical location that is significantly distinct from other division.
Related Parties: Two or more parties are considered to be related if at any time during the reporting period one party has the ability to control by virtue of an agreement or the implementation of law the other party or exercise significant influence over the operating and financial decisions.
Discontinuing operation should be recognized when a business enterprise disposes a business segment or geographical segment either entirely or substantially resulting into abandonment of control by the reporting enterprises.
Basic earning per share is calculated by considering current years profit or loss that is attributable to equity shareholders and weighted number of equity shares for the reporting period.
Diluted earning per share is calculated by considering dilution in the reported equity earning on account of prospective ordinary shares and the weighted number of ordinary shares after considering prospective ordinary shares on account of conversion, bonus, rights or exercise of the option due in the reporting period.
The **global reporting initiative** (GRI) is a framework of internationally accepted guidelines and principles for companies and business entities to report on (i) corporate responsibility and (ii) sustainable development report by the reporting enterprise.
Corporate social responsibility implies the disclosure of corporate initiative in discharging its responsibility towards certain external stakeholders, such as society and employees and related entities.

REVIEW QUESTIONS

MULTIPLE CHOICE QUESTIONS

1. Qualified audit report implies
   (a) Clean report by auditor
   (b) Report indicating deficiencies in accounts
   (c) Suggestive report
   (d) None of these
2. An operating division of Godrej India Limited that caters to the needs of customers located in south-east Asia is to be identified as
   (a) Geographical segment
   (b) Business segment
   (c) Primary segment
   (d) Secondary segment
3. An operating division of Godrej India Limited that caters to the needs of women segment of rural India is to be identified as
   (a) Geographical segment
   (b) Business segment
   (c) Primary segment
   (d) Secondary segment
4. For calculating basic EPS which out of the following is used as denominator?
   (a) Existing weighted average number of ordinary shares
   (b) Prospective weighted average number of ordinary shares
   (c) Existing plus prospective weighted average number of ordinary shares
   (d) Only the shares which were outstanding at the end of the year
5. For calculating diluted EPS which out of the following is used as denominator?
   (a) Existing weighted average number of ordinary shares
   (b) Only prospective weighted average number of ordinary shares
   (c) Existing plus prospective weighted average number of ordinary shares
   (d) Only the shares which were outstanding at the end of the year
6. For calculating adjusted EPS which out of the following is used as numerator?
   (a) Equity earning as at the beginning of the year
   (b) Equity earning as at the end of the year
   (c) Equity earning with reference to the date for which adjusted EPS is being calculated
   (d) None of these

7. For calculating diluted EPS which out of the following is used as numerator?
   (a) Equity earning as at the beginning of the year
   (b) Equity earning with reference to the date for which diluted EPS is being calculated
   (c) Equity earning as at the end of the year
   (d) None of these

Descriptive Questions

1. Explain the term 'corporate financial reporting' and discuss the contents of annual report.
2. What do you understand by corporate governance? Discuss why it is necessary.
3. Explain the basis of creating the segment. What are the provisions of accounting standard with respect to reporting segment information in an annual report?
4. When is a business operation considered as discontinuing operation and how it should be disclosed in the annual report?

Numerical Problems

1. On April 1, 2009 X Limited had 5,00,000 equity shares and it has profit after tax attributable to equity shareholders of ₹ 15,00,000. During the year 2010–11, on July 1, 2009, it issued 2,00,000 new shares and on January 1, 2010, 3,00,000 more shares were issued on conversion. The reported profit after tax attributable to equity shares for the year ending 2009–10 was ₹ 18,20,000. Calculate basic EPS.
2. A company has 13,600 equity shares on April 1, 2010 on August 31, 2010 company issued 11,200 more shares and on February 1, 2011, it bought back 1,600 shares. Calculate weighted average number of equity shares on March 31, 2011.
3. On April 1, 2010 Jagan Limited (JL) has 280 crore shares outstanding of face value ₹ 10 fully paid up. On December 31, 2010 it issued 160 crore more shares of face value ₹ 10 and ₹ 6 paid up. Calculate weighted average number of shares for calculating EPS.
4. Profit after tax attributable to equity shares on March 31, 2010 is ₹ 18,00,000 and on March 31, 2011 is ₹ 60,00,000. Number of shares outstanding on March 31, 2010 was 30,00,000 on October 1, 2010 company issued bonus shares in the ration of 1:1 by capitalization of profits. Calculate basic EPS on March 31, 2010 as well as adjusted EPS on this date and basic EPS on March 31, 2011.

Answers

Multiple Choice Questions

1. (b) 2. (a) 3. (b) 4. (a) 5. (c) 6. (c) 7. (b)

Numerical Problems

1. On April 1, 2009, basic EPS is ₹ 3. On March 31, 2010, basic EPS is ₹ 2.51.
2. Weighted average number of equity shares is 19,867.
3. Weighted average number of equity shares is 304 crore.
4. On March 31, 2010, basic EPS is ₹ 0.60 and adjusted EPS is ₹ 0.30. On March 31, 2011, basic EPS is ₹ 1.

CASE

Reporting EPS: Annual Reports

Sigma Limited has profit after tax of ₹ 10,00,000 on April 1, 2009 with the number of shares outstanding being 5,00,000 of face value ₹ 10, each fully paid. On this date, there were 10,000 12% convertible debentures of face value ₹ 100, each convertible into 10 equity shares of face value ₹ 10, each fully paid. The conversion is due during the year. Tax rate for the company is 30%. Further, on July 1, 2010, it issued 50,000 bonus shares and on October 31, 2011, an option is due for exercise resulting into 20,000 new equity shares to be issued at ₹ 20 each (face value) against the fair value of ₹ 50. On January 1, 2011, 30,000 10% ₹ 100 debentures are due for conversion into 60,000 equity shares of the company.

Discussion Question

1. You are an expert in accounting and the company has appointed you March 31, 2011. You are asked to prepare the statement of EPS to be disclosed in the annual report. You also have to assist the company in calculating various estimates of EPS as per the provisions of AS-20 and IAS-33.

APPENDIX

I

Window Dressing—Creative Accounting and Forensic Accounting

CREATIVE ACCOUNTING LEADING TO FINANCIAL SCAMS

Just before Satyam scam was unearthed, Satyam's employee roll revealed that around 50,000 people were employed in Satyam. Further, US GAAP statement of Satyam as on March 31, 2008, disclosed a bank deposit of ₹ 3,400 crore. It raises an eyebrow on the role of statutory auditor PricewaterhouseCooopers (PwC). What as an auditor they were doing? Why did they not verify the balance with the banker?

The accounting scandal of Enron was revealed in October 2001 leading to the bankruptcy of Enron Corporation and dissolution of one of the auditors of Enron, namely Arthur Andersen. The story of Enron scam is not only one of the biggest scams in the corporate world of USA but also a big question mark on the accounting and auditing regulations in countries like the USA.

Despite the facts that both these companies were considered to be good at corporate governance still the self-centred greed of their owners, i.e., promoters/directors led to the financial scams. This shows that good governance is only an ornament to cover the ugly face of the dirty financial statements.

WINDOW DRESSING

Window dressing is the use of certain accounting techniques to present the financial position of a company in a favourable manner or in a desired direction. It is a form of creative accounting either to inflate profits and assets or deflate the same with the objective to hide the real financial performance and position. It is also called creative accounting. **Creative accounting** is practically using the flexibility provided within the accounting principles or accounting standards to manage recognition, measurement and presentation of different accounting figures to serve the purpose of those who prepare the accounts rather than those who are likely to use the accounts.

Apart from using the flexibility provided by the accounting principles and accounting standards, a few accountants go ahead with the manipulation and misrepresentation of facts to project and present desired financial performance in terms of profit/loss, assets and liabilities. This manipulation and misrepresentation lead to fraud or falsification of facts leading to **accounting scams.**

Focus

The main focus of window dressing is around the following aspects:

Liquidity

Managing liquidity by either temporarily delaying the payment of expenses or holding back the cash on behalf of others.

Profitability

Showing higher or lower level of profits by changing accounting policies.

Earning Management

Influencing the earning for the period by employing creative methods of accounting is termed earning management, whereas playing around the accounting policies and procedures to project a desired level of earning for equity shareholders is termed as **fraudulent mechanism of earning management**.

EARNING MANAGEMENT

Earning management is the application of accounting facts in a biased judgmental manner with the aim to report desired level of revenue/profit. The main focus is on misleading all or a few of the stakeholders so as to influence their decision-making in the favour of the company.

Earning management involves artificial increase or decrease of revenue, profits or earning potential of assets this is done with the help of aggressive accounting tactics. **Aggressive accounting** involves misstatement of financial statements—balance sheet and profit and loss account with the goal of presenting economic stability of the business firm. Certain aggressive accounting techniques are legal as these are performed within the flexibility granted by accounting standards and few cross the limits and identified as illegal practices. Aggressive accounting is also called **window dressing** or **creative accounting.**

Earning Management—Legal or Illegal

Earning management is the tactful presentation of earning as per the desire of the interested parties by the manipulation of facts either at the time of preparation or presentation of financial statements. When the practices of earning management are within the flexibility provided by the accounting standards, it is legal and acceptable. The moment these fall beyond the boundaries specified under accounting standards, these are identified as **fraud, scam** or **scandal**.

Illustration When the management of the company wishes to report a steady performance even though the company has earned high level of profits, the management does not report all the profits in the year in which these are earned. The recognition of revenue or profits is postponed so as to compensate the poor profits, if any during the next or subsequent financial years. This helps the management in report an average desired level of profit whether the profits are higher or lower in a particular financial year.

Motive for Earning Management

The following are the common motives behind earning management:

- To show a positive increase in profits so as to help in maintaining share prices at a higher level.
- To show an increased profit to justify higher price for coming issue of shares by the company.
- To maintain a regular payment of dividend.
- To maintain solvency and profitability of the company.

Mechanism of Earning Management

Earning management is achieved using all or any of the following tactics:

- Improper revenue recognition
- Inappropriate estimation of liabilities and accruals
- Excessive provisioning
- Minor breach in reporting of income and recognition of expenses

Earning management is the task of reporting desired level of earning either to achieve consistency in reporting or to inflate/deflate reported income to influence decision-making by certain stakeholders.

Management of Assets and Liabilities

Management of assets and liabilities implies skillful presentation of different assets and liabilities either by using flexibility provided by accounting standards or by the violation of accounting practices to achieve desired level of assets and liabilities.

Objectives of Window Dressing

There are several reasons for window dressing—creative accounting, some of which are listed below:

- To keep the company's financial results within agreed limits specified by owners
- To help raise further capital at a favourable price
- To fulfill public listing requirements
- To help negotiations with regulators or with the acquirer in case of merger
- To pay less tax
- To push the company towards insolvency or to delay the insolvency
- To hide inefficiencies of the managerial team
- To smooth out income

The purpose of these objectives is to achieve the desired level of profit or financial position playing with the flexibility provided in accounting standards or by manipulation of facts.

Creative Accounting Techniques

Creative accounting can be applied by using all of any one of the tools discussed in the following depending upon the objective of using it.

Creating Multiple Trading Entities

Under this, a large business house dealing in multiple products and multiple consumer segments creates a separate trading entity to which goods and services are sold for executing sales to the end users. This process helps in creating the same amount of profit in two different trenches and helps in avoiding tax that otherwise would have been paid.

Moving Business Segments Offshore

Sometimes the business entities create offshore business outfits to carry out their foreign business. These offshore business outfits are not subject to the accounting and disclosure norms of the home country. Therefore, the companies can hide the actual level of profit or loss as it would have been reflected in the annual accounts of the company.

Enron managed to hide the losses by executing this creative accounting technique. It could hide the losses resulting from certain business segments by passing the transactions offshore outfits. The shareholders and regulators could not come to know the losses from such offshore business segments as these were not reflected in the annual accounts of Enron.

Changing Inventory Valuation

Inventory is one of the assets that is very much sensitive towards the changing market prices. In certain industries, the price of inventory changes even many times in a day, such as edible oil, crude oil, gold, silver and commodities. This changing price of inventory can be used as a tool for window dressing of accounts. By changing inventory valuation practices, the companies can influence (i) cost of goods sold, and (ii) value of closing inventory disclosed as the current asset in the balance sheet.

During the **inflationary period** when the prices have risen from the point to point time basis, the change from LIFO method to FIFO method of inventory valuation will deflate the cost of goods sold and inflate the value of inventory shown as closing stock in the balance sheet.

Similarly, during the **period of recession**, a change from FIFO to LIFO will result into an inflated cost of goods sold and deflated value of inventory reported in the balance sheet.

