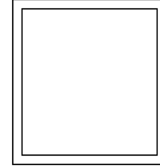

MMS SEM - I
MASTERS IN MANAGEMENT STUDIES

FINANCIAL ACCOUNTING

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MMS – Masters in Management Studies

Semester – I

Financial Accounting

Syllabus

Module

Sr. No.	Content	Activity	Learning outcomes
1	Introduction to Accounting Meaning and necessity of accounting Accounting cycle An overview of Financial Statements – Income Statement and Balance Sheet	Lecture and discussion	Clarity and understanding of the basic concepts of accounting and financial statements
2	Introduction and meaning of GAAP, IFRS and Ind AS Important Accounting Standards Concepts used in accounting Concepts related to Income Statement and Balance Sheet Accounting Equation and its relation to accounting mechanics	Theoretical discussion and explanation	Ability to apply the principles and concepts of accounting in preparing the financial statements
3	Accounting mechanics and process leading to preparation of Trial Balance and Financial Statements	Theoretical discussion and exercises	Ability to execute the accounting process- Recording- Classifying and Summarizing. Understanding the use of accounting Software
4	Preparation of Financial Statements with Adjustment - 'T' form and vertical form of financial statements Detailed discussion and understanding of various items in Schedule III Preparation of Corporate Financial Statements and Notes to Accounts	Theoretical discussion and problem solving	Detailed and in depth understanding of all the items in the corporate financial statements
5	Revenue recognition and measurement Capital and revenue items Treatment of R & D expenses Preproduction cost Deferred revenue expenditure etc.	Theoretical discussion and exercises	Understanding the principles of revenue recognition and ability to distinguish between revenue and capital income and expenditure and their treatment in corporate financial statements

Sr. No.	Content	Activity	Learning outcomes
6	Fixed Assets and Depreciation Accounting	Theoretical discussion and problem solving	Understanding different methods of depreciation and their impact on profitability and asset valuation
7	Evaluation and accounting of Inventory	Theoretical discussion and problem solving	Understanding the concepts of inventory valuation and their effect on profit and cost of goods sold.
8	Fund Flow Statement Cash Flow Statement	Problems and exercises with theoretical discussion	Ability to prepare a statement of changes in financial position with respect to working capital and cash flow.
9	Corporate Financial Reporting – Reading of Annual Report, Presentation and analysis of audit reports and directors report. (Students should be exposed to reading of Annual Reports of companies both detailed and summarized version)	Assignment discussion	Ability to read Annual Reports, Presentation and analysis of audit reports and directors' report
10	Basics of Cost Accounting	Theoretical discussion	Understanding basic cost concepts and ability to prepare a simple cost sheet
11	Ethical Issues in accounting	Theoretical discussion	Understanding the difference between errors and frauds; creative accounting and the Corporate Governance Report.

Text Books

1	Financial Accounting for Management – Dinesh D Harsolekar
2	Financial Accounting –Text and Cases – Dearden and Bhattacharyya
3	Accounting- Text and Cases – Robert Anthony, david Hawkins and Kenneth Merchant

Reference Books

1	Financial Accounting - Reporting & Analysis – Stice and Diamond
2	Full Text of Indian Accounting standard – Taxmann Publication
3	Financial Accounting for Managers – T.P. Ghosh
4	Financial Accounting – R. Narayanaswamy

Assessment

Internal	40%
Semester end	60%

MODULE – I

1

ACCOUNTING: AN INTRODUCTION

Unit Structure

1.1 Accounting: the language of business
1.2 Accounting: an information system.
 1.2.1 Definitions
 1.2.2 Objectives of accounting
 1.2.3 Function of accounting
1.3 Users of accounting information:
1.4 Branches of accounting
1.5 Book-keeping
 1.5.1 Accounting cycle
 1.5.2 Basic accounting terms

1.1 INTRODUCTION TO ACCOUNTING

Accounting is a business language. We can use this language to communicate financial transactions and their results. Accounting is a comprehensive system to collect, analyzes, and communicates financial information.

The origin of accounting is as old as money. In early days, the number of transactions was very small, so every concerned person could keep the record of transactions during a specific period of time. Twenty-three centuries ago, an Indian scholar named *Kautilya* alias *Chanakya* introduced the accounting concepts in his book *Arthashastra*. In his book, he described the art of proper account keeping and methods of checking accounts. Gradually, the field of accounting has undergone remarkable changes in compliance with the changes happening in the business scenario of the world.

Business is an economic activity undertaken with the motive of earning profits and to maximize the wealth for the owners. Business cannot run in isolation. Largely, the business activity is carried out by people coming together with a purpose to serve a common cause. This team is often referred to as an organization, which could be in different forms such as sole proprietorship, partnership, body corporate etc. The rules of business are basedon general principles of trade, social values, and statutory framework encompassing national or international boundaries. While these variables could be different for different businesses, different countries etc., the basic

purpose is to add value to a product or service to satisfy customer demand.

A bookkeeper may record financial transactions according to certain accounting principles and standards and as prescribed byan accountant depending upon the size, nature, volume, and other constraints of a particular organization.

With the help of accounting process, we can determine the profit or loss of the business on a specific date. It also helps us analyze the past performance and plan the future courses of action. As the basic purpose of business is to make profit, one must keep an ongoing track of the activities undertaken in course of business.

1.2 ACCOUNTING: AN INFORMATION SYSTEM

1.2.1 DEFINITIONS

Definition of Accounting

Definition by the American Institute of Certified Public Accountants (Year 1961):

"Accounting is the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the result thereof".

Definition by the American Accounting Association (Year 1966):

"The process of identifying, measuring and communicating economic information to permit informed judgments and decisionsby the users of accounting".

1.2.2 OBJECTIVES OF ACCOUNTING

To Providing Information

The primary objective of accounting is to provide useful information for decision-making to stakeholders such as owners, management, creditors, investors, etc. Various outcomes of business activities such as costs, prices, sales volume, value under ownership, return of investment, etc. are measured in the accounting process.

To keep systematic records:

Accounting is done to keep systematic record of financial transactions. The primary objective of accounting is to help us collect financial data and to record it systematically to derive correct and useful results of financial statements.

Ascertainment of Results

'Profit/loss' is a core accounting measurement. It is measured by preparing profit and loss account for a particular period. Various other accounting measurements such as different types of revenue expenses and revenue incomes are considered for preparing this profit

and loss account. Difference between these revenue incomes and revenue expenses is known as result of business transactions identified as profit/loss.

To ascertain the financial position of the business:

A balance sheet or a statement of affairs indicates the financial position of a company as on a particular date. A properly drawn balance sheet gives us an indication of the class and value of assets, the nature and value of liability, and also the capitalposition of the firm. With the help of that, we can easily ascertain the soundness of any business entity.

To assist in decision-making:

To take decisions for the future, one requires accurate financial statements. One of the main objectives of accounting is to take right decisions at right time.Thus, accounting gives you the platform to plan for the future with the help of past records.

To fulfill compliance of Law:

Business entities such as companies, trusts, and societies are being run and governed according to different legislative acts. Similarly, different taxation laws (direct indirect tax) are also applicable to every business house. Everyone has to keep and maintain different types of accounts and records as prescribed by corresponding laws of the land. Accounting helps in running a business in compliance with the law.

To Know the Solvency Position :

Balance sheet and profit and loss account prepared as above give useful information to stockholders regarding concerns potential to meet its obligations in the short run as well as in the long run.

1.2.3 FUNCTION OF ACCOUNTING

The main functions of accounting are as follows:

Measurement: Accounting measures past performance of the business entity and depicts its current financial position.

Forecasting: Accounting helps in forecasting future performance and financial position of the enterprise using past data.

Decision-making: Accounting provides relevant information to the users of accounts to aid rational decision-making.

Comparison & Evaluation: Accounting assesses performance achieved in relation to targets and discloses information regarding accounting policies and contingent liabilities which play an important role in predicting, comparing and evaluating the financial results.

Control: Accounting also identifies weaknesses of the operational system and provides feedbacks regarding effectiveness of measures adopted to check such weaknesses.

Government Regulation and Taxation: Accounting provides necessary information to the government to exercise control on die entity as well as in collection of tax revenues.

1.3 USERS OF ACCOUNTING INFORMATION:

Generally users of accounts are classified into two categories:

a) Internal User
b) External User

Following are the various users of accounting information:

i) **Investor:** They provide capital to business. They need information to assess whether to buy, hold or sell their investment. Also they are interested to know the ability of the business to survive, prosper and to pay divided.

ii) **Employees:** Growth of employees is directly related to the growth of the organisation and therefore, they are interest to know the stability, continuity and growth of the enterprise and its ability to provide remuneration, retirement and other benefits and to enhance employment opportunities.

iii) **Lenders:** They are interested to know whether their loan- principal and interest will be paid when due.

iv) **Supplier and Creditors:** They are also interested to know the ability of the enterprise to pay their dues that helps them to decide the credit policy for the relevant concern, rates to be charged and so on. Sometime, they also become interested in long term continuation of the enterprise if their existence becomes dependent on the survival of the business. Suppose, small ancillary units supply their products to a big enterprise, if the big enterprise collapses, the fate of the small units also becomes sealed.

v) **Customers:** Customers are also concerned with the stability and profitability of the enterprise because their functioning is more or less dependent on the supply of goods, suppose, a company produces some chemicals used by pharmaceutical companies and supplies chemicals on three months credit. If all a sudden it faces some trouble and is unable to supply the chemical, the customers will also be in trouble.

vi) **Government and their agencies:** They regulate thefunctioning of business enterprise for public good, allocated scarce resources among competing enterprise, control price,change excise duties and taxes, and so they have continued interest in the business enterprise.

vii) **Public:** The public at large is interested in the functioning of the enterprise because it may make a substantial contribution to the local economy in many ways including the number of people employed and their patronage to local suppliers.

viii) **Management:** On the basis of Accounts, management

determine the effects of their various decisions on the functioning of the organisation. This helps them to make further managerial decisions.

External users of accounting information	External users include Investors Creditors Customers Suppliers Employees Government organizations
Internal users of accounting information	Internal users include Management Managers of operations

1.4 BRANCHES OF ACCOUNTING

Following are various branches of Accounting.

1.4.1 Financial Accounting

It is commonly termed as Accounting. The American Institute of Certified Public Accountants defines Accounting as "an art of recoding, classifying and summarizing in a significant manner and in terms of money, transactions and events which are in part at least of a financial character, and interpreting the results thereof."

1.4.2 Cost Accounting

According to the Chartered Institute of Management Accountants (CIMA), Cost Accountancy is defined as "application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability as well as the presentation of information for thepurpose of managerial decision-making."

1.4.3 Management Accounting

Management Accounting is concerned with the use of Financial and Cost Accounting information to managers within organizations, to provide them with the basis in making informed business decisions that would allow them to be better equipped in their management and control functions.

1.4.4 Social responsibility Accounting

Social responsibility accounting is concerned with accounting for social costs incurred by the enterprise and social benefits created.

1.4.5 Human Resource Accounting

Human resource accounting is an attempt to identify,quantify and report investment made in human resource of an organisation that are not presently accounted for under conventional accounting practice.

1.4.6 Difference between Management Accounting andFinancial Accounting

Management Accounting	Financial Accounting
1. Management Accounting is primarily based on the data available from Financial Accounting.	1. Financial Accounting is based on the monetary transactions of the enterprise.
2. It provides necessary information to the management to assist them in the process of planning, controlling, performance evaluation and decision making.	2. Its main focus is on recording and classifying monetary transactions in the books of accounts and preparation of financial statements at the end of every accounting period.
3. Reports prepared in Management Accounting are meant for management and as per management requirement.	3. Reports as per Financial Accounting are meant for the management as well as for shareholders and creditors of the concern.
4. Reports may contain both subjective and objective figures.	4. Reports should always be supported by relevant figuresand it emphasizes on the objectivity of data.
5. Reports are not subject to statutory audit.	5. Reports are always subject to statutory audit.
6. It evaluates the sectional as well as the entire performance of the business.	6. It ascertains, evaluates and exhibits the financial strength of the whole business.

1.5 BOOK-KEEPING

As defined by Carter, 'Book-keeping is a science and art of correctly recording in books-of accounts all those business transactions that result in transfer of money or money's worth'.
Book-keeping is an activity concerned with recording and classifying financial data related to business operation in order of its occurrence.