Example 1 A company has been following LIFO (last in first out) method of inventory valuation under periodic system. During the year, the company had the following transactions relating to inventory:

Date	Particulars	Quantity (units in crore)	Rate (₹)
01/04/10	Opening stock	1,500	12
22/07/10	Purchase	7,500	13
16/10/10	Purchase	12,500	12.50
22/01/11	Purchase	8,500	13.20
23/02/11	Purchase	10,000	13.50

During the year, the total quantity sold was 38,700 crore units resulting into a stock level of 1,300 crore units. During the year 2010–11, the company changed the method of inventory valuation to FIFO (first in first out) from the previous practice of LIFO. Show how cost of goods sold and value of inventory has been affected.

Solution To find out the impact of inventory valuation policy on cost of goods sold and value of inventory reported in the balance sheet for the year ending 2010–11, we need to work out the value of inventory under FIFO and LIFO method.

(i) Value of inventory under LIFO method
Under this method, 1,300 crore units of closing inventory is to be valued at the price of first batch of inventory, i.e., opening stock, i.e., ₹ 12 resulting into the value of inventory ₹ 15,600 crore.

(ii) Value of inventory under FIFO method
Under this method, 1,300 crore units of closing inventory is to be valued at the price of last purchase, i.e., ₹ 13.50 resulting into the value of inventory ₹ 17,550 crore.

(iii) The impact on cost of goods sold and the value of closing inventory

By changing from LIFO to FIFO, the value of closing inventory has been increased by ₹ 1,950 crore (17,550 – 15,600) resulting into a decrease in the cost of goods sold by this amount.

Conclusion

The net profit has been increased by the amount of difference in the inventory, i.e., by ₹ 1,950 crore without any revenue generating activity.

Changing Depreciation Policy

Depreciation is a non-cash expense resulting from an accounting entry that has twin effect, i.e., it records a reduction in the book value of the asset being depreciated at the same time total cost of goods sold also gets affected. A change in depreciation method from straight line method (SLM) to written down value (WDV) will surely have an impact on the profit and the level of assets reported in the balance sheet.

Normally, a **change from SLM to WDV** will result into a comparatively lower amount of depreciation resulting into an increased profit and increased book value of assets.

Similarly, a **change from WDV to SLM** will result into a comparatively higher amount of depreciation resulting into a decreased profit and increased book value of assets.

Example 2 Profit after before but tax of the company reported was ₹ 3,250 crore. The depreciation by WDV method on different asset was ₹ 750 crore, whereas had the company followed the usual method of depreciation, i.e., SLM then the depreciation would have been ₹ 825 crore.

Solution This showed that the company has recognized depreciation expenses less by ₹ 75 crore (825 – 750) resulting into increase in the profit before tax of ₹ 75 crore and a corresponding increase in the book value of assets as well.

Deviation in Revenue Recognition Practices

The most common practice of creative accounting leading to window dressing effect on the financial statements is the deviation from standard revenue recognition practices. As per the accounting principles of 'revenue recognition' and stipulation of accounting standards, the revenue is to be recognized at the time when sales has been executed and claim of the selling company is justified against the buyer and not at the time when the order is received or goods are being processed/manufactured. Any deviation from this standard/principle will certainly have an increased level of revenue.

Example 3 The sales revenue of the company till March 16, 2011 for the year 2010–11 was ₹ 80,000 crore, whereas sales of the last financial year was ₹ 84,000 crore. In the last AGM of the company, the board of directors had expressed a hope of 15% increase in the revenue. While correlating the facts of sales of the year till date and comparing it with the expectation of board of directors, the finance director had the reasons to employ creative accounting tactics. He/she, in association with the marketing director, managed to procure the orders worth ₹ 18,000 crore, out of which sales was executed for only ₹ 3,000 crore and rest was to be executed in the next financial year.

On April 3, 2011, the finance director presented the financial report by stating an increase of 16.67% in the sales revenue over the sales of the previous financial year. Comment on the accounting practice.

Solution The principle of revenue recognition stipulates that the revenue should be recognized only when the firm (seller) has the claim against the buyer by executing the order for sales. Therefore, actual sales of the company for 2010–11 should have been reported at ₹ 83,000 crore (80,000 + 3,000), which is the sales actually executed and the company has the claim for this against the buyers. Had this been done, the actual sales for the year would have been short by ₹ 1,000 crore (1.19% less) as compared to the sales of the last financial year.

The order of ₹ 15,000 (18,000 − 3,000) are only an order and cannot be recognized as sales revenue as the company has not executed any sales activity for it. Therefore, these should not be recognized as sales. By recording this as sales, the company has reported a sale of ₹ 98,000 crore reporting an increase of 16.67% over previous year's sales of ₹ 84,000 crore.

Deviation in Matching Concept

Principle of matching concept stipulates that all the relevant expenses should be recorded in the books of accounts so as to arrive at the accurate amount of profit. This not only helps in reporting the profit at accurate level but also helps in an accurate measurement and presentation of assets and liabilities.

A deviation in matching concept can help a manager to report desired level of profit. To show a higher level of profit certain expenses, such as outstanding expenses; non-cash expenses, such as depreciation or amortization of intangible and fictitious assets is deferred temporarily resulting into lower total cost and higher level of profits. The same is reversed in the beginning of next year. This practice helps in reporting a higher level of profit that helps in judging the performance of management as good performance with an improvement.

Similarly, when the company wants to report a lower level profit and have tax evasion, it can show extra expenses that are not otherwise relevant for the current financial year; rather could be related to the next financial year.

Example 4 A further verification of books of accounts for the situation explained in the previous example reveals that the finance director had shown a proportionate amount of expenses equal to 65% of the orders of ₹ 15,000 crore recognized as sales for which sales is to be executed in the next financial year. While recognizing the expenses, the finance director did not recognize non-cash expenses that equals to 22% of sales and certain other expenses equal to 3%. Show by how much profits have been inflated.

Solution The recognition of ₹ 15,000 crore of orders itself is a tool to **manage earning;** at the same time, not recognizing appropriate expenses has inflated the profits as well. The profits have been reported higher by ₹ 3,750 crore (25% of 15,000 crore). Therefore, profits have been inflated by ₹ 3,750 crore.

Change in Recognition of Assets

Accounting standards stipulate the guidelines for the recognition of assets as current, fixed, intangible and fictitious assets. However, there exists certain flexibility in recognizing these assets. Using this flexibility, one can influence the value as well as classification of assets. The most sensitive assets are investments that may be classified as 'held for sale' or 'held to maturity'. This classification is subject to the perception and vision of management affected by market sentiments. An interchange in these categories can affect the valuation of assets and recognition of profit and loss on such assets.

Creative Accounting and Insider Trading

Creative accounting not only affects the disclosure of financial position of the company but it leaves a scope for an insider to be motivated for insider trading. An **insider** is the one who has an access to price-sensitive information much before such information is made public. **Insider trading** is the use of the insider information by an insider in buying or selling the shares of the company to either generate profit or avoid losses.

Those who are involved in window dressing—creative accounting can be identified as **insider** and when these insiders use this information for trading in the shares of the company to make gain out of it, then it results into insider trading. Insider trading is a crime if proved.

Window dressing—creative accounting is the result of human intervention in the accounting system, rarely a system can make profit out of its own but a human intervention with wrong intention can make it possible.

FORENSIC ACCOUNTING

Forensic accounting is the art of identifying and unfolding the frauds and malpractices exercised by an accountant who knowingly or unknowingly cooks the annual accounts to achieve a desired objective by manipulating accounting facts and figures. This accounting is the application of specialized knowledge and skills to stumble upon the evidences leading to creative accounting/fraud/scandal specifically relating to accounting. Forensic accounting can be considered as the task of fault finding and doubting the integrity of those who are responsible for preparing and presenting the financial statements and supporting accounting documents. This accounting doubts even those who are responsible in making strategies and establishes the link between the strategies and the work of accountants.

In a nutshell, forensic accounting can be considered as the task of criminal investigation before a crime is established/reported. It is the task of intelligent accounting and looking beyond the numbers and grasping the substance of the situation.

Forensic Accountant

Kautilya is considered to be the first forensic accountant who identified 40 ways of embezzlement. A **forensic accountant** should have the ability to read behind the numbers that even seem to be true and benign. The forensic accountant can be compared to a **bloodhound of accounting** having the ability to sniff out frauds and criminal transactions in companies, banks, cooperative societies and other entities presenting financial accounts for public interest. He/she needs to have the knowledge of legal environment, accounting skills, communication skills and reasoning ability to think beyond the appearance.

In India, the formation of Serious Fraud Investigation Office (SFIO) is the milestone in the field of forensic accounting. The step has been initiated due to growing cyber crimes, failure of regulators to track security scams, growing number of failure of co-operative banks and siphoning of bank money in stock market or other speculative activities.

Forensic Accounting vs Auditing

Forensic accounting is different from **auditing** in the sense that forensic accounting starts with skepticism, whereas auditing starts with the matching and verifying the accounts with the supporting documents. The end result of audit is verification of the annual accounts in the form of certified financial statements—balance sheet and profit and loss account, whereas the end result of forensic accounting is to expose the effect of creative accounting, a fraud or accounting scandal and also estimation if the magnitude of such fraud/scandal is in terms of monetary implication.

Forensic Auditing

Forensic auditing is an examination of an organization's economic affairs with the aim to establish the fraud or scam uncovered by a forensic accountant. This auditing is the cross examination of accounting facts to establish the fraud and identify the culprit involved in it. Forensic auditing is the task of making a comprehensive investigation of firm's financial records so as to assess the substance of assets, liabilities, expenses, revenue and profits. The end result is to present a report that indicates as follows:

- The type of financial fraud/scam/scandal
- The mechanism of executing fraud/scam/scandal
- The magnitude of fraud/scam/scandal in terms of amount and its financial implication
- It also detects bottlenecks in the systems leading to such fraud/scam/scandal
- It also includes a suggestive profile of course of action to check the occurrence of such frauds/scam/scandal in future.

Forensic auditing can help not only the regulators but management of a business enterprise to take precautionary action to avoid financial/accounting frauds or scams. It also suggests to become proactive to avoid the happening of such frauds and corrective actions to mend the losses and stop the happening of similar frauds in future.

WINDOW DRESSING—CREATIVE ACCOUNTING: REAL LIFE CASES

There have been many incidences of adopting creative accounting to window dressing of financial statement in Indian corporate sector. In practice, small cases of window dressing are like 'golden fish' and remain under the water and do not get noticed till the time they become as large as a whale. The moment these get noticed and catch the eyes of regulators and media these are reported as **scams**. The story of Satyam financial scam is similar to this. The same was the story of Enron in USA.

SATYAM COMPUTER SERVICES LIMITED, INDIA

Background

Satyam Computer Services Limited, one of the leading India outsourcing company ranking fourth in terms of software services, was put to limelight by the resignation of its Founder and Chairman, B. Ramalinga Raju (Raju). This sent a negative wave to Indian stock market and price of Satyam tumbled by about 85% in one trading session. Satyam served as backbone of many banks, corporate houses, healthcare services, insurance companies not only in India but across the globe. Just before the scam was unearthed, Satyam's employee roll revealed that around 50,000 people were employed in Satyam and US GAAP statement of Satyam as on March 31, 2008 disclosed a bank deposit of ₹ 3,400 crore.

Another fact was that the bank deposit as shown on March 31, 2008 vanished in the beginning of the next financial year. Was it siphoned away to some of its subsidiaries, such as Maytas Limited or used for the personal purpose of the directors or chairman? Even after knowing all these facts, NASSCOM did not accept the plan to disqualify Satyam as a member but it assured to work with Satyam and its employees (numbering to about 50,000) to manage the situation and face the transition period.

Confession by Raju

The facts about the falsification of facts at Satyam were admitted by its head Raju in a self-declaration type letter leading to the confession of crime—crime in the sense that a small level creative accounting resulted in the accumulation of false profits, false assets and unlawful presentation of liabilities over the years. The abstracts of Raju's letter are as follows:

The balance sheet as on September 30, 2008 carried the following window dressing items:

- Inflated amount of interest by ₹ 376 crore, this was inflated by showing accrued interest that really did not exist.
- Understatement of liability to the tune of ₹ 1,230 crore on account of funds arranged by Raju.
- Refined position of debtors by about ₹ 490 crore as against ₹ 2,651 crore in the books.
- For the second quarter ending September, 2008 company reported a revenue of ₹ 2,700 crore (actual ₹ 2,112 crore) and an operating profit margin of ₹ 649 crore (actual ₹ 61 crore) by showing operating profit margin of 24% as against an actual of 3%.
- Artificial inflating of revenue and operating profit resulted into an increase in the cash balance by ₹ 588 crore in the second quarter alone.

The gap between reported revenue, profits, assets and liabilities and actual figures of these was supported by showing artificial figures of employees, carrying additional assets and related activities this all resulted in an increase in the cost leading to poor profit margins.

Why did Raju Confess

The reason for Raju to confess about the fraud and admit having the knowledge of the same is just because the promoters had a very little percentage of shareholders in the company. They were apprehensive of a probable takeover by the rival companies.

However, before the confession Raju made, a last attempt to buy one of its subsidiaries namely Maytas Limited was made but the deal failed. And Raju found himself in a soup and thought that it was not possible to either come out of the red or avoid probable takeover due to very thin equity stake of promoters.

By making necessary assumptions, analyse the above case and also suggest what should be the mechanism to check such happenings in future.

ENRON CORPORATION SCANDAL

The accounting scandal of Enron was revealed in October 2001 leading to the bankruptcy of Enron Corporation and dissolution of one of the auditors of Enron namely Arthur Andersen. The story of Enron scam is one of the biggest scams in the corporate world of the USA and the accounting and auditing regulations in countries like the USA also became a matter of concern.

Foundation and Beginning

Enron was founded by Kenneth Lay in the year 1985 by merging Natural Gas Pipeline Companies of Houston Natural Gas and Inter North. Initially, the business profile of Enron was to generate electricity and sell it at the market price. Enron also engaged in lobbying to persuade government of America to have a free market system for pricing electricity and it succeeded too in doing so. By the year 1992, Enron succeeded in becoming the largest seller of electricity in North America and majority of its revenue was attributed to gas contract trading segment. In the year 1999, the company managed to start Enron Online Trading website that helped it to manage its trading business much more efficiently.

Diversification

Influenced with the success in online trading business, Enron pursued a modernization and diversification strategy and the company-owned variety of assets, such as gas pipelines, pulp and paper plants, water plants, electricity plants and broadband services not only in America but across the globe as well. The tricky idea of generating business was to enter into self-generated contracts and creating derivatives on these contracts.

The impact of all these was that the stock of Enron recorded a rise of about 300% from 1990 to 1998. The stock of Enron further recorded a rise of about 55% in the year 1999 and 85% in the year 2000 as compared to a corresponding decline in the index by 20% and 10%, respectively. By the end of December 2000, the price of Enron's stock was $82 plus with a market capitalization of $60 billion plus. Enron was also rated as the most innovative company of America.

Causes of Downfall—Creative Accounting for Earning Management

There were several reasons for the debacle of Enron. Enron adopted the mechanism of creative accounting leading to the world's largest accounting scandal. The scrutiny of books of accounts reveals the following creative accounting techniques used by Enron:

Revenue Recognition

Enron was engaged in building and maintaining electric power plants, natural gas pipelines and related processing facilities. Apart from it, Enron got engaged in the trading of electricity. Enron was involved in the trading of electricity as an agent, but it adopted **merchant model** to account for the business transactions relating to the trading business as an agent; whereas it should have adopted 'agent model' of accounting transactions relating to this business segment. The accounting fundamentals stipulate the adoption of **agent model** to account for business transactions relating to the trading business as an agent.

AGENT MODEL VS MERCHANT MODEL FOR TRADING BUSINESS

Agent model of accounting for trading business is to be adopted when the business entity facilitates the task of an agent. Accordingly, an agent should recognize the commission or brokerage as its revenue and matching expenses should be the one incurred in earning the brokerage.

Merchant model of accounting for trading business is to be adopted when the business entity itself is one of the parties to trade as a buyer and subsequently, the goods/services purchased are sold at a margin. This model stipulates the recognition of revenue at the gross selling price of goods and services and the cost of goods sold is to be recognized as the matching cost for the revenue recognized under the model.

Being an agent in the trading of electricity, Enron adopted 'merchant model' to account for the trading activities as against 'agent model'. Enron recognized full value of the deal as revenue and corresponding cost of the electricity sold as cost of goods sold. This resulted in reporting total amount of gain as if it belonged to Enron as compared to it the actual earning was only the brokerage relating to the deal.

By departing from agent model to merchant model, Enron could report artificially higher level of revenue and profits year after year. With help of this, Enron reported an increase in its revenue by about 740% during the period from 1996 to 2000 rising from $13 billion in 1996 to $98 billion in 2000; resulting into an annualized growth rate of about 100 percent plus as compared to an average growth rate of about 5% in electricity industry.

Long-Term Contracts and Fair Value Approach

Fair value approach of accounting for long-term contracts stipulate that the expected gains from such contracts and cost of these contracts should be recognized at the present value of estimated revenue and cost to generate such revenue under contract. The difference between these two is to be recognized as revenue for the current period. Enron adopted this practice for recognizing its long-term contracts for electricity trading, gas pipeline business and others.

The biggest pitfall of this approach is faced when a long-term contract has a premature termination resulting into derecognition of assets, liabilities, expenses and revenue relating to terminated long-term contract. But Enron continued to show the contracts and related revenue in its books of account even when contracts had been terminated. One such contract was signed between Enron and Blockbuster Video in July 2000 for a period of 20 years. As per the agreement, Enron was to provide the service over the agreed period and estimated a profit of $110 million from this single deal. Enron reported this as income at its present value by using fair value approach. When subsequently the deal failed even then Enron continued to recognize this income in its accounts.

Special Purpose Entities

Enron created certain special purpose entities to circumvent business transaction and hide the debt component actually used by it. The financial position of special purpose entities, such as assets, liabilities, costs and revenue of these entities are not disclosed in the financial statements of sponsor. This fact helped Enron to hide the debt and loss generating transactions by routing through these hundreds of special purpose entities created by Enron.

Snowball

Financial accountant of Enron started the practice of recognizing the cost of cancelled projects and contracts as an asset rather than recognizing it as a loss in the profit and loss account. This resulted in inflating profits as well as assets. The assets and profits so created and known as the **snowball** that are likely to melt any day resulting into a loss and decline in the assets. The scrutiny of Enron's books of accounts revealed a volume of such snowball to the tune of $200 million.

Creation on its Own without Market Testing

Enron was having its own electricity generating units and trading business to buy and sell the electricity also. Enron entered into long-term contracts as long as 20 years for buying and selling electricity as an agent and reported present value of the expected profit as profit in one single quarter as compared to spreading it to future years. At the same time, the estimates of revenue and costs for these long-term contracts were not put to test in the market with respect to accuracy in estimation.

Executive Compensation

To keep its executives motivated to perform better, Enron not only paid good remuneration to its executives but also awarded them with stock options. Executives were interested in finalizing the business deals that had positive impact on the stock prices without considering the quality of cash flow and timing of profit from such deals. The sole motive of the executives was to have gain from exercising the stock options when price of Enron's stock rises on account of rising revenue and profits. As on December 31, 2000, Enron had about

95 billion shares outstanding under stock option plan that was approximately 13% of the ordinary shares outstanding.

The Clue that Led to the Unearthing of Scam—Credit Rating Downgrade

The first symptom of Enron's debacle was downgrading of credit rating by Moody's and Fitch in October 2001. The impact of downgrade was severe enough that forced Enron to plan to issue enough number of shares to cover the debt instruments issued by it. This downgrading of credit rating force the counter parties to review their long-term contracts with Enron and few of the parties even cancelled the contracts. This resulted into a heavy loss not only during the year 2001 but also for the coming years too. The cancellation of contracts resulted into liquidity problem for Enron and further downgrading in the credit rating to **Baaa2,** just two points above **junk rating symbol**. This created a further liquidity problem and increased number of cancellation of long-term electricity trading contracts that eventually eroded revenue, profits and assets of Enron. At the same time, the liabilities that were understated due to the circumventing of transactions through special purpose vehicles were exposed and liabilities also mounted by the end of 2001.

Negative Outcome

As soon as the story of Enron was exposed, the share prices of Enron tumbled to as low as $1 from a high level of $83 plus. This resulted into a heavy loss for general investors as well as employees who were holding stock options received as reward for their service rendered to company. At the same time suppliers, debenture holders and money lenders suffered a heavy loss. Enron was declared bankrupt at the same time one out of its five auditors, Arthur Anderson was dissolved.

Analyse the story of Enron's debacle by making necessary assumptions and identify the pitfalls. Also suggest the mechanism to check the recurrence of such incidences.

APPENDIX II

Cases

1. **Inventory Valuation and Misreporting of Profits/Losses**
2. **Financial Performance Analysis of Tata Motors Limited**
3. **Earning Management**
4. **Recognition Dilemma—Assets vs Expenses**
5. **Revenue Recognition and Matching Concept**
6. **Valuation of Inventory—Impact on Profit and Asset**

CASE 1

Inventory Valuation and Misreporting of Profits/Losses

This case is a real-life situation of a woollen mill, which had shown the closing stock of the year 1992–93. It was shown at the market value irrespective of it being lower than the cost and reported a higher level of profit thereby leaving a gross profit margin of 2054.60% in the year 1992–93 that in any case is not possible. By inflating the profits, the company claimed the deduction under Section 80HHC of Income Tax Act, 1956. Due to the higher valuation of closing stock in the year 1991–92, the opening stock for the year 1992–93 was shown at a higher value, thereby inflating the input cost and reported a loss in this financial year. The case was first invoked by the assessing office and the decision of the assessing officer was that a company cannot earn profit out of itself, which was rejected by the tribunal but subsequently upheld by the honourable High Court and Supreme Court of India in the year 2002.

The assessing officer pleaded on the ground of a higher valuation of closing stock but the basic logic as per the author is that one cannot derive a gross profit margin of even 100% out of a particular then how a gross profit margin of 2054.60% can be reported by the firm in the year 1992–93. Had the assessing officer made this as his basis then the tribunal would not have rejected the ground adopted by the assessing officer and hopefully case could have been settled much earlier.

Sanjeev Woollen Mills, Ludhiana, is engaged in the export of woollen blankets. Since the accounting year 1986–87, the firm followed the method for valuing the inventory such that the stock of raw material and semi-finished goods was valued at cost price and the stock of finished stock was valued at the market price. This practice of valuing the stock was practiced by the firm consistently for a longer period year after year without comparing the cost and market value of finished goods. For several years, there has been constant valuation for both opening and closing stocks of finished goods as the price fluctuation was not much across the year from the beginning to the end of the year. The records of the company reveal that the company has been maintaining a gross profit ratio at around 100–110% of the sales turnover. The following are the final accounts of the firm for the accounting years 1991–92 and 1992–93:

Profit and Loss Account
For the year ending March 31, 1992

Particulars	₹	Particulars	₹
To **Opening Stock**		By Sales (@ ₹ 136)	34,70,406
Finished Goods	1,13,36,831	By **Closing Stock**	
Raw Material & WIP	40,14,044	Finished Goods	8,69,13,158
To Purchase of Raw Material	10,00,000	Raw Material & WIP	31,13,706
To Direct Wages	51,33,000		
To Manufacturing Expenses	6,80,175		
To Gross Profit c/d	7,13,33,220		
	9,34,97,270		9,34,97,270
To Admin. Expenses	12,20,000	By Gross Profit b/d	7,13,33,220
To Depreciation	5,10,000		
To Preliminary expenses Written off	1,40,000		
To Selling and Distribution Expenses	54,21,305		
To Net Profit	6,40,41,915		
	7,13,33,220		7,13,33,220

Abstracts from notes forming part of accounts:

- The firm had valued the stock of raw material and work-in-process in the beginning of the year and at the end of the year at cost and proportionate conversion cost as applicable.
- The firm valued the opening stock of finished stock at market price that was ₹ 90 per kg in the beginning of the year. And the closing stock of the finished stock was also valued at the market price that was ₹ 130 per kg, whereas sales was recorded at the selling price of ₹ 136 per kg. The sales included export sales also. As per the estimates, the majority of the sales of the company was from export business.
- As the company is in the export business and the company brought the profits to India within the stipulated time period of six months; hence, the company claimed the deduction under Section 80HHC and the profit was exempted from tax as per the provisions of this Section.

Profit and Loss Account
For the year ending March 31, 1993

Particulars	₹	Particulars	₹
To **Opening Stock**		By Sales (@ ₹ 136)	10,39,49,300
Finished Goods	8,69,13,158	By **Closing Stock**	
Raw Material & WIP	31,13,706	Raw Material & WIP	11,13,700
To Purchase of Raw Material	5,30,000		
To Direct Wages	11,33,000		
To Manufacturing Expenses	20,70,136		
To Gross Profit c/d	1,13,03,000		
	10,50,63,000		10,50,63,000
To Admin. Expenses	2,20,000	By Gross Profit b/d	1,13,03,000
To Depreciation	4,90,000	By Net Loss	54,420
To Preliminary expenses Written off	1,40,000		
To Selling and Distribution Expenses	1,05,07,420		
	1,13,57,420		1,13,57,420

Abstracts from notes forming part of accounts:

- The firm had valued the stock of raw materials and work-in-process in the beginning of the year and at the end of the year at cost and proportionate conversion cost as applicable.
- The firm valued the opening stock of finished stock at market price that was ₹ 130 per kg as closing stock of the previous year became the opening stock of the current year, and there was no closing stock of the finished stock at the end of the year.