Book-keeping is a mechanical task which involves:

- Collection of basic financial information.
- Identification of events and transactions with financialcharacter i.e., economic transactions.
- Measurement of economic transactions in terms of money.
- Recording financial effects of economic transactions in orderof its occurrence.
- Classifying effects of economic transactions.
- Preparing organized statement known as trial balance.

The distinction between book-keeping and accounting is given below:

Book-Keeping	Accounting
Output of book-keeping is an input for accounting.	Output of accounting permit informed judgments and decisions by the user of accounting information.
Purpose of book-keeping is to keep systematic record of transactions and events of financial character in order of its occurrence.	Purpose of accounting is to find results of operating activity of business and to report financial strength of business.
Book-keeping is a foundation of accounting.	Accounting is considered as a language of business.
Book-keeping is carried out by junior staff.	Accounting is done by senior staff with skill of analysis and interpretation.
Objects of book-keeping is to summarize the cumulative effect of all economic transactions ofbusiness for a given period by maintaining permanent recordof each business transaction with its evidence and financial effects on accounting variable.	Object of accounting is not only bookkeeping but also analyzing and interpreting reported financial information for informed decisions.

1.5.1 ACCOUNTING CYCLE

When complete sequence of accounting procedure is done which happens frequently and repeated in same directions during an accounting period, the same is called an accounting cycle.

Steps/Phases of Accounting Cycle

The steps or phases of accounting cycle can be developedas under:

Recording of Transaction: As soon as a transaction happens it is at first recorded in subsidiary book.

Journal: The transactions are recorded in Journal chronologically.

Ledger: All journals are posted into ledger chronologically and in a classified manner.

Trial Balance: After taking all the ledger account closing balances, a Trial Balance is prepared at the end of the period for the preparations of financial statements.

Adjustment Entries: All the adjustments entries are to be recorded

properly and adjusted accordingly before preparing financial statements.

Adjusted Trial Balance: An adjusted Trail Balance may also be prepared.

Closing Entries: All the nominal accounts are to be closed by the transferring to Trading Account and Profit and Loss Account.

Financial Statements: Financial statement can now be easily prepared which will exhibit the true financial position and operating results.

1.5.2 BASIC ACCOUNTING TERMS

In order to understand the subject matter clearly, one must grasp the following common expressions always used in business accounting.

Transaction: It means an event or a business activity which involves exchange of money or money's worth between parties.

Goods/Services: These are tangible article or commodity in which a business deals. These articles or commodities are either bought and sold or produced and sold.

Profit: The excess of Revenue Income over expense is called profit. It could be calculated for each transaction or for business as a whole.

Loss: The excess of expense over income is called loss. It could be calculated for each transaction or for business as a whole.

Asset: Asset is a resource owned by the business with the purpose of using it for generating future profits. Assets can be tangible and intangible. Tangible Assets are the Capital assets which have some physical existence. The capital assets which have no physical existence and whose value is limited by the rights and anticipated benefits that possession confers upon the owner are known as intangible Assets. They cannot be seen or felt although they help to generate revenue in future.

Liability: It is an obligation of financial nature to be settled at a future date. It represents amount of money that the business owes to the other parties.

Contingent Liability: It represents a potential obligation that could be created depending on the outcome of an event.

Capital: It is amount invested in the business by its owners. It may be in the form of cash, goods, or any other asset which the proprietor or partners of business invest in the business activity. From business point of view, capital of owners is a liability which is to be settled only in the event of closure or transfer of the business. Hence, it is not

classified as a normal liability.

Drawings: It represents an amount of cash, goods or any other assets which the owner withdraws from business for his or herpersonal use
Debtor : The sum total or aggregate of the amounts which the customer owe to the business for purchasing goods on credit or services rendered or in respect of other contractual obligations, is known as Sundry Debtors or Trade Debtors, or Trade Payable, or Book-Debts or Debtors.

Creditor: A creditor is a person to whom the business owes money or money's worth. E.g. money payable to supplier of goods or provider of service. Creditors are generally classified as Current Liabilities.

Trade Discount: It is the discount usually allowed by the wholesaler to the retailer computed on the list price or invoice price.

Cash Discount: This is allowed to encourage prompt payment by the debtor. This has to be recorded in the books of accounts. Thisis calculated after deducting the trade discount.

1.6 MEANING AND TYPES OF FINANCIAL STATEMENTS

Meaning :

Financial statements are plain statements based on historical records, facts and figures. They are uncompromising in their objectives, nature and truthfulness. They reflect a judicious combination of recorded facts, accounting principles, concepts and conventions, personal judgments and sometimes estimates.

Financial statements consist of 'Revenue Account' and 'Balance Sheet'.

1. *Revenue Account / Income Statement:*

Revenue Account refers to 'Profit and Loss Account' or 'Income and Expenditure Account' or simply 'Income Statement'. Revenue Account may be split up or divided into 'Manufacturing Account', 'Trading Account', 'Profit and Loss Account' and 'Profit and Loss Appropriation Account', Revenue Account is prepared fora period, covering one year. This statement shows the expenses incurred on production and distribution of the product and sales and other business incomes. The final result of this statement may be profit of loss for a particular period.

2. *Balance Sheet:*

Balance sheet shows the financial position of a business as on a particular date. It represents the assets owned by the business and the claims of the owners and creditors against the assets in the form of liabilities as on the date of the statement.

3. *Funds Flow Statement –*

It describes the sources from which the additional funds were derived and the use of these funds. Funds flow statement helps to understand the changes in the distribution of resources between two balance sheet periods. The statement reveals the sources of funds and their application for different purposes.

4. *Cash flow Statement:*

A cash flow statement shows the changes in cash position from one period to another. It shows the inflow and outflow of cash and helps the management in making plans for immediate future.An estimated cash flow statement enables the management to ascertain the availability of cash to meet business obligations. This statement is useful for short term planning by the management.

5. *Schedules:*

Schedule explains the items given in income statement and balance sheet. Schedules are a part of financial statements which give detailed information about the financial position of a business organization.

1.7 OBJECTIVES OF FINANCIAL STATEMENTS

The main object of financial statements is to provide information about the financial position, performance and changes taken place in an enterprise. Financial statements are prepared to meet the common needs of most users. The important objectives of financial statements are given below:

1. *Providing information for taking Economic decisions:*

The economic decisions that are taken by users of financial statements require an evaluation of the ability of an enterprise to generate cash and cash equivalents and of the timing and certainty of their generation. This ability ultimately determines the capacity of an enterprise to pay its employees and suppliers meet interest payments, repay loans and make distributions to its owners.

2. *Providing information about financial position:*

The financial position of an enterprise is effected by the economic resources it controls, its financial structures its liquidity and solvency and its capacity to adapt to changes in the environment in which it operates.

Information about financial structure is useful in predicting future borrowing needs and how future profits and cash flows will be distributed among those with an interest in the enterprise. This information is useful in predicting how successful the enterprise is likely to be in raising further finance. Information about liquidity and solvency is useful to predicting the ability of the enterprise to meet the financial commitments as fall due.

3. *Providing information about performance (working results)of an enterprise:*

Another important objective of the financial statements is that it provides information about the performance and in particular its

profitability, which requires in order assessing potential changesin the economic resources that are likely to control in future. Information about performance is useful in predicting the capacity of the enterprise to generate cash inflows from its existing resource base as well in forming judgment about the effectiveness with which the enterprises might employ additional resources.

4. *Providing Information about changes in financial position:*

The financial statements provide information concerning changes in the financial position of an enterprise, which is useful in order to assess its investing, financing and operating activities during the reporting periods. This information is useful in providing the user with a basis to assess the ability of the enterprise to generate cash and cash equipments and the needs of the enterprise to utilize those cash flows.

1.8 AN OVERVIEW OF FINANCIAL STATEMENTS

Each business firm has to prepare two main financial statements viz. Income Statement and Balance sheet. The income statement reveals the profit of loss during a particular period generated from the activities of a business. Balance sheet shows the financial position of a business on a particular date.

- ### *Income statement*

Income statement summaries the incomes /gains and expenses /losses of a Business for a particular financial period. The format of Income statement explains in detail the items to be included in the statement. It is presented in the traditional T Format and also in the vertically statement form.

1. Horizontal Form T form

Manufacturing Trading and Profit and Loss Account For the year ending

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Opening stock		By Closing stock	
Raw materials		Raw Material	
Work in progress		Work in progress	
To Purchase of raw materials		By Cost of finished goods c/d	
To Manufacturing wages		By Sales	
To Carriage/ Freight inwards		By Closing stock of Finished Goods	
To Custom duty		By Gross Loss c/d	
To Other factory Expenses		By Gross profit b/d	
To Opening stock		By Business incomes and Gains	
Finished Goods		By Net Loss c/d	
To Cost of finished		By Balance b/d from Previous year	

Goods b/d		By Net Profit b/d	
To Gross profit c/d			
To Gross loss b/d			
To Office and administration Expenses			
To Interest and financial Expenses			
To Provision for Incometax			
To Net Profit c/d			
To Net loss b/d			
To Transfer to Generalreserve			
To Dividend			
To Balance c/f			

Particulars	Rs.	Rs.
Gross Sales		xxx
Less : Sales returns	xxx	
Sales tax / Excise duty		
Net Sales		xxx
Less : Cost of goods sold		
(Materials consumed + Direct Labour + Manufacturing Expenses)	xxx xxx xxx	
Add / Less : Adjustment for change in stock	xxx	xxx
Gross Profit		xxx
Less : Operating expenses	xxx	
a. Office and administration Expenses	xxx	
b. Selling and distribution Expenses	xxx	xxx
Add : Operating Income		xxx
Operating Profit	xxx	
Add : Non Operating Income		xxx
Less : Non Operating expenses (includinginterest)		xxx
Profit before interest and tax		xxx
Less : Interest		xxx
Profit before tax		xxx
Less : Appropriations :	xxx	xxx
a. Transfer to reserves	xxx	xxx
b. Dividends declared / paid		xxx
Surplus carried to Balance Sheet		xxx

- ***Balance sheet:***

It is one of the major financial statements which presents a company's financial position at the end of a specified date. Balance sheet has been described as a "snapshot" of the company's financial position at a moment for e.g. the amounts reported on a balance sheet dated March 31st, 2016 reflects that all the transactions throughout December 31st have been recorded. The balance sheet provides information related to the assets, liabilities and the shareholders' equity of the company as on a specific date.

Total Assets = Total Liabilities + Share holders' equity

The companies Act, 1956 stipulates that the balance sheetof a joint stock company should be prepared as per Part I of Schedule VI of the Act. However, the statement form has beenemphasized upon by accountants for the purpose of analysis and interpretation.

MODULE - II

2

ACCOUNTING PRINCIPLES

Unit Structure

2.1 Introduction
2.2 Accounting Concepts
2.3 Accounting Principles
2.4 Accounting Conventions
2.5 Widely Accepted Accounting Concepts

2.1 INTRODUCTION

Accounting is the language of the business. Accounting Principles are the rules or guidelines which are developed to maintain a uniformity and consistency in accounting records. This **generally accepted accounting principles** (GAAP's) provides unity of understanding and unity of approach in the practice of accounting and also in better preparation of financial statements.

Let us imagine a situation where you give copies of your books of accounts to three different accountants and you ask themto prepare financial statements and to compute the income from business for the financial year on the basis of books of accounts given to them. All three accountants are ready with the financial statements and all three accountants have computed different figure of income i.e. profit from the business and that too with very wide variations among them. Guess in such a situation what impact would it leave on you about accounting profession. To avoid this, a generally accepted set of accounting principles/rules have been developed.

Financial statements prepared by the accountants to communicate financial information to the various users of financial statements for decision making purpose. Therefore, it is important that financial statements prepared by different business entities should be prepared on uniform basis. Also there should be

consistency over a period of time in the preparation of these financial statements. If every accountant starts following his own methods and concepts for accounting different items then there will be confusion.

To avoid confusion and to achieve uniformity, accounting process is applied within the conceptual framework of 'Generally Accepted Accounting Principles' (GAAPs).

The term GAAPs is used to describe rules developed for the preparation of the financial statements and are called

1. **Accounting Concepts;**
2. Accounting Conventions;
3. **Accounting Postulates ;**
4. **Accounting Principles**

2.2 ACCOUNTING CONCEPTS

Accounting Concepts are certain rules that accountant should follow while recording business transactions and preparing accounts.