The company incurred a loss and it was not liable for tax payment in the assessment year 1993–94.

ANALYSIS OF THE ACCOUNTS FROM THE VIEWPOINT OF VALUATION OF INVENTORY

ICAI Rules

AS-2 provides that the inventory should be valued and reported in the final accounts at cost or market price, whichever is less. This has not been abided by the company and the company has shown the stock of finished goods at the market price without comparing it with the cost of finished stock. This shows the violation of AS-2.

Income Tax Rules

Section 145 of Income Tax Act, 1961 provides that inventory should be valued at cost or market price, whichever is lower. At the same time, it should be maintained that the valuation of inventory should result in reporting true profits as far as possible. The valuation of inventory is to be done in such a manner so that the notional profit should not be reported in the books of accounts. Therefore, when the stock is shown at the market price that is higher than the cost then it will result in reporting notional profits in the books of accounts. The rule provides that a business organization cannot make profit out of itself, i.e., it cannot earn the profit by showing the stock at a higher price than the cost, because it will result into reporting notional profits in the books of accounts.

Critical Evaluation of Facts

While looking at financial results of the year 1992–93, a stark contrast is observed as follows:

- Gross profit is even more than the sales value that in any case seems misrepresentation of the facts. The gross profit to sales ratio is 2054% for the financial year 1992–93 that is in stark contrast to the past records. At the same time, it is practically not possible to have gross profit more than the sales.
- The sales and gross profit for the year were ₹ 34,70,406 and ₹ 7,13,03,220, respectively. Practically, it is not possible to derive such a large amount of gross profit from the given value of sales.
- The closing stock was ₹ 8,69,13,158 and opening stock was ₹ 1,13,36,831. This larger difference is not due to the change in the quantity but due to the difference in the valuation rate. The opening stock has been valued at ₹ 90 per kg, whereas the closing stock has been valued at ₹ 130 per kg. This is the major reason for an abnormal increase in the profit.
- The sales has been recorded at ₹ 136 per kg and the closing stock at ₹ 130 per kg that itself seems to be the mechanism of inflating the valuation of closing stock to book the profit from itself without executing the sales in the financial year 1992–93.
- If valuation of the closing stock is done using the rate applicable to the opening stock for the financial year 1992-93, i.e., ₹ 90 the value of closing stock comes to ₹ 6,01,70,648 (8,69,13,158*90/130). this valuation will reduce the gross profit as well as the net profit for the year by ₹ 2,67,42,510 × (8,69,13,158 – 6,01,70,648).
- As the company had claimed the deduction for the profit under Section 80HHC of Income Tax Act, 1961, this inflated profit resulted in a higher amount of deduction that translates into a higher deduction of the amount ₹ 2,67,42,510, the value by which the closing stock has been shown at a higher value when valued @ ₹ 130 per kg instead valuing @ ₹ 90 per kg.

Section 80HHC of Income Tax, 1961

The main theme behind this Section is to promote the export from India and bring home the foreign currency convertible in Indian rupee. The Section allows an export house to claim the profit from the export business as exempt from tax purpose. The main provision is that the profit should really come from exporting the goods and it should be under the head ‘income from business and profession’. For an assessee to avail the benefit under this Section, it is necessary to justify that the profit claimed as deduction should have been earned from the export business and it should form the part of income from business and profession; otherwise deduction is not allowed. The important aspect is that the profits should have been generated actually through the business activities and not by business itself, such as inflating the value of stock or reducing the costs or both done simultaneously.

While looking at financial results of the year 1993–94, the following facts were observed:

- The opening stock has been valued at ₹ 130 that is the same as applied to the closing stock of the previous year.
- The company had been valuing the stock of the finished stock at the market price for a significantly longer time period. The same was adopted in the years 1992–93 and 1993–94 also.
- The opening stock for the year was valued at ₹ 130 per kg and the selling price was ₹ 136. This narrow difference resulted into a loss for the year.

- Had this been valued at ₹ 90 as the usual rate applied in the past as well the valuation of opening stock would have been ₹ 6,01,70,648 then the loss could have been avoided at the realistic position would have been disclosed.
- By valuing the closing stock of previous year at ₹ 90, the costs could be shown lower by ₹ 2,67,42,510 (8,69,13,158 − 6,01,70,648). By not doing this, the company succeeded in inflating the costs.
- Had the opening stock shown at the realistic value, the firm would have reported a profit of ₹ 2,66,88,090 (2,67,42,510 − 54,420).

SECTION 145 OF INCOME TAX ACT, 1961, AND THE SUPREME COURT'S VIEW[1]

This case of valuation of inventory at an abnormally higher rate as compared to the opening stock of the financial year 1992–93 was investigated by the assessing officer. The assessing officer invoked the provisions of the Section 145 of the Income Tax Act, 1961. It is provided in the Section that the valuation of stock is to be valued at the cost or market price, whichever is lower and a business organization cannot earn profit out of itself. The same was taken as the ground by the assessing officer that subsequently upheld by the Supreme Court of India. The view of the Supreme Court was as follows:

- The assessee may employ, whichever basis of inventory valuation but it should be followed by the assessee consistently year after year. The method that is being adopted by the assessee consistently cannot be altered by the assessing officer on the ground that it is in contravention of the 'lower of cost or market 'rule'. Therefore, the choice of inventory valuation method lies with the assessee.
- The assessing office cannot reject the inventory valuation method only on the ground that it results in profit in a particular year and loss in the subsequent/previous year.
- But at the same time, it should be maintained that the inventory valuation is the critical aspect for arriving at the income from business and profession; hence, due caution is to be displayed.
- The method of inventory valuation should not result in realizing profit out of itself, which implies that the reported profit or loss should be realistic and not hypothetical by either inflating the value of closing stock or by reducing/increasing the input cost artificially.

The facts of the Supreme Court ruling and the provision of Section 145 are clear that one cannot show imaginary profits or loss to avail the deduction under any of the Section of Income Tax Act, such as it has been done by Sanjeev Woollen Mills and availed the deduction under Section 80HHC.

Conclusion

Thus, it shows that the firm could manage to inflate the profit in the year 1992–93 by showing the closing price at a higher price than the usual price and than this affected the opening stock of the next financial year, i.e., 1993–94, as a result of which the firm reported a situation of loss. Although the firm has violated the basic principle of reporting the stock in the final accounts at the cost or market price, whichever is lower; at the same time, the firm reported a notional profit and loss in these financial years.

[1]The case of Sanjeev Woollen Mills, Ludhiana, vs CIT was first invoked by the assessing officer and the office rejected the valuation adopted by the firm in the years 1992–93 and 1993–94 and denied the deduction u/s 80HHC as claimed by the assessee. The assessee appealed in the tribunal where the tribunal rejected the plea of the assessing officer. Subsequently, the case was taken up in the High Court and Supreme Court of India and both the honourable courts upheld the decision of the assessing officer saying thereby that the method adopted by the assessee resulted into hypothetical profit and loss; hence, the profit as disclosed by the firm in the year 1992–93 and loss of the year 1993–94 was reported wrong.

The valuation and reporting of inventory in the final accounts also resulted in the violation of provision of Section 145 of Income Tax Act, 1961. According to the Act, a firm can adopt any method of inventory valuation whether at cost or at market price, and it cannot be altered either by the assessing officer or income tax officer just because it results in showing profit or loss for the organization. But the interpretation of Section 145 also provides that the method of inventory valuation has an impact on the profit calculation. Therefore, it should be such that it should help in projecting as far as appropriate and accurate level of profit. Further, it should not result into earning or calculation of profit by a business organization from itself. This implies that the profit or loss should be actual not hypothetical as Sanjeev Woollen Mills did it by inflating the value of closing stock. In the year 1992–93, it showed a higher profit and in the year 1993–94, it reported a loss because of a higher input cost.

CASE 2

Financial Performance Analysis of Tata Motors Limited

The following facts have been extracted from the 65th Annual Report of Tata Motors Limited for the year 2009–10. (Necessary simplification has been made wherever required.)

Balance Sheet of Tata Motors Limited as on March 31, 2010

Particulars	2009–10 (₹ in crore)	2008–09 (₹ in crore)
Sources of Funds		
Shareholders' fund		
Share capital	570	514
Reserves	14,395	11,716
Loan funds		
Secured	7,742	5,252
Unsecured	8,884	7,914
Foreign currency monetary items	nil	164
Deferred tax liability	1,509	866
Total Funds Employed	**33,100**	**26,426**
Application of Funds		
Fixed assets (Gross block)	18,417	13,905
Less: depreciation	(7,213)	(6,260)
Add: capital work-in-progress	5,232	6,947
Net block	**16,436**	**14,592**
Investments	22,337	12,968
Foreign currency monetary items	162	
Current assets, loans and advances		
Inventories	2,936	2,230
Debtors	2,391	1,205
Cash and bank balance	1,753	1,142
Loans and advances	4,457	4,963
Current liabilities and provisions		
Current liabilities	14,608	8,598
Provisions	2,764	2,078
Net Current Assets	(5,835)	(1,136)
Miscellaneous expenditures to the extent not written off	nil	2
Total of Funds Applied	**33,100**	**26,426**

Profit and Loss Account of Tata Motors Limited
For the year ending March 31, 2010

Particulars	2009–10 (₹ in crore)	2008–09 (₹ in crore)
Income		
Sales and other income from operations	38,364	28,568
Less: Exercise duty	(2,771)	(2,938)
Dividend and other income	1,853	926
Expenditure		
Manufacturing and other expenses	32,155	24,762
Expenditure transferred to capital work	(741)	(885)
Profit before depreciation, interest, exceptional items and tax	6,032	2,679
Product development expenditure	146	51
Depreciation and amortization	1,033	875
Interest	1,103	674
Profit before exceptional items and tax	3,750	1,079
Exchange loss	70	65
Loss on redemption of investment in preference shares	850	nil
Profit before tax	2,830	1,014
Less: Tax expenses	589	13
Profit after tax	2,241	1,001

By making necessary assumptions, carry out a financial performance analysis of Tata Motors for the years 2008–9 and 2009–10 on the basis of ratio analysis and make interpretation using ratios.

CASE 3

Earning Management

March 12, 2010 Sach International Corporation

Badam Gussain, Vice-President (Accounts) of Sach International Corporation, Singapore, was taken aback when he reviewed the financial performance of the company. He noticed that the sales for the year were trailing as compared to the sales figures of the previous financial year. It was less as much as about 10% as compared to the sales figures of the previous financial year. The same was the position of the profit for the year. He immediately retrieved the facts of the previous financial year as well as Chairman's speech published in the previous annual report that depicted the following facts:

Income Statement
For the year ending March 31, 2009

Particulars	Details	Amount (₹ in Crore)
Sales		**10,00,000**
Less: Cost of Goods Sold (COGS)		7,00,000
Gross Profit		**3,00,000**
Less: *Operating Expenses*		
Administrative expenses		
Selling and Distribution expenses		70,000

(*Contd*)

(*Contd*)

Cash Operating Profit (EBDAIT)		2,30,000
Less: Depreciation and Amortization	30,000	30,000
Operating Profit		**2,00,000**
Add: Non-operating Income (profit on sale of shares)	20,000	
Less: Non-operating expenses/losses (loss on sale of plant)	25,000	(5,000)
Earning Before Interest and Tax (EBIT)		**1,95,000**
Less: Interest	50,000	
Less: Tax	55,000	1,05,000
Earning After Tax (EAT)		**90,000**

Along with this, he recalled the facts from the previous year's address of Chairman delivered at AGM. Accordingly, the sales and EAT for the current year should have shown an increase of 30% and 12%, respectively over the last year's performance. He immediately called his subordinates and held a meeting to review the situation. His team members updated him by providing the figures of provisional income statement for the year as on March 12, 2010, which revealed the following facts:

Income Statement
For the year ending March 31, 2010 (as on March 12, 2010)

Particulars	Details	Amount (₹ in Crore)
Sales		**8,99,000**
Less: Cost of Goods Sold (COGS)		6,89,000
Gross Profit		**2,10,000**
Less: Operating Expenses		
Administrative expenses		
Selling and Distribution expenses		(85,000)
Cash Operating Profit (EBDAIT)		1,25,000
Less: Depreciation and Amortization	30,000	(30,000)
Operating Profit		**95,000**
Add: Non-operating Income (profit on sale of shares)	20,000	20,000
Earning Before Interest and Tax (EBIT)		**1,15,000**
Less: Interest	50,000	
Less: Tax	25,000	75,000
Earning After Tax (EAT)		40,000

Meeting of Vice-Presidents

As Badam Gussain was also holding the charge of CEO of the company, he coordinated a meeting with George Danny, Vice-President (Marketing) and Dean Jones, Vice-President (Production). In the meetin,g everyone was apprehensive about projecting a poor show as compared to the previous year's financial result and this was surely to be taken as a negative remark on the performance of the executives. George Danny was of the opinion that his marketing team was negotiating the deal with few clients and he was hopeful that his team would be able to procure the orders for as much as ₹ 5,00,000 crore during the month of March

2010. This would not only help in achieving the targets but even would surpass the target. However, Dean Jones, Vice-President, was not confident in fulfilling the target of additional ₹ 5,00,000 crore of goods to be manufactured and dispatched to the customers. To resolve the issue concerning production, Daisy Dazzling, Vice-President (HR & Personnel) was invited. Badam Gussain moved a proposal of running the factory in three shifts and other offices in two shifts for rest of the working days of March 2010 but Daisy Dazzling had her own limitations saying thereby that it would be difficult to get additional workers and staff members at such a short notice that too for only about 18 working days. While they kept on discussing the issue like this, they finally concluded that it was the responsibility of middle level executive staff to achieve the targets on time and passed a resolution of issuing strict warning to middle level executive stating "Either achieve the targets or face the consequences of a reprimand or stern action by the chairman". The outcome of the meeting stating this warning was circulated as office memo among the middle level executives, and everyone in the company kept his/her fingers crossed hoping for the best outcome.

April 4, 2010 Sach International Corporation
Venue: Meeting Hall
Activity: Presentation by Middle Level Executives in the presence of Chairman
Theme: Progress Report of Financial Year Ending March, 2010

S M Joseph, Senior Executive, Accounts presented the following brief note on the progress of the year ended on March 31, 2010:

"I feel pride in presenting the progress report in the honor of Chairman Sir. Sir as guided by your leadership style and under the efficient leadership of out senior management team we have successfully not only achieved the targets but surpassed the benchmarks. These results have created a specific platform for our company in the market place and our market share has increased tremendously and we rank 2nd in terms of market share in the industry as compared to 5th rank in the previous year. I request my colleague Mr. Biju Joseph to present the snapshot of the progress report."

Biju Joseph presented the following facts before the house:

"This year net profit has shown a record breaking increase of 100% over previous years' profit, this all happened on account of simultaneous effect of managing the top line as well as bottom line. Sales for the year ended were higher by 50% over previous years' sales and we could cut down our expenses by about 17% as compared to last financial year." In support of these facts, the following un-audited income statement was presented:

Income Statement
For the year ending March 31, 2009 and March 31, 2010

Amount (₹ in Crore)

Particulars	March 31, 2009	March 31, 2010
Sales	10,00,000	**15,00,000**[2]
Less: Cost of Goods Sold (COGS)	7,00,000	**8,50,000**[3]
Gross Profit	3,00,000	**6,50,000**
Less: Operating Expenses	70,000	**1,00,000**

(*Contd*)

[2]Order worth ₹ 4,59,000 crore was received on March 25, 2010 and is yet to be processed for manufacturing and delivery.
[3]Provisional expenses relating to the orders yet to be completed have been shown the same adjustment has been made in the operating expenses.

(*Contd*)

(Administrative expenses,		
Selling and Distribution expenses)		
Cash Operating Profit (EBDAIT)	2,30,000	**5,50,000**
Less: Depreciation and Amortization	30,000	**30,000**
Operating Profit	2,00,000	**5,20,000**
Add: Non-operating Income (profit on sale of shares)		
Less: Non-operating expenses/losses (loss on sale of plant)	(5,000)	**(25,000)**
Earning Before Interest and Tax (EBIT)	1,95,000	**4,95,000**
Less: Interest and Tax	1,05,000	**3,15,000**
Earning After Tax (EAT)	90,000	**1,80,000**

All the senior management team members headed by Badam Gusain were surprised at the figures presented by the middle management executives. However, they could interprete the accounting jugglery but kept mum and everyone clapped. At the end, the chairman congratulated all the employees and announced productivity bonus for the employees.

1. *Analyse the case from the viewpoint of accounting fundamentals.*
2. *Comment on the accounting policy of the company.*
3. *Also evaluate how middle level executives could show a better performance in contrast to the apprehension of the senior management team headed by Badam Gusain.*

CASE 4

Recognition Dilemma—Assets vs Expenses

Robin was working as Group Leader in a middle-level company and drawing a monthly salary of ₹ 50,000 resulting into ₹ 6,00,000 per annum. He was heading a team of six executives responsible for creating new corporate clients for the company and all his teammates and he himself performed the task in a dedicated manner. The result of this teamwork was that about 20% of the sales of the company used to be generated by this group amounted to two crore per annum.

Robin's Team in a Coffee Shop

On the occasion of Holi festival, Robin invited his team members for a small get together to celebrate the festive occasion and disclose his future course of action. After discussion with his team members, he thought of starting his own business house and he along with his teammates were confident in generating good amount of sales as well as profit. He took the steering seat and agreed to start the new business venture as owner and his team members agreed to join him as employees.

Robin Enterprises

The new business venture was inaugurated in the month of April 2009 for his new venture Robin's father contributed initial capital of ₹ 10,00,000. Robin's father inaugurated the business enterprise and handed over the overall charge to Robin. All the team members along with Robin did well to achieve the targets. Robin motivated his team and paid them the salaries and remuneration in time that to with an increment of about 10–15% as compared to the previous remuneration package. With the amount of labour and hardwork put in by the team, Robin was confident of not only having earned ₹ 6,00,000 plus for himself but also thought of giving a good return on the capital invested by his father. In managing his enterprise, he did not engage the services of a professional accountant as he himself was confident enough in maintaining the accounting records by keeping proper record of all the receipts and payments. He quickly summed up the financial transactions and prepared the results in the first week of April 2010. The results for the first year as prepared by him were as follows:

End of Maiden Financial Year on March 31, 2010

Particulars	Amount in ₹
Cash Inflows	
Capital (contributed by father)	10,00,000
Sales (all in cash)	2,50,00,000
Total Cash Inflow	2,60,00,000
Cash Outflows	
Purchase	1,40,00,000
Equipments	45,00,000
Operating expenses	42,00,000
Salary of staff[4]	8,00,000
Drawing by owner (father)	6,00,000
Advance to Suppliers	16,00,000
Total Cash Outflows	2,57,00,000
Cash Balance at the end of the year	3,00,000

Reaction

Despite better sales position and extra efforts put in by all the team members, Robin, his father and his teammates all were surprised at the year-end as Robin was left out with a cash balance of only ₹ 3,00,000 at the end of the year, whereas he used to get a salary of ₹ 6,00,000 from his previous employment; just 50% of the erstwhile salary. In view of this, he and his father decided to close down the business and Robin was set to start job hunting once again from the next day.

1. *Analyse the case and prepare a financial statement for the year ending March 31, 2010.*
2. *Narrate the important accounting concepts that Robin has followed or not followed while preparing his books of accounts.*
3. *Do you think Robin and his team has not performed well? Show your calculation.*

[4]Robin did not draw any salary or remuneration during the year.

CASE 5

Revenue Recognition and Matching Concept

Mr. Singh, having completed diploma course in driving, started his career as business development executive with Lucky Car Hire Services. The company provided personal transport service to corporate clients. While performing his job, Mr Singh developed good liaison with major clients, such as ITC, SHCIL and BPL. On one occasion, he had heated arguments with his immediate boss and just next day he resigned from the job. As business development executive, Mr Singh used to draw a salary or ₹ 4,50,000 per annum. Having a good experience of managing car hire services and good liaison with corporate clients, he started his own car hire agency in the name of Lovely Car Hire Services.

Lovely Car Hire Agency—The Beginning

The agency was started by taking a loan from Bank of ₹ 33,00,000 @ 10% p.a. With this, Mr Singh purchased six taxies costing ₹ 5,00,000 and he kept ₹ 3,00,000 for working capital purpose. Initially, he managed all his business affairs from his residence and hired sufficient number of drivers and one office assistant. On account of his good liaison with corporate clients, he could manage good amount of business during the year. The financial transactions for the first year were as follows:

- All the six taxies were hired out to six corporate clients at a monthly rent of ₹ 4,00,000 per annum per car.
- Six drivers were hired at a consolidated pay package of ₹ 9,000 per month per driver.
- During the year, he paid in cash an average petrol expense of ₹ 8,000 per month per car.
- At the end of the year, ₹ 2,16,000 was yet to be paid for petrol expenses.
- Being the first year of operations, the cars did not require any repairs and maintenance.
- Average lifespan of each car was estimated at five years with 10% salvage value at the end.
- As per the scheme of Government, he was required to pay only 15% on the net profit earned for the year by him.
- At the end of the year, he was assured of continuing at the same pace in the years to come also.

First Year Financial Results

Financial Year Ending on March 31, 2010

Particulars	Details	Amount in ₹
Sales Revenue		24,00,000
Less: *Expenses (Paid in cash only)*		
■ Drivers' Salary	6,48,000	
■ Petrol Expenses	5,76,000	
■ Interest on Loan	3,30,000	
■ Telephone Charges	46,000	16,00,000
Profit Before Tax		8,00,000
Less: Tax		1,20,000
Profit After Tax		6,80,000

Out of the profits he used ₹ 2,40,000 per annum for his household expenses and rest of the amount, he maintained in a bank account to be used to repay the bank loan at the end. He was optimistic of continuing the business at a higher scale in the years to come.

1. *Evaluate the financial statement prepared by Mr Singh.*
2. *Comment on the accounting policy adopted by Mr Singh.*
3. *Suggest an appropriate accounting course of action for Mr Singh.*

CASE 6

Valuation of Inventory—Impact on Profit and Asset

Milky Enterprises—First Years Results

It was the first year of operations of Milky Enterprises. During the year, the firm purchased the raw material several times. The records of the stores department showed the following results:

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/01/07	10,000	100	15/01/07	8,500
21/01/07	7,000	95	28/01/07	3,500
31/01/07	2,200	96	21/02/07	7,000
10/02/07	800	100	02/03/07	800
15/03/07	6,200	101	29/03/07	4,400

Under continuous inventory valuation system, the firm adopted LIFO method of inventory valuation. As a result, the closing inventory for the year ending March 31, 2007 was 2,000 units having a cost ₹ 2,01,800 (market value ₹ 1,89,700[5]). After considering these facts and other accounting records, the firm reported a gross profit of ₹ 12,79,300 for the year ending March 31, 2007 and the net profit for the year was ₹ 6,64,500.

Milky Enterprises—Second Years Results

The second year of the firm was more challenging as many new firms had entered in the industry that intensified the level of competition. As a result, Milky Enterprises had a tough time in managing its business activities. The records of the stores department showed the following details:

Opening stock 2000 units (200 units @ ₹ 100 and 1,800 units @ ₹ 101)

Date	Purchase Qty.	Rate per unit	Date	Issue Qty.
02/04/07	20,000	110	15/04/07	18,500
21/01/08	17,000	100	28/01/08	13,500
31/01/08	14,200	98	21/02/08	15,600
10/02/08	1,000	99	02/03/08	1,800
15/03/08	6,200	110	29/03/08	9,000

During the year, the accountant of the company was changed as the previous accountant was not fulfilling the requisite qualification. The new accountant adopted the FIFO method under continuous inventory valuation system. As a result, the closing inventory for the year ending 2008 was 2,000 units valuing ₹ 2,20,000 (Market value ₹ 2,49,000[6]) . The sales activity for the current year was almost of the same level

[5]Closing stock was shown in the final accounts at the cost.

as that of the previous year and the gross profit reported by the firm was ₹ 12,95,200 and net profit was ₹ 6,81,200. The chief executive of the firm expressed a feeling of satisfaction and relief over the results and motivated the employees to further improve the performance in the next financial year.

1. *Evaluate the accounting policy of the business firm.*
2. *If you feel that the accounting policy of the firm is not appropriate, then rework on the profit using an appropriate accounting policy.*

[6]Closing stock was shown in the final accounts at market value.

APPENDIX III

Recent Changes in Regulations

The following major changes have been announced recently with regard to corporate entities and their accounts:

1. Revised Schedule VI to Companies Act, 1956
2. (Near final) India accounting standards (Ind As) corresponding to IFRS
3. Goods and Services Tax (GST)

These are being discussed briefly in this appendix.

REVISED SCHEDULE VI TO COMPANIES ACT, 1956

(Applicable for the accounting year commencing on or after 01st April, 2011)

Schedule VI to Companies Act, 1956 lays down the format and contents of the financial statements to be presented by a company. It specifies the items to be disclosed in (i) balance sheet, and (ii) statement of profit and loss, presented by any company.

In March 2011 the Ministry of Corporate Affairs, Govt. of India, notified the revised schedule VI to Companies Act, 1956. This will replace the old schedule VI. The revised schedule is applicable for the accounting year commencing on or after 01st April, 2011. The provisions of revised schedule are flexible as regards their adoption. The compliance requirements set out in the revised schedule are in addition to the disclosure requirements set out in the accounting standards and provisions of Companies Act, 1956, as applicable. The revised schedule is flexible in the sense that in all the circumstances, provisions of accounting standards and the Companies Act, 1956 shall be considered superior to the provisions of the revised schedule.