E.g. in India there is a basic rule to be followed by everyone that one should walk or drive on his/her left hand side of the road. It helps in the smooth flow of traffic. Similarly, there are certain rules that an accountant should follow while recording business transactions and preparing accounts.

Accounting concepts lay the foundation on the basis of which the accounting principles are followed. Concepts constitutethe very basis of accounting. There are various concepts of accounting and all have been developed over the period of time from experience and thus, they are university accepted rules.

2.3 ACCOUNTING PRINCIPLES

Meaning of Principles:

A general law or rule followed or adopted as a guide toaction is known as a principle.

Definitions of Accounting Principles:

1. According to **American Institute of Certified Public Accountants (AICPA) :** "The accounting principles are general law or rule adopted or preferred as a guide to action, a settled ground or basis of conduct or practice."

2. According to **R.N Antony: "**The rules and conventions of accounting are commonly referred to as Principles."

Accounting principles must satisfy following conditions:

1. They should be based on real assumptions;
2. They must be simple, understandable & self explanatory;
3. They must be followed consistently;
4. They should be able to reflect future predictions;
5. They should be informational for the users.

2.4 ACCOUNTING CONVENTIONS

An accounting convention refers to common practices which are universally followed in recording and presenting accounting statements of the business entity. Accounting conventions are followed like customs, traditions, etc. in a society. They make accounting information more clear and useful. They have evolved through the regular and consistent practice over the years. They facilitate uniform recording in the books of accounts.

2.5 WIDELY ACCEPTED ACCOUNTING CONCEPTS

1. Business Entity Concept
2. Money Measurement Concept
3. Accounting Period(Periodicity) Concept
4. Cost Concept
5. Realization Concept or Revenue recognition Concept
6. Matching Concept
7. Accrual Concept
8. Dual Aspect Concept
9. Materiality Concept
10. Conservatism or Prudence Concept

1) **Business Entity Concept**: Entity Concept states that Business Enterprise is separate entity from its owner. As per this concept business transactions to be recorded in business books andowner's transactions to be recorded in his personal books.

Entity concept means that enterprise owes to the owner for capital provided by the owner.

Example: Mr. A Commenced business by investing Rs. 12,00,000/- with which he purchased Equipments & other Fixed assets required in business for Rs. 10,00,000/- & kept balance in hand. i.e. Rs. 2,00,000/- The financial position(Balance sheet) of business is as follows:

Balance Sheet

Liabilities	*Amount(Rs.)*	*Assets*	*Amount(Rs.)*
Capital	*1200000*	*Equipment & Fixed Assets*	*1000000*
		Cash in Hand	*200000*
	1200000		***1200000***

This means that Business Enterprise owes to Mr. A Rs.12,00,000/- now if Mr. A Spends/ uses Rs. 50,000/- for Household Expenses from business capital Fund then as per business entity concept it should not be classified/recorded as business expenses but should be charged to capital account i.e. Capital will get reduced by Rs. 50,000/- & revised Balance sheet will show following position

Balance Sheet

Liabilities		*Amount(Rs.)*	*Assets*	*Amount(Rs.)*
Capital	*12,00,000*		*Equipment & Fixed Assets*	*10,00,000*
Less: *Drawings(Personal Expenses.)*	*(50,000)*	*11,50,000*	*Cash in Hand*	*1,50,000*
		11,50,000		***11,50,000***

2) **Money Measurement Concept:** This Concept states that only monetary transactions i.e. which can be measured in terms of money are to be recorded. In accounting, a record is made only

of those facts or transactions that can be expressed in monetary terms. It provides a common unit for measurement, *i.e.,* money for measuring, recording and summarizing the transaction. Events, which cannot be expressed in money terms, do not find a place in account books. *Example, salary paid to manager is recorded in account books but his competence is has no place in account books.*

3) **Accounting Period / Periodicity Concept:** All the transactions are recorded in the books of accounts on the assumption that profits on these transactions are to be ascertained for a specified period. This is known as periodicity or accounting period concept. Thus, this concept requires that a balance sheet and profit and loss account should be prepared at regular intervals. This is necessary for different purposes like, calculation of profit, ascertaining financial position, tax computation etc. Usually one year is taken as one accounting period which may be a calendar year or a financial year.

Thus, the periodicity concept facilitates in:

(a) Comparing of financial statements of different periods
(b) Uniform and consistent accounting treatment for ascertaining the profit and assets of the business
(c) Matching periodic revenue with expenses for getting correct results of the business operations.

4) **Cost Concept:** As per cost concept value of asset recorded at its acquisition/purchase cost, in other words, at its historical cost.
For example, if a plot of land is purchased for Rs. 1,50,000 then as per this concept, the asset will be recorded in the books at Rs. 1,50,000, even if its market value at that time is Rs. 2,00,000.

5) **Realization Concept or Revenue recognition Concept:** This Concept deals with the problem, when the revenue should be recognized? According to this concept, the sale should be recognised at the point, when the property in goods passes to the buyer and he becomes legally liable to pay and other income is recognised, when they accrue.

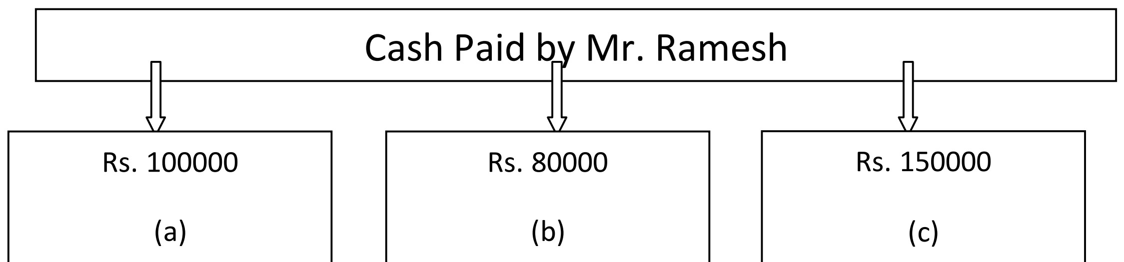
Example: Mr. A places an order with Mr. B for supply of certain goods, which are yet to be manufactured. On receipt of order, Mr. B purchases raw materials employs workers, produces the goods and delivers finished goods to Mr.A. Mr. A makes payment on receipt of goods. In this case, the sale will be presumed to have been made not at the time of receipt of the order for the goods, but at the time, when goods are delivered to Mr. A.

6) **Matching Concept:** In this concept, all expenses matched with revenue of that period should only be taken into consideration. The objective of running business is to earn profit in order to ascertain the profit made by the business during a period. It is necessary that the revenues of the period should be matched with the cost (Expenses) of the period. The term matching means appropriate association of related revenues and expenses.

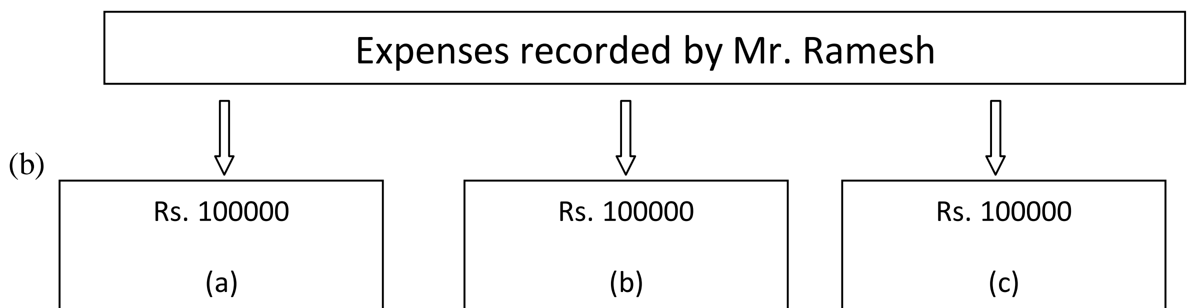
   Example: ABC Ltd. purchases a large appliance from wholesalers for Rs.5,000 and resells it to a local restaurant for Rs.8,000. At the end of the period, ABC Ltd. should match the Rs.5,000 cost with the Rs.8,000 revenue.

7) **Accrual Concept:** Under Accrual concept/ Accrual basis of accounting, income must be recorded in the accounting periodin which it is earned. Therefore, accrued income must be recognized in the accounting period in which it arises ratherthan in the subsequent period in which it will be received. Conversely, prepaid income must be not be shown as income in the accounting period in which it is received but instead it mustbe presented as such in the subsequent accounting periods in which the services or obligations in respect of the prepaid income have been performed.

   Example: Suppose Mr. Ramesh rents a house from Suresh at Rs.100,000 per year. Now consider the following three cases in which Ramesh pays cash to Suresh and records rent expense.



Cash Paid by Mr. Ramesh



(b)

In above example, even though cash paid is different in all the three cases but the rent expense recorded is Rs.1,00,000 in each case. Justification behind that is the accrual concept of accounting in which expenses must be recorded in the accounting period in which they are incurred not in the period in which they are paid.

Notice that in case "b" Mr. Ramesh has paid Rs.80,000 cash but has recorded Rs.100,000 expense during the period because the annual rent is Rs.100,000 not Rs.80,000. The remaining Rs.20,000 will be paid subsequently. Also notice that in case "c" Mr. Ramesh has paid Rs.1,50,000 but has recorded Rs.100,000 expense, the balance of Rs.50,000 will be adjusted against the rent of subsequent period.

8) Dual Aspect Concept: This is a basic concept of accounting. According to this concept, every business transactions has dual effect-

	1st Aspects		2nd Aspects
(i)	It increases on Asset *[Purchase of Machinery]*	and	decreases other Asset, *[Payment of Cash]*
(ii)	It increases an Asset *[Purchase of Machinery]*	and	simultaneously increase liability, *[Payment at future date (on credit basis)]*
(iii)	It decreases one Asset, *[Payment of Cash]*	and	decreases one Liability *[Settlement of Liability]*
(iv)	It increase liability, *[Bank Loan Obtained]*	and	decreases simultaneously liability *[Payment to Creditors (Using Loan Amount)]*

For example, suppose Mr. Rahul purchases Assets of Rs. 100000 in cash. In this business transaction, Mr. Rahul receives the assets of Rs. 100000, but on the other hand, Cash balance will decrease by Rs. 100000 So, Assets Account and Cash Account shall be affected by this transaction.

Thus in every business transaction, one aspect represents the assets or expenses other represents the claim or income and these two expects are always equal. This approach generates the concept of accounting equation, which can be summarized as below:

Liabilities	=	Assets
External Liabilities + Capital	=	Assets

For example, if A starts a business with a capital of Rs. 1,00,000. There are no aspects of this transaction. On the one hand, the business has asset (in the form of cash) of Rs. 1,00,000, while on the other hand the business has to pay to the proprietor a sum of Rs. 1,00,000, which is known as proprietor's capital. This expression can be shown in the form of accounting equation as follows:

Capital (Liability)	=	Cash (Assets)
1,00,000	=	1,00,000

In the example given above, if the Machinery worth Rs. 50,000 is purchased, the situation will be as follows:
Capital (Rs. 1,00,000) = Cash (Rs. 50,000) + Machinery (Rs. 50,000)

Thus, this concept develops a relationship between liabilities and assets. The Accounting Equation can be technically started as "for every debit, there is an equivalent credit". As a matter of fact, the entire Double Entry System of Book-Keeping is based on this concept.

9) **Materiality Concept:** As per the concept of materiality, all the items having significant economic effect on the business of the enterprise should be disclosed in the financial statements and any insignificant item which will only increase the work of accountant but will not be relevant to the users need should not be disclosed in the financial statements.

The term materiality depends not only upon the amount of the item but also upon the size of the business, nature & level of information, level of the person making decision etc. Moreover an item material to one person may be immaterial to another person. What is important is that omission of any information should not impair the decision-making of various users.

10) **Conservatism or Prudence Concept:** Conservatism states that the accountant should not anticipate income and shouldprovide for all possible losses. When there are many alternative values of an asset, an accountant should choose the method which leads to the lesser value. Later on we should see that the golden rule of current asset valuation – 'cost or market price 'whichever is lower originated from this concept.

3

BASICS OF ACCOUNTING STANDARDS

Unit Structure

3.1 Meaning & Introduction
3.2 Accounting Standards in Brief

3.1 MEANING & INTRODUCTION

Accounting standards are the *written policy documents* issued by the regulatory authority, experts accounting body or bythe government covering various aspects of recognition, treatment, measurement, presentation & disclosure of accounting transactions and events in the financial statements. The accountant has to adhere to various accounting standards while preparing financial statements of the entities.

Accounting standard provide framework and standard accounting policies so that the financial statement of different enterprises become comparable.

The accounting standards deals with the issues of –

i. Recognition of events and transactions in the financial statements;

ii. Measurement of these transactions and events;

iii. Presentation of these transactions and events in the financial statements in a manner that is meaningful and understandableto the reader; and

iv. The disclosure requirements which should be there to enable public at large and the stakeholders and the potential investorsin particular, to get insight into what these financial statement are trying to reflect and thereby facilitating them to take prudent and informed business decisions.

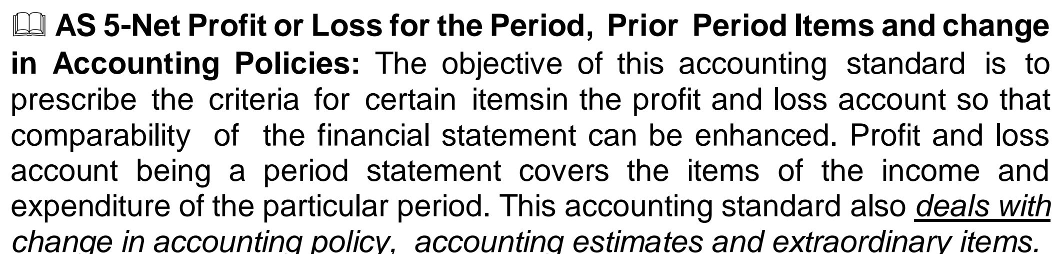
3.2 ACCOUNTING STANDARDS IN BRIEF

AS-1-Disclosure of Accounting Policies: Accounting Policies refer to *specific accounting principles and the method of applying those principles* adopted by the enterprises in preparation and presentation of the financial statements.

AS-2-Valuation of Inventories: The objective of this standard is to *formulate the method of computation of cost of inventories / stock, determine the value of closing stock / inventory at which the inventory is to be shown in balance sheet* till it is not sold and recognized as revenue.

AS 3-Cash Flow Statements: Cash flow statement is additional information to user of financial statement. *This statement exhibits the flow of incoming and outgoing cash.* This statement assessesthe ability of the enterprise to generate cash and to utilize the cash. *This statement is one of the tools for assessing the liquidity and solvency of the enterprise.*

AS 4-Contingencies and Events occurring after the balance sheet date: In preparing financial statement of a particular enterprise, accounting is done by following accrual basis of accounting and prudent accounting policies to calculate the profit or loss for the year and to recognize assets and liabilities in balance sheet. While following the prudent accounting policies, the provision is made for all known liabilities and losses even for those liabilities / events, which are probable. Professional judgment is required to classify the likehood of the future events occurring and, therefore, the question of contingencies and their accounting arises. *Objective of this standard is to prescribe the accounting of contingencies and the events, which take place after the balance sheet date but before approval of balance sheet by Board of Directors*. The Accounting Standard *deals with Contingencies and Events occrring after the balance sheet date*.



📖 **AS 5-Net Profit or Loss for the Period, Prior Period Items and change in Accounting Policies:** The objective of this accounting standard is to prescribe the criteria for certain itemsin the profit and loss account so that comparability of the financial statement can be enhanced. Profit and loss account being a period statement covers the items of the income and expenditure of the particular period. This accounting standard also *deals with change in accounting policy, accounting estimates and extraordinary items.*

📖 **AS 6-Depreciation Accounting:** It is a measure of wearing out, consumption or other loss of value of a depreciable asset arising from use, passage of time. *Depreciation is nothing but distribution of total cost of asset over its useful life.*

📖 **AS 7-Construction Contracts:** Accounting for long term construction contracts involves question as to *when revenue should be recognized* and *how to measure the revenue in the books of contractor*. As the period of construction contract is long, work of construction starts in one year and is completed in another year or after 4-5 years or so. Therefore question arises how the profit or loss of construction contract by contractor should be determined. There may be following two ways to determine profit or loss: On year-to-year basis based on percentage of completion or on completion of the contract.

📖 **AS 8-Accounting for Research & Development**: Accounting for research & development, is withdrawn from the date of AS 26, Intangible assets, becoming mandatory for respectiveenterprises.

📖 **AS 9-Revenue Recognition:** The standard *explains as to when the revenue should be recognized in profit and loss account* and also states the circumstances in which revenue recognition can be postponed. Revenue means gross inflow of cash, receivable or other consideration arising in the course of ordinary activitiesof an enterprise such as the sale of goods, rendering of services, and use of enterprises resources by other yielding interest, dividend and royalties. In other words, revenue is acharge made to customers / clients for goods supplied and services rendered.

📖 **AS 10-Accounting for Fixed Assets:** *AS 10 prescribesaccounting for fixed assets* used by entity in the business. AS defines term fixed asset. It is an asset, which is held with intention of being used for the purpose of producing or providing goods and services not held for sale in the normal course of business and expected to be used for more than one accounting period.

📖 **AS 11-The Effects of changes in Foreign Exchange Rates**
: Effect of Changes in Foreign Exchange Rate shall be applicable in Respect of Accounting Period commencing on or after 01-04-2004 and is mandatory in nature. *This accounting Standard applicable to accounting for transaction in foreign currencies in translating in the financial statement of foreign operations.* Effect of changes in foreign exchange rate, an enterprises should disclose following aspects:

a) Amount Exchange Difference included in Net profit or Loss;
b) Amount accumulated in foreign exchange translation reserve;
c) Reconciliation of opening and closing balance of Foreign Exchange translation reserve;

🕮 **AS 12-Accounting for Government Grants:** Accounting standard 12 deals with accounting for *government grants* both *capital and revenue* from government. Government Grants are assistance by the Govt. in the form of cash or kind to an enterprise in return for past or future compliance with certain conditions. Government assistance, which cannot be valued reasonably, is excluded from Govt. grants,. Those transactions with Government, which cannot be distinguished from the normal trading transactions of the enterprise, are not considered as Government grants.

🕮 **AS 13-Accounting for Investments:** AS 13 provides accounting principles for investments in the financial statement and related disclosure requirements. As per AS 13 Investment means the assets held for earning income by way of dividend, interest and rentals, for capital appreciation or for other benefits.

🕮 **AS 14-Accounting for Amalgamation:** *This standard prescribes accounting for amalgamation*. This accounting standard deals with accounting to be made in books of Transferee Company in case of amalgamation. The standard is applicable when acquired company is dissolved and separate entity ceased exist and purchasing company continues with the business of acquired company

🕮 **AS 15-Employee Benefits:** *Accounting Standard 15 prescribes the accounting and disclosure for employee benefits.* This Standard covers all forms of employee benefits i.e. Short term employee benefits (Salaries, Leave, bonus, housing, mediclaim etc.), Post employment benefits (gratuity, pension, post employment medical care etc.) and other long term employee benefits and termination benefits.

🕮 **AS 16-Borrowing Costs :** Enterprises are borrowing the funds to acquire, build and install the fixed assets and other assets, these assets take time to make them useable or saleable, therefore the enterprises incur the interest (cost on borrowing)to acquire and build these assets. *The objective of the Accounting Standard is to prescribe the treatment of borrowing cost* (interest + other cost) in accounting, whether the cost of borrowing should be included in the cost of assets or not.

🕮 **AS 17-Segment Reporting:** An enterprise needs in multiple products/services and operates in different geographical areas. Multiple products / services and their operations in different geographical areas are exposed to different risks and returns. *Information about multiple products / services and their operation in different geographical areas are called segment information*. Such information is used to assess the risk andreturn of multiple products/services and their operation in different geographical areas. *Disclosure of such information is called segment reporting.*

🕮 **AS 18-Related Party Disclosure:** Sometimes business transactions between related parties lose the feature and character of the arms length transactions. Related party relationship affects the volume and decision of business of one enterprise for the benefit of the other enterprise. Hence *disclosure of related party transaction is essential for proper understanding of financial performance and financial position of enterprise.*

🕮 **AS 19-Accounting for leases:** Lease is an arrangement by which the lesser gives the right to use an asset for given period of time to the lessee on rent. It involves two parties, a lessor and a lessee and an asset which is to be leased. *The lessor who owns the asset agrees to allow the lessee to use it for a specified period of time in return of periodic rent payments.*

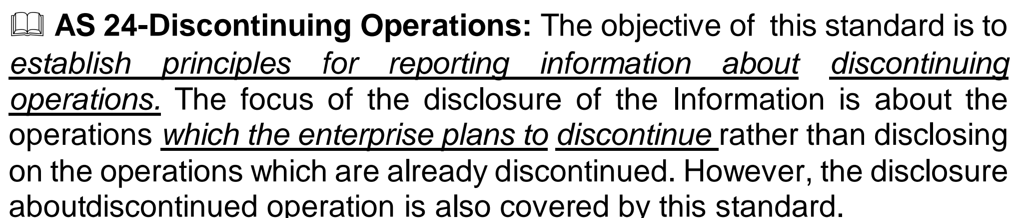
🕮 **AS 20-Earning Per Share:** Earning per share (EPS) is a*financial ratio that gives the information regarding earning available to each equity share.* It is very important financial ratio for assessing the state of market price of share. This accounting standard gives computational methodology for the determination and presentation of earning per share, which will improve the comparison of EPS. The statement is applicable to the enterprise whose equity shares or potential equity shares are listed in stock exchange.

🕮 **AS 21-Consolidated Financial Statements:** The *objective of this statement is to present financial statements of a parent and its subsidiary (ies) as a single economic entity.* In other wordsthe holding company and its subsidiary (ies) are treated as one entity for the preparation of these consolidated financial statements. Consolidated profit/loss account and consolidatedbalance sheet are prepared for disclosing the total profit/loss of the group and total assets and liabilities of the group. As per this accounting standard, the conslidated balance sheet if preparedshould be prepared in the manner prescribed by this statement.

🕮 **AS 22-Accounting for Taxes on Income:** This accounting standard prescribes the *accounting treatment for taxes on income*. Traditionally, amount of tax payable is determined on the profit/loss computed as per income tax laws.

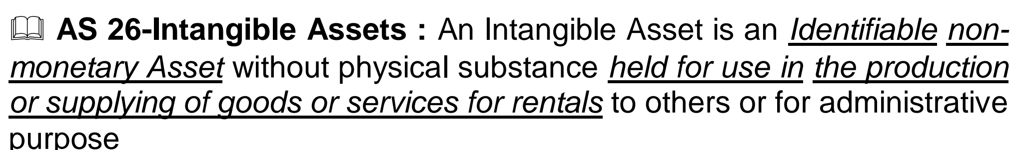
🕮 **AS 23-Accounting for Investments in Associates in consolidated financial statements:** The accounting standardwas formulated with the *objective to set out the principles and procedures for recognizing the investment in associates in the consolidated financial statements of the investor*, so that theeffect of investment in associates on the financial

position of the group is indicated.

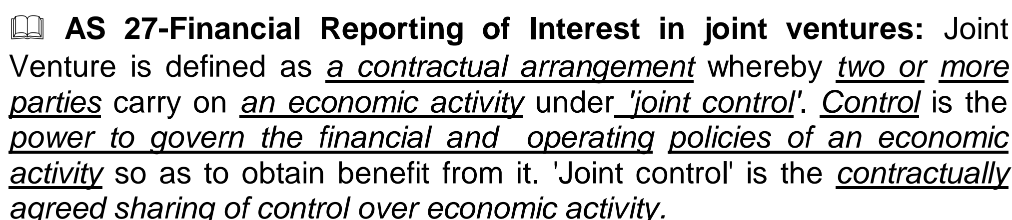


AS 24-Discontinuing Operations: The objective of this standard is to *establish principles for reporting information about discontinuing operations.* The focus of the disclosure of the Information is about the operations *which the enterprise plans to discontinue* rather than disclosing on the operations which are already discontinued. However, the disclosure aboutdiscontinued operation is also covered by this standard.