The changes are many. For instance, the old schedule allowed vertical as well as horizontal form of presentation of balance sheet, but the new schedule permits only vertical form of presentation of balance sheet. In the old schedule major headings in the balance sheet were 'sources of funds' and 'application of funds', whereas in the new schedule these have been replaced by 'equity and liabilities' and 'assets' respectively. Given below is a comparison of the old schedule VI and the new schedule VI.

Table A-III.1 *Comparison of Old Schedule VI and New Schedule VI*

Point of difference	Old Schedule VI	New Schedule VI
Fixed assets	Shown under the sub- heading 'fixed assets' by showing gross block, depreciation, net block, and capital work-in-progress. Bifurcation of tangible and intangible fixed assets is not mandatory.	Fixed asset to be shown under the heading 'non-current assets' by showing a bifurcation of tangible and intangible assets. Further, capital work-in-progress and intangible assets under development are to be shown separately.
Investments	Current and non-current investments are to be disclosed under this heading.	Long term investments are to be disclosed under the heading 'non-current investment' and current investment under the heading 'current assets'.
Net working capital	Both current assets and current liabilities are shown under the heading 'application of funds' by showing net working capital.	Current assets are shown under the heading 'assets' and current liabilities under the heading 'liabilities and equities', hence net working capital does not appear in the balance sheet.
Loans and advances	Loan and advances are shown as a part of current assets, therefore presented under the heading 'current assets and loans and advances'.	Short term loans and advances to be presented under the heading 'current assets' and long term loans and advances to be presented under the heading 'non-current assets'.
Cash and bank balance	Bank balance to be shown as separately with scheduled bank and with other banks.	Bank balance held as margin money against borrowing and deposit maturing beyond 12 months period to be shown separately.
Deferred tax assets and deferred tax liabilities	These are to be shown separately, as the case may be.	Deferred tax assets to be shown under 'non-current assets' and deferred tax liabilities under 'non-current liabilities'.
Profit and loss (debit balance)	This is to be shown on the asset side under the heading 'miscellaneous expenditures and losses to the extent not written off'.	This is to be shown under the heading 'reserve and surplus' with negative figure. As a result reserve and surplus may be negative.
Shareholder's funds	These are to be presented under sub-headings 'share capital', 'equity share warrants', 'share application money', and 'reserve and surplus' are the major headings.	These are to be presented under sub-headings 'share capital', 'reserve and surplus', money received against share warrants', and share application money pending allotment are the sub headings under this.
Loan funds	These are to be presented under sub-headings 'secured loans' and 'unsecured loans'.	These are to be presented under sub-headings 'non-current liabilities showing long-term borrowings', 'deferred tax liabilities (net) other long term liabilities', and 'long term provisions'.
Current liabilities	These are shown on the asset side by deduction from current assets. Short term borrowings are not shown under this. At the same time provisions are not classified as long term and short term provisions.	These are to be presented on the liability side under the heading 'current liabilities' by showing short-term borrowings, trade payables, other current liabilities and short-term provisions.

(Contd)

(*Contd*)

Current liabilities of long term debts	There is no provision for having a separate disclosure of these items.	These are to be disclosed under the heading 'current liabilities' with specific mention under the sub heading 'other current liabilities'.
Finance lease obligation	To be grouped under the heading 'current liabilities'.	To be shown under the heading 'non-current liabilities'.
Lease deposits	To be shown under the heading 'loans and advances along with current assets'.	To be shown under 'non-current assets'.
Expense classification	Expenses to be classified function wise and nature wise.	Expenses to be classified nature wise.
Finance cost	To be classified in fixed loan and other loans.	To be classified as interest expense, other borrowing costs and gain/loss on foreign currency transaction and translation.
Foreign exchange gain/loss	Gain/loss on foreign currency transaction to be shown under the heading finance cost.	Gain/loss on foreign currency transaction to be bifurcated into finance cost and other expenses and shown separately like this.

The format of balance sheet and profit and loss account has been changed and companies are required to follow new format. The new format is based on the concept of having more disclosure as compared to the old one. The major difference in the old schedule VI and new schedule VI with respect to the format of balance sheet is shown in Table A.III.2.

Table A.III.2 *Comparative Format of Balance Sheet under Old Schedule VI and New Schedule VI*

Format of Balance Sheet under Old Schedule VI	Format of Balance Sheet under New Schedule VI
SOURCES OF FUNDS 1. Shareholder's Funds ● Capital ● Reserves and Surplus 2. Loan Funds ● Secured Loans ● Unsecured Loans 3. Deferred Tax Liabilities (Net) **Total**	**EQUITY AND LIABILITIES** 1. Shareholder's Funds ● Share capital ● Reserve and surplus ● Money received against share warrants 2. Share application money pending allotment 3. Non-current Liabilities ● Long-term borrowings ● Deferred tax liabilities (net) ● Other long term liabilities ● Long term provisions 4. Current Liabilities ● Short-term borrowings ● Trade payables ● Other current liabilities ● Short-term provisions **Total**
APPLICATION OF FUNDS 1. Fixed Assets ● Gross Block ● Less : Depreciation ● Net Block ● Capital Work-in-progress 2. Investment (Long term and current)	**ASSETS** 1. Non-current Assets (a) Fixed Assets ● Tangible assets ● Intangible assets ● Capital work-in-progress ● Intangible assets under developments

(*Contd*)

(*Contd*)

3. Deferred Tax Assets (Net) 4. Current Assets, Loans and Advances • Inventories • Sundry debtors • Cash and bank balance • Loan and advances • Other current assets **Total Current Assets** Less : Current Liabilities and Provisions • Liabilities • Provisions **Net Current Assets** 5. Miscellaneous expenditure to the extent not written off of adjusted 6. Profit and Loss Account (debit balance)	(b) Non-current investments (c) Deferred tax assets (net) (d) Long term loans and advances (e) Other non-current assets 2. current Assets (a) Current investments (b) Inventories (c) Trade receivables (d) Cash and cash equivalents (e) Short-term loans and advances (f) Other current assets
Total	**Total**

In the revised schedule VI the format and contents of profit and loss account has also been changed. Under the old schedule it was called profit and loss account but under the new schedule it is called statement of profit and loss. A comparison of old and new schedule VI in this regard has been depicted in the Table A.III.3.

Table A.III.3 *Comparative Format of Statement of Profit and Loss under Old and New Schedule VI*

Format of Profit and Loss Account	Format of Statement of Profit and Loss
Income	**Income**
1. The aggregate amount of turnover from all the products and services is to be shown in one line by giving details in the notes to accounts. 2. Income from other sources is to be shown separately	1. Revenue from Operations (revenue from core business activities is to be shown here. The revenue from discontinuing operations need not to be shown here.) 2. Other income
Total	**Total**
Expenditure:	**Expenses**
1. Manufacturing, construction and operating expenses 2. Staff expenses 3. Sales, administration and other expenses 4. Interest expenses and brokerage 5. Depreciation, obsolescence of tangible assets 6. Amortization of intangible assets Less: Overheads charged to fixed assets	1. Cost of material consumed 2. Purchase of stock-in-trade 3. Changes in inventory of finished goods, work-in-progress and stock-in-trade 4. Employee benefit expenses 5. Financial costs 6. Depreciation and Amortization 7. Other expenses
Total	**Total**
Profit before tax (Income – Expenditure)	**Profit before exceptional and extraordinary items and taxes (Income-Expenses)**
Less : provision for tax (for current year and deferred tax)	Less: exceptional items **Profit before extraordinary items and taxes** Less : extraordinary items

(*Contd*)

(*Contd*)

Profit after tax Add: Gain/(loss) from extraordinary items **Profit after tax after extraordinary items**	**Profit before taxes** Less : provisions for taxes (current year and deferred tax) **Profit after tax for the period only from continuing operations** Add : Profit/(loss) from discontinuing operations (net of taxes) **Profit/ (loss) for the period**
Profit after tax after extraordinary items Add : Balance brought forward from previous year Less : Dividend paid for the previous including additional dividend tax thereon, if any **Profit available for Appropriation** Less : Transfer to general reserve **Profit Available for distribution** Less : (a) Interim dividend (b) Proposed dividend (c) Additional tax on dividend **Balance Carried to Balance Sheet**	**Profit/ (loss) for the period** **Earning Per Share (EPS)** (a) Basic (b) Diluted

Example – Balance Sheet of Ranbaxy Limited as per Old and New Schedule VI.

We present herewith balance sheet of Ranbaxy Limited for the year ending 31st December, 2010 as published by Ranbaxy Limited in its 50th Annual Report. The balance sheet is in the format prescribed in the old schedule VI. This is followed by the presentation of the same balance sheet had it been presented as per the new schedule VI.

Ranbaxy Limited
Balance Sheet as at 31st December, 2010 (As per Old Schedule VI)
(Rupees in million, except for share data, and if otherwise stated)

Particulars	As at 31-12-10	As at 31-12-2009
SOURCES OF FUNDS		
1. Shareholder's Funds	**51,323.92**	**41,346.05**
• Capital	2,105.20	2,102.09
• Equity share warrants	--	1,756.59
• Share application money pending allotment	65.96	1.95
• Reserves and Surplus	49,152.76	37,485.42
2. Loan Funds	**42,407.15**	**33,483.80**
• Secured Loans	1,953.85	1,758.27
• Unsecured Loans	40,653.30	31,725.53
Total	**93,931.07**	**74,829.85**
APPLICATION OF FUNDS		
1,. Fixed Assets		
• Gross Block	28,675.34	26,209.20
• Less : Accumulated Depreciation	11,554.16	10,275.15
• Net Block	**17,121.18**	**15,934.05**
• Capital Work-in-progress	3,301.82	4,149.16

(*Contd*)

(*Contd*)

2. Investment (Long term and current)	38,044.,37	38,336.90
3. Deferred Tax Assets (Net)	--	4,199.08
4. Current Assets, Loans and Advances		
● Inventories	14,899.06	12,304.82
● Sundry debtors	12,926.32	15,346.48
● Cash and bank balance	27,11.82	7,541.24
● Loan and advances	11,498.55	9,648.16
● Other current assets	3,205.97	1,558.74
Total Current Assets	**69,652.72**	**46,399.44**
Less : Current Liabilities and Provisions		
● Liabilities	24,910.82	26,558.44
● Provisions	9,278.20	7,630.34
Total current liabilities and provisions	**34,189.02**	**34,188.78**
Net Current Assets	**35,463.70**	**12,210.66**
5. Miscellaneous expenditure to the extent not written off of adjusted	---	--
6. Profit and Loss Account (debit balance)	--	--
Total	**93,931.07**	**74,829.85**

Ranbaxy Limited
Balance Sheet as at 31st December, 2010
(As per New Schedule VI) (Rupees in million , except for share data, and if otherwise stated)

Particulars	Figures as at the end of 31-12-2010	Figures as at the end of 31-12-2009
I. EQUITY AND LIABILITIES		
1. Shareholder's Funds		
(a) Share Capital	2,105.20	2,102.09
(b) Reserves and Surplus	49,152.76	37,485.42
(c) Money received against share warrants		1,756.59
2. Share application money pending allotment	65.96	1.95
3. Non-Current Liabilities		
(a) Long-term borrowings	1,953.85	1,758.27
(b) Deferred tax liabilities (Net)		
(c) Other Long term liabilities		
(d) Long term provisions	2,416.52	2,108.31
4. Current Liabilities		
(a) Short-term borrowings	40,653.30	31,725.53
(b) Trade payables	12,742.15	9,124.88
(c) Other current liabilities	12,168.67	17,433.56
(d) Short-term provisions	6,861.68	5,522.03
Total	128,120.09	109,018.63

(*Contd*)

(*Contd*)

II. Assets		
1. Non-current assets		
(a) Fixed assets		
(i) Tangible assets	16,268.41	15,207.46
(ii) Intangible assets	852.77	726.59
(iii) Capital work-in-progress	3,301.82	4,149.16
(iv) Intangible assets under development		
(b) Non-current investments	34,081.94	38,301.57
(c) Deferred tax assets (net)		4,199.08
(d) Long term loans and advances		
(e) Other non-current assets		
2. Current assets		
(a) Current investments	3,962.43	35.33
(b) Inventories	14,899.06	12,304.82
(c) Trade receivables	12,926.32	15,346.48
(d) Cash and cash equivalents	27,122.82	7,541.24
(e) Short-term loans and advances	11,498.55	9,648.16
(f) Other current assets	3,205.97	1,558.74
Total	128,120.09	109,018.63

Explanation: The balance sheet of Ranbaxy Limited presented above has been taken from the annual report of the company for the year 2010. Necessary details were extracted from the schedules forming the part of accounts presented in the annual report as schedules to balance sheet. As new schedule VI is not applicable therefore sufficient details to rework the profit and loss account could not be extracted hence profit and loss account has not been reworked as per the new schedule.