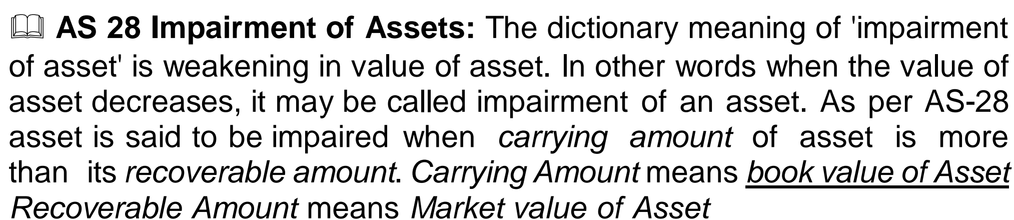
AS 25-Interim Financial Reporting (IFR): Interim financial reporting is the *reporting for periods of less than a year* generally for a period of 3 months.



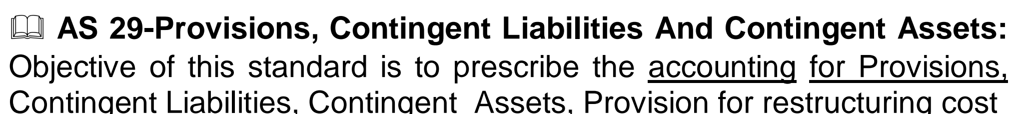
AS 26-Intangible Assets : An Intangible Asset is an *Identifiable non-monetary Asset* without physical substance *held for use in the production or supplying of goods or services for rentals* to others or for administrative purpose



AS 27-Financial Reporting of Interest in joint ventures: Joint Venture is defined as *a contractual arrangement* whereby *two or more parties* carry on *an economic activity* under *'joint control'*. *Control* is the *power to govern the financial and operating policies of an economic activity* so as to obtain benefit from it. 'Joint control' is the *contractually agreed sharing of control over economic activity.*



AS 28 Impairment of Assets: The dictionary meaning of 'impairment of asset' is weakening in value of asset. In other words when the value of asset decreases, it may be called impairment of an asset. As per AS-28 asset is said to be impaired when *carrying amount* of asset is more than its *recoverable amount*. *Carrying Amount* means *book value of Asset* *Recoverable Amount* means *Market value of Asset*



AS 29-Provisions, Contingent Liabilities And Contingent Assets: Objective of this standard is to prescribe the accounting for Provisions, Contingent Liabilities, Contingent Assets, Provision for restructuring cost
.

Provision: It is a liability, which can be measured only by using a substantial degree of estimation
.

Liability: A liability is present obligation of the enterprise arising from past events the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.

4

INTRODUCTION TO IFRS

Unit Structure

4.1 Introduction
4.2 Purpose
4.3 Scope
4.4 International Financial Reporting Standards

4.1 INTRODUCTION

IFRS stands for **International Financial Reporting Standards.** IFRS are developed by International Accounting standards boards (IASB). IFRS is set of standards used in many parts of the world, including the European Union, Hong Kong, Australia, Malaysia, Russia, South Africa, Singapore etc. for preparation of financial statements. Different Countries uses different set of accounting standards while preparation of financial statements for e.g. India uses its own set of Accounting standards issued by the ICAI, United states have their US GAAP, Canada has its Canadian GAAP and United Kingdom has its UK GAAP.

Conceptual Framework

Introduction: Financial statements are prepared and presented for external users by many entities around the world. Although such financial statements may appear similar from country to country, there are differences which have probably been caused bya variety of social, economic and legal circumstances and by different countries having in mind the needs of different users of financial statements when setting national requirements.

The International Accounting Standards Board is committed to narrowing these differences by seeking to harmonize regulations, accounting standards and procedures relating to the Preparationand presentation of financial statements. It believes that further harmonization can best be pursued by focusing on financial statements that are prepared for the purpose of providing information that is useful in making economic decisions.

The Board believes that financial statements prepared forthe purpose of making economic decisions meet the common needs of most users. This is because nearly all users are making economic decisions, for example:

(a) to decide when to buy, hold or sell an equity investment.

(b) to assess the stewardship or accountability of management.

(c) to assess the ability of the entity to pay and provide other

benefits to its employees.

(d) to assess the security for amounts lent to the entity.

(e) to determine taxation policies.

(f) to determine distributable profits and dividends.

(g) to prepare and use national income statistics.

(h) to regulate the activities of entities.

The Board recognises, however, that governments, in particular, may specify different or additional requirements for their own purposes. These requirements should not, however, affect financial statements published for the benefit of other users unless they also meet the needs of those other users.

4.2 PURPOSE

This Conceptual Framework sets out the concepts that underlie the preparation and presentation of financial statements for external users. The purpose of the Conceptual Framework is:

(a) To assist the Board in the development of future IFRSs and inits review of existing IFRSs;

(b) To assist the Board in promoting harmonization of regulations, accounting standards and procedures relating to the presentation of financial statements by providing a basis for reducing the number of alternative accounting treatments permitted by IFRSs;

(c) To assist national standard-setting bodies in developing national standards;

(d) To assist preparers of financial statements in applying IFRSs and in dealing with topics that have yet to form the subject of an IFRS;

(e) To assist auditors in forming an opinion on whether financial statements comply with IFRSs;

(f) To assist users of financial statements in interpreting the information contained in financial statements prepared in compliance with IFRSs; and

(g) To provide those who are interested in the work of the IASB with information about its approach to the formulation of IFRSs.

4.3 SCOPE

The Conceptual Framework deals with:

(a) the objective of financial reporting;

(b) the qualitative characteristics of useful financial information;

(c) the definition, recognition and measurement of the elements from which financial statements are constructed; and

(d) concepts of capital and capital maintenance.

4.4 INTERNATIONAL FINANCIAL

REPORTINGSTANDARDS

International Financial Reporting Standards in a broad sensecomprise:

4.4.1 ***Conceptual Framework for Financial Reporting*** —stating basic principles and grounds of IFRS

4.4.2 ***IAS***—standards issued before 2001

4.4.3 ***IFRS***—standards issued after 2001

4.4.4 ***SIC***—interpretations of accounting standards, giving specificguidance on unclear issues

4.4.5 ***IFRIC***—newer interpretations, issued after 2001

IFRSs

IFRS 1: First time Adoption of International Financial ReportingStandards

IFRS 2: Share-based Payment IFRS

3: Business CombinationsIFRS 4:

Insurance Contracts

IFRS 5: Non-current Assets Held for Sale and DiscontinuedOperations

IFRS 6: Exploration for and Evaluation of Mineral ResourcesIFRS 7:

Financial Instruments: Disclosures

IFRS 8: Operating Segments IFRS

9: Financial Instruments

IFRS 10: Consolidated Financial StatementsIFRS 11:

Joint Arrangements

IFRS 12: Disclosure of Interests in Other EntitiesIFRS

13: Fair Value Measurement

IFRS 14: Regulatory Deferral Accounts

IFRS 15: Revenue from Contracts with Customers

IASs

IAS 1: Presentation of Financial StatementsIAS

2: Inventories

IAS 7: Statement of Cash Flows

IAS 8: Accounting Policies, Changes in Accounting Estimates andErrors

IAS 10: Events after the Reporting PeriodIAS

11: Construction Contracts*

IAS 12: Income Taxes

IAS 16: Property, Plant and EquipmentIAS

17: Leases

IAS 18: Revenue*

IAS 19: Employee Benefits

IAS 20: Accounting for Government Grants and Disclosure ofGovernment Assistance

IAS 21: The Effects of Changes in Foreign Exchange Rates

Note: IAS 3, 4, 5, 6, 9, 13, 14, 15, 22, 25, 30, 31 and 35 have been superseded SICs

SIC 7: Introduction of the Euro

SIC 10: Government Assistance – No Specific Relation toOperating Activities

SIC 15: Operating Leases – Incentives

SIC 25: Income Taxes – Changes in the Tax Status of an Entity orits Shareholders

SIC 27: Evaluating the Substance of Transactions Involving theLegal Form of a Lease

SIC 29: Service Concession Arrangements: Disclosures

SIC 31: Revenue – Barter Transactions Involving AdvertisingServices

SIC 32: Intangible Assets – Web Site Costs

Note: SIC 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, 30, 33 have been superseded

*Will be superseded by IFRS 15 as of 1 January 2017

IFRICs

IFRIC 1: Changes in Existing Decommissioning, Restoration andSimilar Liabilities

IFRIC 2: Members' Shares in Co-operative Entities and SimilarInstruments

IFRIC 4: Determining whether an Arrangement contains a Lease

IFRIC 5: Rights to Interests Arising from Decommissioning,Restoration and Environmental Rehabilitation Funds

IFRIC 6: Liabilities Arising from Participating in a Specific Market -Waste Electrical and Electronic Equipment

IFRIC 7: Applying the Restatement Approach under IAS 29Financial Reporting in Hyperinflationary Economies

IFRIC 10: Interim Financial Reporting and ImpairmentIFRIC 12:

Service Concession Arrangements

IFRIC 13: Customer Loyalty Programmes*

IFRIC 14: IAS 19 – The Limit on a Defined Benefit Asset, MinimumFunding Requirements and their Interaction

FRIC 15: Agreements for the Construction of Real Estate* IFRIC 16:

Hedges of a Net Investment in a Foreign OperationIFRIC 17:

Distributions of Non-cash Assets to Owners

IFRIC 18: Transfers of Assets from Customers*

IFRIC 19: Extinguishing Financial Liabilities with Equity Instruments

IFRIC 20: Stripping Costs in the Production Phase of a SurfaceMine

IFRIC 21: Levies

Note: IFRIC 3, 8, 9 & 11 have been withdrawn

MODULE - III

5

BASICS OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT

Unit structure :

5.1 Objectives
5.2 Introduction
5.3 Meaning and Types of Financial Statements
5.4 Parties Interested In Financial Statements
5.5 Basics of Income Statement and Balance Sheet
5.6 Limitation of financial statement
5.7 Exercise

5.1 OBJECTIVE

After studying the unit, the students will be able to -

- Understand the meaning and types of financial statement.
- Know the parties interested in Financial statements
- Understand the objectives of Financial statements
- Explain the basics of Financial statements

5.2 INTRODUCTION

Government legislations require certain organizations to maintain proper accounts and draw financial statement. Public can understand from the financial statement the extent to which a company is discharging its social responsibilities. While issuing shares, bonds, financial statement become necessary as prospective investors can judge the financial position of the organization and able to take a proper decision. Workers union may study the financial statement and ascertain whether they can enforce their demand. Tax legislature makes it obligatory for the business entities to draw fair and objective financial statement. The financial statement serves as instruments to regulate equity and debentures issued by companies.

5.3 MEANING AND TYPES OF FINANCIAL STATEMENTS

Meaning :

Financial statements are plain statements based on historical records, facts and figures. They are uncompromising in their objectives, nature and truthfulness. They reflect a judicious combination of recorded facts, accounting principles, concepts and conventions, personal judgements and sometimes estimates.

Financial statements consist of 'Revenue Account' and 'Balance Sheet'.

1. **Revenue Account / Income Statement:**

Revenue Account refers to 'Profit and Loss Account' or 'Income and Expenditure Account' or simply 'Income Statement'. Revenue Account may be split up or divided into 'Manufacturing Account', 'Trading Account', 'Profit and Loss Account' and 'Profit and Loss Appropriation Account', Revenue Account is prepared fora period, covering one year. This statement shows the expenses incurred on production and distribution of the product and sales and other business incomes. The final result of this statement may be profit of loss for a particular period.

2. **Balance Sheet:**

Balance sheet shows the financial position of a business as on a particular date. It represents the assets owned by the business and the claims of the owners and creditors against the assets in the form of liabilities as on the date of the statement.

3. **Funds Flow Statement –**

It describes the sources from which the additional funds were derived and the use of these funds. Funds flow statement helps to understand the changes in the distribution of resources between two balance sheet periods. The statement reveals the sources of funds and their application for different purposes.

4. **Cash flow Statement:**

A cash flow statement shows the changes in cash position from one period to another. It shows the inflow and outflow of cash and helps the management in making plans for immediate future.An estimated cash flow statement enables the management to ascertain the availability of cash to meet business obligations. This statement is useful for short term planning by the management.

5. **Schedules:**

Schedule explains the items given in income statement and balance sheet. Schedules are a part of financial statements which give detailed information about the financial position of a business organization.

5.4 PARTIES INTERESTED IN FINANCIAL STATEMENTS

In recent years, the ownership of capital of many public companies has become truly broad based due to dispersal of shareholding. Therefore, one may say that the public in general has become interested in financial statements. However, in addition to the share holders, there are other persons and bodies who are also interested in the financial results disclosed by the annual reports of companies. Such persons and bodies include:

1. Creditors, potential suppliers or others doing business with the company;
2. Debenture-holders;
3. Credit institutions like banks;'
4. Potential Investors;
5. Employees and trade unions;
6. Important customers who wish to make a long standing contract with the company;
7. Economists and investment analyst;
8. Members of Parliament, the Public Accounts Committee and the Estimates Committee in respect of Government Companies;
9. Taxation authorities;
10. Other departments dealing with the industry in which the company is engaged; and
11. The Company Law Board

Financial Statement analysis, therefore, has become of general interest.

5.5 OBJECTIVES OF FINANCIAL STATEMENTS

The main object of financial statements is to provide information about the financial position, performance and changes taken place in an enterprise. Financial statements are prepared to meet the common needs of most users. The important objectives of financial statements are given below:

1. Providing information for taking Economic decisions:

The economic decisions that are taken by users of financial statements require an evaluation of the ability of an enterprise to generate cash and cash equivalents and of the timing and certainty of their generation. This ability ultimately determines the capacity of an enterprise to pay its employees and suppliers meet interest payments, repay loans and make distributions to its owners.

2. **Providing information about financial position:**

The financial position of an enterprise is effected by the economic resources it controls, its financial structures its liquidity and solvency and its capacity to adapt to changes in the environment in which it operates.

Information about financial structure is useful in predicting future borrowing needs and how future profits and cash flows will be distributed among those with an interest in the enterprise. This information is useful in predicting how successful the enterprise is likely to be in raising further finance. Information about liquidity and solvency is useful to predicting the ability of the enterprise to meet the financial commitments as fall due.

3. **Providing information about performance(working results) of an enterprise:**

Another important objective of the financial statements is that it provides information about the performance and in particular its profitability, which requires in order assessing potential changesin the economic resources that are likely to control in future. Information about performance is useful in predicting the capacity of the enterprise to generate cash inflows from its existing resource base as well in forming judgment about the effectiveness with which the enterprises might employ additional resources.

4. **Providing Information about changes in financial position:**

The financial statements provide information concerning changes in the financial position of an enterprise, which is useful in order to assess its investing, financing and operating activities during the reporting periods. This information is useful in providing the user with a basis to assess the ability of the enterprise to generate cash and cash equipments and the needs of the enterprise to utilize those cash flows.

5.6 BASICS OF INCOME STATEMENT AND BALANCE SHEET

Each business firm has to prepare two main financial statements viz. Income Statement and Balance sheet. The income statement reveals the profit of loss during a particular period generated from the activities of a business. Balance sheet shows the financial position of a business on a particular date.

- **Income statement**

Income statement summaries the incomes /gains and expenses /losses of a Business for a particular financial period. The format of Income statement explains in detail the items to be included in the statement. It is presented in the traditional T Format and also in the vertically statement form.

1. **Horizontal Form T form**

Manufacturing Trading and Profit and Loss Account For the yearending

Dr. Cr.

Particulars	**Rs.**	**Particulars**	**Rs.**
To Opening stock		By Closing stock	
Raw materials		Raw Material	
Work in progress		Work in progress	
To Purchase of raw materials		By Cost of finished goods c/d	
To Manufacturing wages		By Sales	
To Carriage/ Freight inwards		By Closing stock of Finished Goods	
To Custom duty		By Gross Loss c/d	
To Other factory Expenses		By Gross profit b/d	
To Opening stock		By Business incomes and Gains	
Finished Goods		By Net Loss c/d	
To Cost of finished		By Balance b/d from Previous year	
Goods b/d		By Net Profit b/d	
To Gross profit c/d			
To Gross loss b/d			
To Office and administration Expenses			
To Interest and financial Expenses			
To Provision for Incometax			
To Net Profit c/d			
To Net loss b/d			
To Transfer to General reserve			
To Dividend			
To Balance c/f			

Particulars	Rs.	Rs.
Gross Sales		xxx
Less : Sales returns	xxx	
Sales tax / Excise duty		
Net Sales		xxx
Less : Cost of goods sold		
(Materials consumed +Direct Labour + Manufacturing Expenses)	xxxxxx xxx	
Add / Less : Adjustment for change in stock	xxx	xxx
Gross Profit		xxx
Less : Operating expenses	xxx	
a. Office and administration Expenses	xxx	
b. Selling and distribution Expenses	xxx	xxx
Add : Operating Income		xxx
Operating Profit	xxx	
Add : Non Operating Income		xxx
Less : Non Operating expenses (including interest)		xxx
Profit before interest and tax		xxx
Less : Interest		xxx
Profit before tax		xxx
Less : Appropriations :	xxx	xxx
a. Transfer to reserves	xxx	xxx
b. Dividends declared / paid		xxx
Surplus carried to Balance Sheet		xxx

- **Balance sheet:**

It is one of the major financial statements which presents a company's financial position at the end of a specified date. Balance sheet has been described as a "snapshot" of the company's financial position at a moment for e.g. the amounts reported on a balance sheet dated March 31st, 2016 reflects that all the transactions throughout December 31st have been recorded. The balance sheet provides information related to the assets, liabilities and the shareholders' equity of the company as on a specific date.

Total Assets = Total Liabilities + Share holders' equity

The companies Act, 1956 stipulates that the balance sheetof a joint stock company should be prepared as per Part I of Schedule VI of the Act. However, the statement form has been emphasized upon by accountants for the purpose of analysis and interpretation.

Understanding Corporate Balance Sheet:

A. Assets side:

1. Fixed Assets :

Fixed Assets are called long-term assets. These assets are used over several periods. They are major sources of revenue to the business. They are intended for long term use in the business. They are called "bundle of future services" or "Sunk Costs". The group of fixed assets is explained in the proforma. Generally the Fixed assets are classifies as:

a) Tangible movable assets;
b) Tangible immovable assets; and
c) Intangible assets.

a) Tangible movable assets are the assets which can be seen, touched and moved from one place to another place. Plant and Machinery, furniture and fixtures, transportation equipments etc. are tangible movable assets.

b) Tangible immovable assets are the assets which can be seen and touched but cannot be moved from one place to another place. Such assets include land, buildings, mines, oil wells, etc.

c) Intangible assets are the assets which cannot be seen and touched. However, their existence can only be imagined such as patents, trademarks, copyrights, goodwill, etc.

The Fixed Assets are presented as:

Gross Block - Provision for Depreciation = Net Blocks

2. Investments :

Investments may be short-term or long term. Short-term investments are marketable securities and they represent temporary investments of idle funds. These investments can bedisposed off by the company at any time. Investments are shown at cost. Cost includes brokerage, fees and all other expenses incurred on acquisition of investments. However, the market value is shown by way of a note.

Long-term investments are held for a long time. They are required to be held by the business by the very nature and conditions of the business. For example, a company engaged in generating electricity may be required to hold the bonds of the Electricity Board. These bonds are retained by the company so long as the company uses electric power.

As per Schedule VI of the Indian Companies Act 1956, investments are shown separately, showing the nature of investments and the mode of valuation of various classes of securities.

Long term Investments are grouped under fixed assets and short term investments under current assets.

3. Current Assets, Loans and Advances:

The item, “Current Assets, Loans and Advances” is divided intotwo parts:

a. Current Assets, and
b. Loans and Advances.

a. Current Assets and Quick assets:

“Current Assets include cash and the other assets that are likely to be converted into cash and the cash thus generated is available to pay current liabilities. Current assets are not intendedfor long-term use in business. Current assets represent employment of money by the company on a short-term basis. They circulate within the group. **For example,** cash becomes raw material when material is purchased, material becomes finishedgoods, finished goods become cash or debtors when sold and so on.

Current Assets = Stock + Debtors + Cash & Bank + Loans &Advances + Marketable Securities + Other Current Assets

In fact, total current assets are known as “Gross Working Capital”. Current assets less current liabilities are known as ‘net working capital’.

Quick Assets are known as ‘near cash’ assets. In other words, quick assets are those which can be converted into cash quickly. Therefore, they are also known as liquid assets. Cash and bank balances are the most liquid assets. Debtors and cash advances can be converted into cash at a short notice. Therefore, they are also regarded as quick assets. Marketable investments can be converted into cash, fall into the category of quick assets. Inventory does not fall in this category of quick assets, since itcannot be converted into cash quickly, as material is to be converted into finished goods and then they should be sold. Expenses paid in advance do not satisfy the criteria of quick assets. They cannot be converted into cash. They can be received in the form of services.

Therefore Quick Assets = Current Assets – Inventory – Prepayments

b. Loans and Advances :

Loans and advances given are current assets. It includes different types of advances such as advances against salary, advances against machinery, advances to subsidiary, prepaid expenses on account of rent, taxes, insurance, etc.

4. Miscellaneous Expenditures and losses :

This heading covers Fictitious Assets and other expenses which are made for future on a mass basis. These expenses are really not assets but the whole balance on the account of these items is not charged to current year’s Profit and Loss A/c therefore the amount to the extent not written off or adjusted is shown onthe Assets side as Miscellaneous expenditures.

The **examples** of fictitious assets are :

a. Preliminary expenses.
b. Brokerage on issue of shares and debentures.
c. Discount on issue of shares and debentures.
d. Share or debenture issue expenses.
e. Heavy Advertisement and Publicity expenditure.
f. Profit and Loss A/c debit balance.

Liquidity means easy convertibility into cash**.** Though ultimately all assets are converted into cash, the term liquidity refers not only to the nature of assets

but also to the purposes of holding the assets. Assets are normally arranged in order of permanency i.e., from least liquid to most liquid.

B. Liabilities Side

The term 'liability' when used in accounting, means a debt. A debt is something that a person or an organization owes to another person or organization. In other words, Liabilities are the claims of outsiders against the business. Technically speaking, all liabilities shown in a balance sheet are claims against all assets shown in it. But, there may be certain cases where a liability has a claim against a specific asset. Even under such circumstances, the liabilities are shown separately, not as a deduction from the specific assets.

Classification of Liabilities :

The liabilities of an enterprise may be classified into threecategories

1. Permanent Funds or Proprietors' Funds.
2. Semi-permanent Funds or Long-term Borrowings.
3. Current liabilities and Provisions.

1. Proprietor's Funds :

These are the funds provided by the proprietors (owners) or the shareholders. Proprietors' fund represents the interest of the proprietors in the business. This is the amount belonging to the proprietors. Proprietors' fund is also called as 'Proprietors' Equity', 'Owners' Funds', or 'Shareholders' Funds'. This is also known as the 'Net Worth' of the business. Owners' Equity refers to the claimof the owners it includes :

Owners' Equity = Capital (May be Equity Share Capital only or Equity and Preference Share Capital) + Reserves + Profit and Loss A /c credit balance – Accumulated losses and Fictitious assets.