INDIAN ACCOUNTING STANDARDS (Ind AS) CORRESPONDING TO IFRS

With the announcement of IFRS and ongoing implementation of IFRS across the globe, the concerned statutory body in India–Institute of Chartered Accountants of India (ICAI)—has recently finalized the draft of Indian Accounting Standards (Ind AS). These have been debated and discussed widely among the experts. ICAI has come out with the near final Indian accounting standards (Ind AS) corresponding to IFRS. These are subject to certain changes, which may be made by the Government before issuing notification for the implementation of these standards. These are as follows:

Ind AS	Heading	Corresponding IFRS/IAS
Ind-AS 101	First-time Adoption	IFRS 01
Ind-AS 102	Share based payments	IFRS 02
Ind-AS 103	Business combinations	IFRS 03
Ind-AS 104	Insurance contracts	IFRS 04

(*Contd*)

(*Contd*)

Ind-AS 105	Non-current assets held for sale and discontinued operations	IFRS 05
Ind-AS 106	Exploration for and evaluation of mineral resources	IFRS 06
Ind-AS 107	Financial instruments : disclosure	IFRS 07
Ind-AS 108	Operating segments	IFRS 08
Ind-AS 1	Presentation of financial statements	IAS 1
Ind-AS 2	Inventories	IAS 2
Ind-AS 7	Statement of cash flows	IAS 7
Ind-AS 8	Accounting policies, changes in accounting estimates, and errors	IAS 8
Ind-AS 10	Events after the reporting period	IAS 10
Ind-AS 11	Construction contracts	IAS 11
Ind-AS 12	Income tax	IAS 12
Ind-AS 16	Property, plant and equipments	IAS 16
Ind-AS 17	Leases	IAS 17
Ind-AS 18	Revenue	IAS 18
Ind-AS 19	Employee benefits	IAS 19
Ind-AS 20	Accounting for government grants	IAS 20
Ind-AS 21	The effects of changes in foreign exchange rates	IAS 21
Ind-AS 23	Borrowing costs	IAS 23
Ind-AS 24	Related party disclosure	IAS 24
Ind-AS 27	Consolidated and separate financial statements	IAS 27
Ind-AS 28	Investments in associates	IAS 28
Ind-AS 29	Financial reporting in hyperinflationary economies	IAS 29
Ind-AS 31	Interest in joint ventures	IAS 31
Ind-AS 32	Financial instruments: Presentation	IAS 32
Ind-AS 33	Earning per share	IAS 33
Ind-AS 34	Interim financial reporting	IAS 33
Ind-AS 36	Impairment of Assets	IAS 36
Ind-AS 37	Provisions, contingent liabilities and contingent assets	IAS 37
Ind-AS 38	Intangible assets	IAS 38
Ind-AS 39	Financial instruments: Recognition and measurement	IAS 39
Ind-AS 40	Investment in property	IAS 40

Out of these Ind-AS 101 to Ind-AS 108 and IFRS 01 to IFRS 02 are the recently issued accounting standards. The details about IFRS 01 to IFRS 08 have been provided in chapter seventeen of this book (on Accounting Standards and IFRS). Therefore, we present herewith details about Ind-AS 101 to Ind-AS 108 and a comparison of these with IFRS 01 to IFRS 08.

Ind AS 101: First-time Adoption of Indian Accounting Standards (corresponding to IFRS 01)

This new accounting standards corresponds to IFRS 01. It deals with the aspects relating to complete set of financial statements of Indian accounting standards—presentation of financial statements. According to it a complete set of financial statements comprises:

(a) A balance sheet as at the end of current accounting period and at the end of previous accounting period.
(b) A statement of profit and loss for the period.
(c) A statement of cash flow for the period.
(d) Notes, comprising a summary of significant accounting policies and other explanatory information.

Further, it emphasizes on the presentation of true and fair view and compliance with Ind ASs. The entity following Ind AS shall make an explicit statement of such compliance in notes to accounts. When preparing financial statements, management shall follow the following concepts

- Going concern concept
- Accrual basis of accounting
- Materiality and aggregation of facts
- No offsetting of facts

Ind AS 102: Share-based Payment (corresponding to IFRS 02)

The purpose of this accounting standard is to specify the provisions to be followed by an entity making share-based payment for transactions. The provisions provide for the following:

- Transactions in which services are received and settlement for these is done in shares.
- The value of transactions is measured with reference to the fair value of the equity instruments granted.
- Treatment of vesting conditions with reference to the issue of share-based payment.
- Treatment of non-vesting conditions with reference to the issue of share-based payment.
- Cash settled share-based transactions.
- Non-cash settled share-based transactions.
- Recognition and measurement of share-based payment transactions.

Ind AS 103: Business Combinations (corresponding to IFRS 03)

The objective of this accounting standard is to have an improved relevance, reliability and comparability of the information that a reporting business entity should provide while presenting financial statements after business combination or amalgamation of companies. The provisions provide for the following:

- Scope of business combination, recognition and measurement criterion.
- Recognition and measurement of identifiable assets acquired and liabilities assumed in a business combination transaction.
- Recognition and measurement of goodwill and other intangible assets acquired pursuant to business combination.
- To present fair view of financial position pursuant to business combination so as to facilitate true interpretation of the post amalgamation financial statements.
- Details of bargain purchase and recognition of goodwill or gain resulting from bargain purchase.
- Business combination achieved without the transfer of consideration.
- Business combination costs and accounting effect of such costs.

Ind AS 104: Insurance Contracts (corresponding to IFRS 04)

The objective of this accounting standard is to specify the reporting standards for insurance contract to be adopted by a business entity doing insurance business i.e. an insurer. The provisions deal with the following:

- Embedded derivatives.
- Unbundling of deposit component from an insurance contract.
- Recognition and measurement of insurance contracts.
- Liability adequacy test for an insurer who issue and re-issues insurance contracts.
- Impairment of reinsurance assets.
- Insurance contracts acquired in a business combination transaction.
- Discretionary participation feature in an insurance contract and in a financial instrument.
- Nature and risk arising from an insurance contract.

Ind AS 105: Non-current Assets Held for Sale and Discontinued Operations (corresponding to IFRS 05)

The objective of this standard is to specify the accounting provisions for assets held for sale and the presentation and disclosure of discounted operations. It specifies the provisions for the recognition and measurement of assets held for sale and accounting for discontinued operations. The main provisions cover the following:

- Recognition and measurement of non-current assets held for sale and relating to discontinued/discontinuing operations.
- Recognition and measurement of impairment loss relating to above mentioned assets.
- Reversal of impairment loss relating to above mentioned assets.
- Gain/loss relating to discontinuing operations.

Ind AS 106: Exploration for and Evaluation of Mineral Resources (corresponding to IFRS 06)

The objective of this standard is to set out the norms for financial reporting and accounting relating to "exploration for and evaluation of mineral resources". It provides for the following

- Recognition of assets by such companies that are engaged in exploration and evaluation practices.
- Recognition of impairment loss by these companies should be done as per the provisions of AS – 36.
- Provision relating to the identification of assets and equity relating to exploration business.

Ind AS 107: Financial Instruments: Disclosures (corresponding to IFRS 07)

The main focus of this accounting standard is to provide disclosure standards to be followed while presenting financial statements. Accordingly, companies are required to disclose the nature and extent of risk arising from financial instruments to which the entity is exposed during the reporting period and at the end of the reporting period.

It also specifies the guidelines as how such risk is to be managed. The provisions of this standard complement with the principles specified in Ind AS 39 – Financial Instruments: Recognition and Measurement and Ind AS 32 Financial Instruments: Presentation. It covers the following:

- Identification of classes of financial instruments disclosed in the balance sheet.
- Level of disclosure about different classes of financial instruments.

- Significance of financial instruments in interpreting financial position and financial performance.
- Nature and extent of risk relating to financial assets and financial liabilities.
- Classification of financial assets and financial liabilities at fair value through profit and loss.
- Recognition, measurement and derecognition of financial assets and financial liabilities at fair value through profit and loss.
- Provisions relating to the recognition, measurement and derecognition of compound financial instruments and embedded derivatives.

Ind AS 108: Operating Segments (corresponding to IFRS 08)

The main provisions of this standard relate to identification of operating segments and reporting segments while presenting financial position of a business entity. They provide for the following:

- Identification of operating segments by a business enterprise while presenting financial statement.
- Identification of reporting segments by a business enterprise while presenting financial statement.
- Disclosure of information about major products and services of the reporting entity.
- Disclosure of information about geographical areas and major clients of the reporting entity.
- Aggregation criterion and quantitative criterion for reporting segments.

Comparison Of Ind AS And IFRS

In the following section we present a snapshot of major differences between Ind As and IFRS.

TABLE A.III.4 Comparison of Ind AS and IFRS

Heading	Ind AS	IFRS
Date of Transition (Ind-AS 101 vs. IFRS 01)	Date of transition is the beginning of the current period.	Date of transition is the earliest period for which an entity presets full comparative information.
Compulsion of Comparative Financial Statements (Ind-AS 101 vs. IFRS 01)	It is not compulsory to present a comparative financial statement. It provides an option to present comparative financial statements in accordance with Ind-AS on a memorandum basis.	It is compulsory to present comparative financial statement at the time of first time adoption of IFRS.
Disclosure about non-specific information (Ind-AS 101 vs. IFRS 01)	If an entity presents certain historical summaries and information as per old standards then such disclosure is not compulsory.	If an entity presents certain historical summaries and information as per old standards then such disclosure is compulsory to facilitate comparison.
Terminology-I	It uses 'balance sheet'	It uses 'Statement of Financial Position'.
Terminology-II	It uses 'statement of profit and loss'	It uses 'statement of comprehensive income'.
Terminology-III	'Approval of financial statements for issue' has been used.	'Authorization of the financial statements for issue' has been used.
Business Combination—Gain/loss from bargain purchase(Ind-AS 103 vs. IFRS 03)	Such gain/loss is to be recognized in comprehensive income.	Such gain/loss to be recognized in profit and loss account.

GOODS AND SERVICES TAX (GST)

Definition

Goods and services tax (GST) is a tax on each value addition in every stage of channel of distribution. It is levied on the value contributed at each stage of the channel of distribution involved in the movement of goods and services from the place of production to the place of consumption. It is also called as value-added tax.

Goods and Services Tax (GST) is a widely discussed issue in the field of accounting. It is likely to be introduced in the year 2012. The prominent features of GST system are as follows:

Mechanism of GST

The mechanism of charging GST and claiming input credit is as follows:

Registration

To facilitate smooth collection and payment of GST each intermediary in the chain of distribution is required to be registered under GST rules. Examples of different intermediaries are manufacturer, wholesaler and retailer.

Charging GST

Manufacturer, wholesaler, and retailer/service provide should be registered under GST. Each of these should charge the tax at the specified rates to be borne by the purchaser at the each stage of distribution of goods and services. The collected tax is to be deposited with Government.

Getting Credit of GST

If the goods and service provider i.e. any of the intermediaries collecting tax from the purchaser, is a registered dealer under GST and has a valid invoice for the goods and services purchased by him, then he is authorized to claim the credit for the GST so paid at the time of purchase.

Payment to Government

Every registered intermediary (manufacturer, wholesaler and retailer) is required to deposit net amount of tax under GST. Net amount means GST collected less GST paid. Every payment should be supported by a valid GST invoice for GST collected and GST paid.

Ultimate Burden Bearer

The ultimate bearer of GST is the final customer/consumer of goods and services passing through whole chain of distribution.

Systems of GST

There are three system of GST prevalent around the world. These are:

- Invoice based system
- Payment based system
- Hybrid system

Invoice Based System

Under this system GST (input) can be claimed on the basis of acknowledgement of invoice for goods purchased and GST (output) is accounted as soon as invoice is raised for goods sold. The incidence of payment is not considered in it. This corresponds to accrual system of accounting.

Payment System

Under this system GST (input) can be claimed at the time of making the payment for the goods purchased, and GST (output) is accounted as soon as payment is cleared for the goods sold.

Hybrid System

In this system, a mix of invoice system and payment system can be used if accounting laws of the country allow for it.

Model Question Paper-I

FINANCIAL ACCOUNTING

Time: Three hours | Maximum marks: 100

PART A — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

1. Write a note on double entry accounting system.
2. "Balance sheet is like corporate bikini which conceals more than what it reveals." Comment.
3. "Ratio analysis is a powerful tool for financial performance analysis but one needs to take certain precautions before using ratios." Explain.
4. "Liquidity does not mean profitability and profitability does not mean liquidity." Do you agree? Explain with the help of any hypothetical example.
5. Explain the term: funds flow statement. Describe the steps involved in the preparation of funds flow statement.
6. Discuss the relevance of having accounting standards. Aren't these hurdles in preparing books of accounts? Explain.

PART B — ($3 \times 15 = 45$ marks)

Answer any THREE questions.

7. Journalize, post to ledger accounts, and prepare trial balance:

   Ram brought capital of Rs. 15,00,000
   Purchase of machinery for Rs. 3,00,000
   Cash purchases — Rs. 2,50,000
   Paid salaries — Rs 40,000
   Rent received — Rs. 20,000

Paid wages — Rs. 16,000
Credit purchases from Rajaram — Rs. 20,000
Cash sales — Rs. 3,20,000
Purchase of stationary — Rs. 5,000
Paid cash to Rajaram Rs. 19, 800 in the final settlement of his account
Sold goods – Rs. 80,000
Paid for advertising – Rs. 12,500
Received commission – Rs. 1,200

8. Discuss the provisions of Indian GAAP relating to classification of assets and liabilities. Give suitable examples.
9. Prepare final accounts from following trial balance as on 31st March, 2011:

Particulars	Debit Amount (Rs.)	Credit Amount (Rs.)
Capital		8,70,000
Purchase and sales	6,05,000	12,10,000
Opening stock	72,000	
Debtors and creditors	90,000	1,70,000
14% Bank loan		2,00,000
Overdraft		1,12,000
Salaries	2,70,000	
Advertisements	1,10,000	
Manufacturing expenses	60,000	
Returns	40,000	30,000
Furniture	4,50,000	
Building	8,90,000	
Cash in hand	5,000	
Investment	45,000	
Bills receivables and bills payables	23,000	20,000
Outstanding expenses		10,000
Accrued income	3,500	
Tax payable		1,20,000
Goodwill	55,000	
Patents	23,500	
	27,42,000	27,42,000

Stock on 31st March, 2011 was for Rs. 89,000, salary for the month of March (Rs. 10,000) was yet to be paid. Provide depreciation on building @ 10% and make a provision for doubtful debts @ 2%.

10. (a) X Ltd. forfeited 200 equity shares of Rs. 10/- each; Rs. 8/- called-up for non-payment of first call money Rs. 2/- each. Application money and allotment money was Rs. 2/- and Rs. 4/- respectively. These shares were reissued at a price of Rs. 7/- each as Rs. 8/- paid-up. Show entries in the journal and how these would appear in the balance sheet. (5)

(b) Konic Ltd. issued 1,50,000, 10% debentures of face value Rs. 100/- each at par. The amount due was to be paid as Rs. 10/- being application money, Rs. 30/-, Rs. 20/- and Rs. 40/- being allotment, first call and second call money respectively. Company received application for 1,80,000 debentures. Application money for 20,000 debentures was refunded and rest of the applicants were issued debentures on prorated basis. Pass necessary journal entries and show the items in balance sheet. (10)

PART — C (Compulsory) (30 marks)

11. A Ltd. and B Ltd. are in the same industry. On 31st March, 2011 A Ltd. decided to amalgamate B Ltd. The balance sheet of both the companies is as follows

Liabilities	A (Amt. Rs.)	B(Amt.Rs.)	Assets	A(Amt.Rs.)	B(Amt.Rs.)
Share Capital (Face value 100 each)	6,00,000	3,00,000	Land and building	7,00,000	1,00,000
			Plant and machinery	6,00,000	1,40,000
Securities premium	2,00,000	10,000	Debtors	4,00,000	30,000
Development rebate reserve	2,50,000	3,000	Stock	2,00,000	2,40,000
			Cash at bank	1,00,000	10,000
General reserve	3,00,000	6,000			
Profit and loss a/c	1,50,000	1,000			
Secured loan	2,00,000	—			
Current liabilities	3,00,000	2,00,000			
	20,00,000	5,20,000		20,00,000	5,20,000

The scheme of amalgamation was:

1. All the shareholders of B Ltd. to get one equity share of face value Rs. 100/- of A Ltd.- to be issued at par for each share held by them in B Ltd.
2. A Ltd. will acquire all the assets and liabilities of B Ltd. at book value.

Pass necessary journal entries in the books of both the companies and prepare post amalgamation balance sheet.

Model Question Paper-II

FINANCIAL ACCOUNTING

Time: Three hours Maximum marks: 100

PART A — ($5 \times 5 = 25$ marks)

Objective type questions **($10 \times 1 = 10$)**

1. A company manufactured 20,000 units of product XYZ during the year 2010. Which accounting concept is missing in this transaction?
   (a) Matching concept
   (b) Money measurement concept
   (c) Going concern concept
   (d) Recognition concept
2. Convention of full disclosure means
   (a) Publishing all the information in the news paper
   (b) Publishing final accounts in the news paper
   (c) Giving all the necessary and price sensitive information in the annual report
   (d) Giving all the information to employees
3. Which out of the following is true about accounting standards?
   (a) Recognition of events and transactions in the monetary transactions
   (b) Measurement of monetary transactions
   (c) Recording and disclosure of monetary transactions in the books of accounts
   (d) None of these
   (e) All of these
4. Although a frequent change in the accounting policies is not suggested, but it becomes inevitable in which of the following circumstances?
   (a) To comply with the regulatory requirements
   (b) To ensure appropriate disclosure

(c) To abide by the provisions of accounting standards
(d) None of these
(e) All of these

5. Which of the following is true about internally generated goodwill?
   (a) Recorded at fair value through profit and loss
   (b) Recorded at the initially value measured by an expert
   (c) Both (a) and (b) are applicable
   (d) None of these
6. Dividend is the function of
   (a) Paid up capital
   (b) Face value
   (c) Called up capital
   (d) None of these
7. When proposed dividend percentage is above 20%, then minimum transfer to general out of the profits for the year should be:
   (a) 5% (b) 7.5% (c) 10% (d) It is situation specific
8. Goods were sold to Ramesh at Rs. 1,690 but it was posted to his account as Rs. 1,960. Which type of error is this?
   (a) Error of omission
   (b) Error of commission
   (c) Error of principle
   (d) Error of compensatory nature
9. Final accounts are prepared by following which of these concepts:
   (a) Money measurement concept
   (b) Cost concept
   (c) Accrual concept
   (d) None of these

10 Which out of the following is applicable when total external liabilities exceed total assets (in case of sole enterprise)?
   (a) Owner's equity becomes nil in the final accounts
   (b) Owner's equity does not appear in the final accounts
   (c) Owner's equity is negative representing loss, and loss is shown on the asset side
   (d) Owner's equity is negative and shown to the liability side
   (e) None of these

Short answer type questions (Attempt any five) **(5 × 5 = 25)**

11. Mention any three areas in which different accounting policies may be followed by different business enterprises operating in different conditions. Support your answer with suitable examples.
12. Explain the term divisible profits. When can a business firm distribute dividend out of profits ? Discuss the provisions about distributing profits out of reserves.
13. Write short notes on the following:
    (a) Going concern concept
    (b) Capital maintenance
    (c) Public issue through book building
    (d) Authorized share capital
    (e) Cash generating units

14. Explain the term pooling of interest method. What are the pre-conditions for adopting this method of accounting for amalgamation?
15. Discuss different constituents of an annual report.
16. Explain the term amortization. How non-current assets get expensed? Give suitable example.

Long answer type questions (Attempt any three) **(3 × 15 = 45)**

17. Explain the provisions of AS-14 about the purchase method of accounting for amalgamation. Also explain with the help of a suitable example, the concept of purchase consideration.
18. Attempt both the following questions: **(8 + 7 = 15)**
    (A) On 1st April, 2010 X Limited has 10,000, Rs. 100/- each, 12% debentures. The terms of issue provide that every year 1/4 of debentures are to be redeemed by making purchase from open market. During the year 2010-11, the company purchased the following debentures:
    (i) 1,300 debentures at a market price of Rs. 97/- per debenture. These were cancelled subsequently.
    (ii) 1,200 debentures at a market price of 99/- per debenture. Subsequently these were sold by company @ Rs. 101/- per debenture.

    Show necessary journal entries in the books of accounts.

    (B) Jindal Aluminum Limited (JAL) acquired a machinery from Jagson Enterprises (JE) for a lease term of four years, which covers almost the complete economic life of the asset. The lease commences on 1st April 2009 and will expire on 31st March, 2013. The fair value of the machine at the commencement of the lease term is Rs. 4,00,890 and JAL is required to pay to JE an annual lease rent of Rs. 1,20,000 per annum and a guaranteed residual value of Rs. 30,000 at the end of the lease term. Calculate the implicit interest rate.
19. From the following comparative balance sheets and additional information, prepare the cash flow statement:

Comparative Balance Sheet

Particulars	Previous Year	Current Year
(A) Sources of funds		
Equity share capital	5,00,000	6,00,000
Debentures	2,70,000	3,50,000
Profit and loss	80,000	43,000
Accounts payable	96,000	1,92,000
Dividend payable	57,000	35,000
Bank overdraft	1,27,000	45,000
(B) Application of funds		
Fixed assets	5,50,000	7,00,000
Investment	2,50,000	1,00,000
Stock in trade	2,30,000	3,15,000
Accounts receivables	70,000	1,40,000
Cash in hand	30,000	10,000

Additional Information

(1) During the year depreciation charged to Profit and Loss Account was Rs. 1,20,000. (2) Tax paid during the year was Rs. 57,000

(3) Interest paid on debentures was Rs. 58,500

(4) During the year Rs. 22,000 was received as dividend on investment and credited to profit and loss account.

(5) During the year the company issued shares of Rs. 40,000 to the vendors of fixed assets as part payment for the fixed assets.

20. Compare the financial ratios of the following companies and comment:

Ratios	A	B	C
Current ratio	2.75	2.65	2.70
Liquid ratio	2.00	1.90	1.50
Gross profit margin	17%	20%	19%
Operating profit margin	9%	12%	16%
Net profit margin	10%	11%	8%
Return on investment	14%	16%	12%
Fixed assets turnover ratio	7 times	5 times	8 times
Debt : equity ratio	3.50	3.00	4.00
Interest coverage ratio	4 times	5 times	4 times
Inventory turnover ratio	2.5 times	4 times	5 times

CASE SUTDY (COMPULSORY 20 MARKS)

Monison Enterprises – First Years Results

It was first year of operations of Monison Enterprises. During the year, the firm purchased the raw material several times at different prices, the records of stores department disclosed the following:

Date	Purchase Qty.	R Rate per unit	Date	Issue Qty.
02/01/07	10,000	100/-	15/01/07	8,500
21/01/07	7,000	95/-	28/01/07	3,500
31/01/07	2,200	96/-	21/02/07	7,000
10/02/07	800	100/-	02/03/07	800
15/03/07	6,200	101/-	29/03/07	4,400

Under continuous inventory valuation system, the firm adopted LIFO method of inventory valuation. As a result, the closing inventory for the year ending 31st March, 2007 was 2,000 units having cost Rs. 2,01,800 (market value Rs. 1,89,700[1]). After considering these facts and other accounting records, the firm reported a gross profit of Rs. 12,79,300 for the year ending 31st March, 2007 and net profit for the year was Rs. 6,64,500.

Monison Enterprises – Second Years Results

The second year of the firm was more challenging as many new firms had entered in the industry, which intensified the level of competition. As a result Monison Enterprises had a tough time in managing its business activities. The records of the stores department disclosed the following details:

Opening stock: 2000 units (200 units @ Rs. 100/- and 1,800 units @ Rs. 101/-)

Date	Purchase Qty.	R Rate per unit	Date	Issue Qty.
02/04/07	20,000	110/-	15/04/07	18,500
21/01/08	17,000	100/-	28/01/08	13,500
31/01/08	14,200	98/-	21/02/08	15,600
10/02/08	1,000	99/-	02/03/08	1,800
15/03/08	6,200	110/-	29/03/08	9,000

[1]Closing stock was shown in the final accounts at the cost.

During the year accountant of the company was changed as the previous accountant was not fulfilling the requisite qualification. The new accountant adopted the FIFO method under continuous inventory valuation system. As a result, the closing inventory for the year ending 2008 was 2,000 units valuing Rs. 2,20,000/- (Market value Rs 2,49,000[2]) . The sales activity for the current year was almost of the same level as that of the previous year and the gross profit reported by the firm was Rs. 12,95,200 and net profit was Rs. 6,81,200. The chief executive of the firm expressed feeling of satisfaction and relief over the results and motivated the employees to further improve the performance in the next financial year.

1. Evaluate the accounting policy of the business firm.
2. If you feel that the accounting policy of the firm is not appropriate, then rework the profit using appropriate accounting policy.

[2]Closing stock was shown in the final accounts at market value.

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