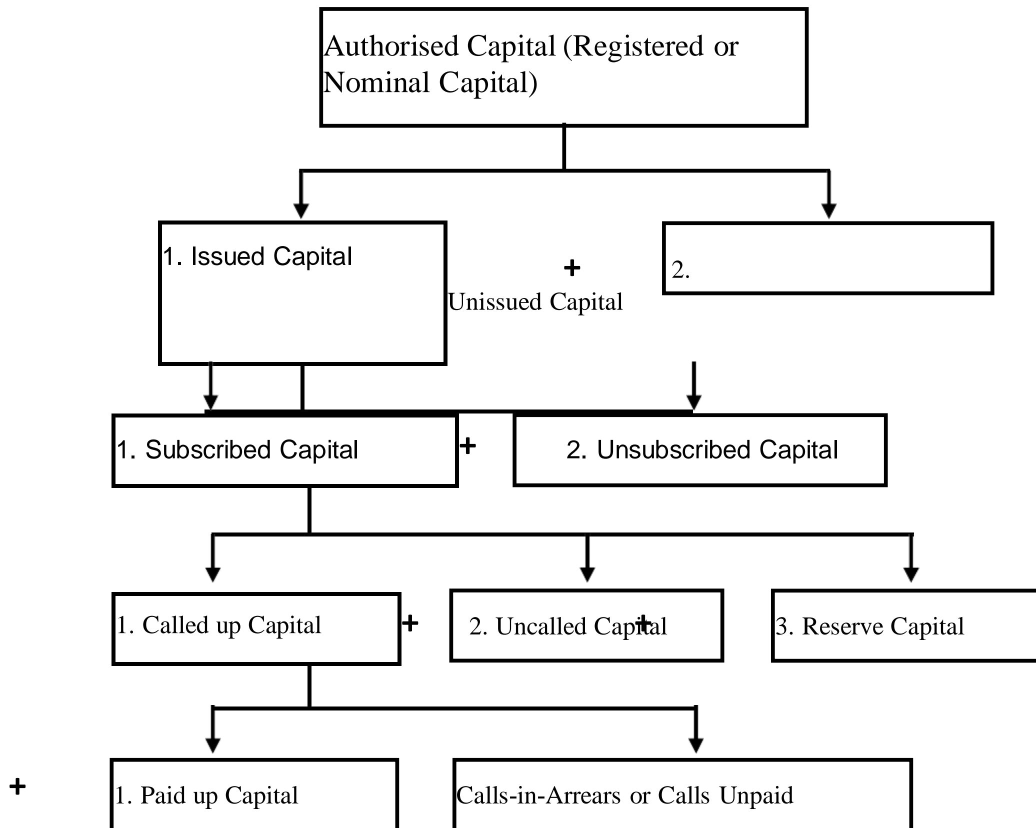
Owners' equity increase either through fresh investments by the owners or by way of increasing the earnings retained i.e., profits not distributed. (Retained earnings are that part of the total earnings which have been retained for use in the business)

a. SHARE CAPITAL :

Share capital is the amount that is raised by a companyfrom the public at large, through the issue of shares. There are different concepts of share capital from the legal and accounting points of view.

The following chart details the different concepts of capital :

Company's Share Capital



i. **Authorised Capital :** Authorised Capital is the maximum capital a company can raise as mentioned in the Memorandum of Association under its Capital Clause.

ii. **Issued Capital :** A company usually does not need the entire registered capital. Issued capital is that part of the Authorised capital; which is actually offered to the prospective investors for subscription. The balance of the Authorised capital which is not issued is called the 'unissued capital.'

iii. **Subscribed Capital :** Subscribed capital is that part of the issued capital which has been subscribed or taken up by the public. Therefore, the subscribed capital may be equal to or less than the issued capital.

Called up Capital Uncalled Capital: The company, therefore, may collect the capital in several instalments as per its need. The called- up capital is that portion of the subscribed capital which has been called or demanded by the company to be paid. The capital that is not demanded from the shareholders is called uncalled capital.

iv. **Paid up Capital:** Paid up capital is that part of the called up capital which has been actually paid by the members. The paid-up capital is the called-up amount less calls not paid. (Calls unpaid or calls-in-arrears).

v. **Reserve Capital :** It is that part of the uncalled capital which may only be demanded on winding up or liquidation, but not when the company is a going on. A company may determine

this amount by a Special Resolution.

b. RESERVES AND SURPLUS :

A business may have to meet certain compulsory or voluntary, foreseen or unforeseen, recurring or non-recurring obligations in future. It is advantageous to for the organization to make provision in advance to meet them. If not sudden payment may adversely affect the financial health of the company. In orderto avoid such situations some part of profit are retained in eachyear which is termed as 'Retained Earnings' or 'Plough Back of profits'. It means the reserves represent amounts set aside out of divisible profits. They are appropriations of profits. Indian Companies Act requires every company to transfer a specific percentage (upto 10%) of the profits to "Reserve" accounts.

Reserve created for a specific purpose is called as a "Specific Reserve" and a reserve created for a general purpose is called as a "General Reserve." General reserves are free and can be utilized for Payment of Dividends, Development and expansion purpose or for any other purpose the company thinks proper.

According to Companies Act "Reserve shall not include any amount written off by way of providing for depreciation, renewals or diminution in value of assets or retained by way of providing for any known liability."

It is compulsory for the business organization to disclose each individual head of the reserves in the balance sheet with its opening balance as per last balance sheet, additions thereto and deductions there from in the current yare.

2. LONG-TERM LIABILITIES :

A company raises finance either from owners or throughexternal borrowings. External borrowings of a company which constitute its "owed funds" are important sources of long-term finance. These borrowings are termed as 'fixed liabilities' or 'term liabilities' or 'long term-loans'. They may take various forms suchas debentures, public deposits, bank loans, deferred payments,etc. They may be fully secured or partly secured or unsecured.

3. CURRENT LIABILITIES AND PROVISIONS:

a. Current Liabilities :

Current liabilities are those short-term obligations of an enterprise which mature within one year or within the operating cycle. They constitute short-term sources of finance. It includesSundry Creditors, Bills Payable, Interest accrued but not due, outstanding expenses, Unclaimed dividends and Bank Overdraft.

These liabilities are not normally secured and no interest is payable on them with the exception of bank overdrafts. These liabilities, are generally paid off by utilizing current assets or by creating a current liability.

Actually all current liabilities are payable within a short period of time. However, Bank Overdraft is the current liability which is not paid immediately or in a very short-time, in practice. Therefore, **Bank Overdraft is not considered as a quick liability.** It is a permanent arrangement with the banker. Hence

Quick Liabilities = Current Liabilities – Bank Overdraft

b. Provisions :

'Provision' means any amount retained by way of providing for any known liability of which the amount cannot be determined with substantial accuracy**.** Provisions have to be made for maintaining the integrity of assets or for known liabilities. Although the amount of liability is not certain organization has to made provision on best estimates. The examples of provisions are Provision for depreciation on assets, Provision for doubtful debts, Provision for proposed dividends, Provision for taxation.

4. CONTINGENT LIABILITIES :

According to ICAI, Contingent liability refers to an obligation relating to an existing condition or situation which may arise in future depending on the occurrence or non-occurrence of one or more uncertain future events. These liabilities may or may not be converted into actual liabilities at some future date. It is a liability which may or may not occur. But on the date of the Balance Sheet,it is not known definitely whether the liability would arise or not. But as a matter of caution, it is indicated in the balance sheet for the sake of information and disclosure, under the head "Contingent Liabilities. Some of the examples of Contingent Liabilities are Discounted Bills of Exchange, Disputed liability on account of income-tax, etc., about which appeal has been filed, Uncalled amount on partly paid-up shares and debentures held by the company as investments, Cumulative preference dividend in arrears, Matters referred to arbitration, Claims not acknowledged as debts, Estimated amount of contracts remaining to be executed on capital account and not provided for, Guarantees given by the company, Bonds executed. and debentures held by the company as investments, Cumulative preference dividend in arrears, Matters referred to arbitration, Claims not acknowledged as debts, Estimated amount of contracts remaining to be executed on capital account and not provided for, Guarantees given by the company, Bonds executed.

Following are the proforma of the Balance sheet

1) Horizontal Form :

Liabilities	Rs	Assets	Rs
Share Capital (with all particulars of authorized, issued, subscribed and Called up capital) Less: Calls in arrears Add: Forfeited shares **Reserve and Surplus** **1.** Capital Reserve **2.** Capital Redemption Reserve **3.** Share premium **4.** Other Reserves Less: P&L a/c Debit balance **5.** Profit and Loss appropriation A/c **6.** Sinking fund A/c		**Fixed Assets** 1. Goodwill 2. Land and Building 3. Lease hold Property 4. Plant and Machinery 5. Furniture and fixture 6. Patents and trade marks 7. Vehicles **Investments** **Current assets, Loans and Advances** **a. Current assets** 1. Interest accrued on Investment 2. Loose tools 3. Stock in Trade 4. Sundry debtors Less Provision for Bad debts 5. Cash in Hand 6. Cash at Bank	

Long term loans **a. Secured loan** Debentures Add: Outstanding Interest Loan from Banks **b. Unsecured loans** Fixed deposits Short term loans andadvances **Current liabilities and Provisions** **a. Current liabilities** 1. Bills payables 2. Sundry creditors 3. Bank overdraft 4. Income received in advance 5. Unclaimed Dividends 6. Other liabilities **b. Provisions** 1. Provision for taxation 2. Proposed dividends 3. Provident fund and Pension fund **Contingent Liabilities**		**b. Loans and Advances** 1. Advances to subsidiaries 2. Bills receivables 3. Prepaid expenses **Miscellaneous expenditure** 1. Preliminary expenses 2. Discount on issue of shares and Debentures 3. Underwriting commission 4. Profit and Loss a/c (debit balance)	

2. Vertical Form

Income Statement of …….. for the year ending ……….

Previous	Particulars	Schedule	Current Year
	I. Sources of Funds **1.** Shareholders' Funds a. Capital b. Reserves and surplus **2.** Loan funds a. Secured loan b. Unsecured loans **TOTAL** **II. Application of Funds** 1. Fixed Assets a. Gross Block Less Depreciation		

	b. Net Block 2. Investments 3. Current Assets, Loans and Advances Less Current Liabilities and Provisions **Net Current Assets** 4. Miscellaneous expenditure to the extent not written off or adjusted Profit and Loss a/c debit balance **TOTAL**		

- **Statement of Retained Earnings:**

The Statement of Retained Earnings is prepared to showhow the balance in Profit and Loss accounts is appropriated for various purposes like provision for dividend, transfer to reservesetc. The balance on this account is finally shown on the Balance sheet Under the heading Reserve and Surplus.

5.7 LIMITATION OF FINANCIAL STATEMENT

Following are the limitations of financial statements:

1. The information being of historical nature does not reflect the future.
2. It is the outcome of accounting concept, convention combined with personal judgement.
3. The statement portrays the position in monetary term. The profit or loss position excludes from their purview things which cannot be expressed or recorded in term of money.

To overcome from the limitations it becomes necessary to analyse the financial statements.

Module - IV

6

ACCOUNTING RECORDS

Unit Structure

6.1 Introduction
6.2 Process of Transaction and Its Record Generation
6.3 What is an Account?
6.4 Final Accounts
6.5 Horizontal or 'T' Format of Trading & P&L A/C
6.6 Vertical Format of Balance Sheet

6.1 INTRODUCTION

Accounting involves a series of processes like measuringeconomic value of a transaction, recording it and reporting it to various stake holders. Accounting information is used by a varietyof users, like investors, creditors, workers, management, and government.

Accounting can be divided into financial accounting, management accounting, auditing, and tax accounting. Financial accounting focuses on the reporting of an organization's financial information, including the preparation of financial statements, to external users of the information, such as investors, regulators and suppliers and management accounting focuses on the measurement, analysis and reporting of information for internal use by management. The recording of financial transactions, so that summaries of the financials may be presented in financial reports,is known as bookkeeping, of which double-entry bookkeeping is the most common system.

Accounting records means internal or external documentary evidence maintained within the organisation to record the economic transaction which has taken place. These are important sources of information and evidences that are used to prepare the financial statements.

In book keeping and accountancy we will be recording only monetary transactions.

Accounting records can take on many forms and include:

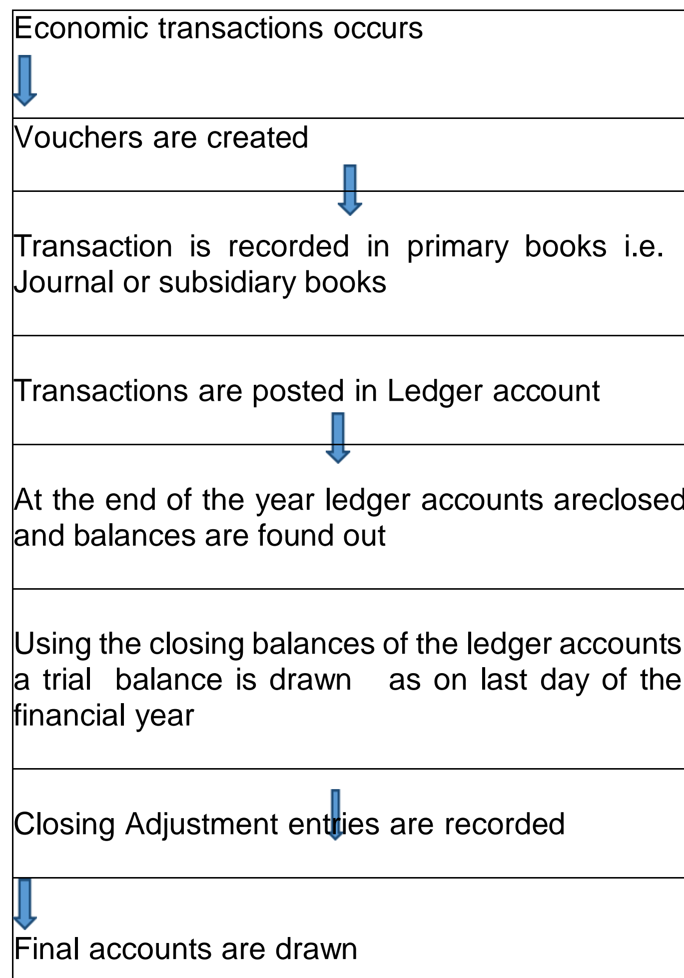
i. Invoices
ii. Vouchers
iii. Ledgers

iv. Journals
v. Bank statements
vi. Contracts and agreements
vii. Verification statements
viii. Transportation receipts etc.

Vouchers are most important document in accounting records. Vouchers form basis for recording any transaction. Account voucher is an accounting document representing an internal intent to make a payment to an external entity, such as a vendor or service provider. A voucher is produced usually afterreceiving a vendor invoice, after the invoice is successfully matched to a purchase order. A voucher will contain detailed information regarding the payee, the monetary amount of the payment, a description of the transaction, and more.

6.2 PROCESS OF TRANSACTION AND ITS RECORD GENERATION

Let us see the entire process of accounting with the help of a chart



Now let us discuss the entire procedure in the order of flow chart

1. **Economic transactions occurs**: In accounts we record only those transaction which has some monetary value. Accountancy is more of a historical record as it records whatever happens in money terms. One should not get confused with non cash and non-monetary transactions. A non cash transaction can be a monetary transaction e.g providing depreciation on fixed assets, is a non cash transaction but it is a monetary transaction as we know the amount of depreciation in money terms.

2. **Vouchers are created:** Whenever any transaction takes placea voucher is created depending upon the nature of transaction. Vouchers may be of following types

    1. Receipt voucher
    2. Payment vouchers
    3. Journal vouchers
    4. Cash memo
    5. Contra entry vouchers
    6. Purchase and returns invoice vouchers
    7. Sales and returns vouchers

A voucher complete in all respects forms basis for recording the transaction. To be called a complete document it should be properly dated, amounted, authorised and signed by the party.

Any documentary evidence supporting the entries recordedin the books of accounts, establishing the arithmetic accuracy of the transaction, may also be referred to as a voucher for example, a bill, invoice, receipt, salary and wages sheet, memorandum of association, counterfoil of paying-in slip, counterfoil of cheque book, or trust deed.

Normally the following types of vouchers are used:

(i) Receipt Voucher
(ii) Payment Voucher
(iii) Journal Voucher
(iv) Supporting Voucher

Let us discuss each of these:

(i) Receipt Voucher:

A Receipt voucher is used to record cash or bank receipt. Receipt vouchers are of two types which are as follows:

(a) Cash receipt voucher – These vouchers are created whenever any cash generation transaction occurs. E.g. sale of scrap for cash.

(b) Bank receipt voucher – it indicates receipt of a cheque or demand draft i.e. money is not received in the form of cash in hand, instead, the money will be credited to the bank account of the assesse.

Contents of Receipt/Credit Voucher:

The following information are usually available from a receipt/creditvoucher:

(a) Names and address of the parties;
(b) Date of preparing the voucher;
(c) Voucher Number;
(d) Amount of the transaction;
(e) Heads of account;
(f) Signature of the person who is preparing the voucher;
(g) Authorized Signatory;
(h) Narrations, i.e., short description of the transaction, and
(i) Number of Supporting Voucher.

CREDIT VOUCHER

Oriental Company
G.S Road, Bhangagarh, Guwahati – 781005

Voucher No. _______________ Date _________

	Amount Rs.	P
CREDIT ________________________________ A/C Being ______________________________________ ____		
(Rupees ……………………… Only) Total:		

Accountant Manager Proprietor

ii). Payment/debit Voucher:

A payment voucher is just the opposite of a receipt voucher. In the above, cash/ bank was debited, while in this case, cash or bank will be credited. In the above case, there was an inflow of funds, while in this case, there is an outflow of funds. A Payment voucher is used to record a payment of cash or cheque. Payment vouchersare also of two types which are:

(a) Cash Payment voucher – it denotes payment of cash

(b) Bank Payment voucher – it indicates payment by cheque or demand draft i.e. money is not paid in the form of cash in hand, instead, the money will be debited from the bank account of the assesse

Contents of payment/debit Vouchers:

The following information are normally available from a debit voucher:

(a) Names and Addresses of the Party (b) Date of voucher;
(c) Voucher Sr. Number; (d) Amount or value of the transaction; (e) Heads of Account; (f) Signature of the person who is preparing the voucher; (g) Authorized signatory; (h) Narration i.e., short description of the transaction and (i) Number of supportingVouchers.

The format of a Debit Voucher is presented:

Payment Voucher

Ref No: _______________

Amount:		Date:
Method of Payment		
Cash:		Check#:
To:		
The Sum of:		
Being:		Payee:
Approved By:	Paid By:	Signature

(If the amount of transaction exceeds Rs. 500 a revenue stamp valued Re 1. should be affixed.)

iii) Journal Voucher:

These vouchers are used for non-cash transactions, they are basically used as a documentary evidence. e.g., Goods sold on credit. In such cases, the cash or the bank account of the assesseis unaffected. In the case of Goods sold on credit, the Voucherwould debit the Debtor to whom the goods are sold on credit, while sales on credit account would be credited further.

JOURNAL VOUCHER

Voucher No. …………………… . Dated………….

	Amount (Rs)
DEBIT ……………………………………… A/C ……………………………………………	xxxxxxxxx
Total Rs.	xxxxxxxxx
CREDIT ………………………………………A/C ……………………………………… .	xxxxxxxx
(Rupees …………………………) only Total Rs.	xxxxxxx

Accountant Manager Partner/Proprietor

iv) Supporting documents vouchers:

These vouchers are the documentary evidence of transactions that have happened. For example, you can attach the bill of an expense along with the original voucher just to further support the primary voucher. Petrol Bills attached with the conveyance vouchers are a good example of Supporting Vouchers. Supporting Vouchers are the documentary evidence of business transactions which have happened.

They are of two types:

(i) External Supporting Vouchers; and
(ii) Internal Supporting Vouchers.
(i) External Supporting Vouchers:

These vouchers are prepared by the third parties who are associated with the firm.

For example:(a) Debit Note Received; (b) Credit Note Received; (c) Cash Memo Received from the Sellers, etc.

The format of a Supporting Voucher is presented:

COMPANY NAME

Street Address
City, ST ZIP Code
Phone: (123) 456 78 99 Fax: (123) 456 78 99

INVOICE

DATE: December 14, 2011
INVOICE: 100

Bill To:
Name
Company Name
Street Address
City, ST ZIP Code
Phone

Ship To:
Name
Company Name
Street Address
City, ST ZIP Code
Phone

SALESPERSON	SHIP VIA	[illegible]	TERMS	DUE DATE

ID	DESCRIPTION	QUANTITY	UNIT PRICE, $	LINE TOTAL
1	Item 1 description	23	44.99	$ 1,034.77
2	Item 1 description	4	12.99	$ 51.96
3	Item 1 description	2	89.99	$ 179.98
4	Item 1 description	56	0.99	$ 55.44
				$ -
				$ -
				$ -
			SUBTOTAL	$ 1,322.15
			TAX RATE	6.50%
			SALES TAX	85.94
			SHIPPING AND HANDLING	-
			TOTAL	$ 1,408.09

Make all checks payable to Your Company Name
If you have any questions concerning this invoice, contact Name, Phone Number, Email

THANK YOU FOR YOUR BUSINESS!

(ii) Internal Supporting Vouchers:

These vouchers are prepared by the internal staff on behalfof 'the firm which are accepted by the third parties for the transaction so happened.

For example:

(a) Counterfoil-of Challan for payment of income tax to a bank;

(b) Counterfoil of pay-in-slip when money is deposited into bank, etc.

3. Transaction is recorded in primary books i.e. Journal books: There are two sets of books maintained in any organisation viz. primary set of books and secondary set of books. Primary set of books is the one where initial transaction is recorded. It is the first instance of the recording of any economic transaction it includes journal and subsidiary books.

In order to record journal entries, one needs to have knowledgeabout following basics of accounting

6.3 WHAT IS AN ACCOUNT?

ACCOUNT: An account is a record of all transaction under one room relating to a particular person, income, expense, property etc.

Types of accounts:
There are three type of accounts in accounting:

A] **Personal account**: Ashok, Anil, Dena Bank, Abcd ltd, prepaid or outstanding incomes or expenses. Personal accounts consist of all those accounts which are related to a person, business, firm etc. There are also subtypes of personal account:

I] Natural Personal Any person like Peter Account, Ram account etc.

II] Artificial Personal: Any company or group of people like Microsoft account, Hindustan Petroleum account etc.

III] Representative Personal this type of Personal a/c represents owner like. Capital a/c, drawings a/c etc.

B] **Real account**: Real accounts consist of all those accounts which are related to assets. For example: Plant and Machinery account, Stock account, Furniture & Fixture, cash etc.

C] **Nominal account**: Nominal accounts consist of all those accounts which are related to expenses, losses, Income and Gains.For example: Rent account, wages account, printing & stationary etc.

Golden rules of accounting
There are three golden rules in accounting to record journal entries.Each of these rules is associated with separate account.

Personal accounts
"Debit the Receiver, Credit the Giver"

Real accounts
"Debit what Comes In, Credit what Goes out"

Nominal accounts
"Debit all Expenses and Losses, Credit all Income and Gains"

How to record a journal entry
First understand the format of a journal

A journal has five vertical columns
JOURNAL

DATE	PARTICULARS	L. F.	DEBIT Rs.	CREDIT Rs.
1.4.2-16	Account to be debited A/c Dr To Account to be credited (Being..narrate the transaction)		xxx	 xxx

Date column records date of the transaction

Particulars column records the two effects of a given transaction, by using at least two ledger accounts, one of which will be debited and other one credited.

Below these two accounts we write brief description of transaction in brackets prefixing the word 'Being', called as narration.

L.F. column records ledger folio or page number where that account is opened in a leger book.

Debit (Amount) and Credit (Amount) columns records amountagainst each ledger account.

Steps to record a journal entry

1. Identify which accounts are involved
2. Identify types of accounts
3. Apply golden rules according to the type of account to determine which account will be Debited and which account will be Credited.

Example: You are writing in the books of Ganesh
Transaction : Cash received from Jagdish Rs5,000,
for this transaction we will pass journal entry by using above mentioned

1 Identify which accounts are involved : a) Cash b) Jagdish

2 Identify types of accounts:

a) Cash : real account

b) Jagdish: personal account

3 Apply golden rules according to the type of account to determine which account will be Debited and which account will be Credited.

a) Cash : real account so: Debit what comes in

b) Jagdish: personal account : credit the giver

Therefore Cash A/c will be debited and Jagdish A/c will be creditedThe entry will be as follows

Cash a/c -----------------------------Dr 5,000

To Jagdish a/c------------------------ Cr 5,000

(Being cash received from Jagdish)

Example : Journalise the following transactions:

2016		Rs.
April. 1	Started business with cash	50,000
April. 3	Deposited cash into Bank	40,000
April. 5	Sold goods to Ganesh	22,000
April. 9	Goods returned by Ganesh	2,000
April. 11	Goods purchased from Kishore	30,500
April. 15	Goods returned to Kishore	1,500
April. 18	Bought Furniture & Fixture for office use by	9,000
April. 22	cheque	1,000
April. 22	Purchased goods for cash	50
April. 30	Paid carriage	500
	Paid interest on loan	

Solution: **Journal**

Date	Particulars	L.F.	Dr.(Rs.)	Cr. (Rs.)
2012				
April. 1	Cash A/c ...Dr. To Capital A/c (Being the business started with cash)		50,000	50,000
April 3	Bank A/c ...Dr. To Cash A/c (Being the amount deposited into the bank)		40,000	40,000
April 5	Ganesh To sales A/c (Being the goods sold to Ganesh)		22,000	22,000
April 9	Sales Returns A/cTo Ganesh (Being the goods returned by Ganesh)		2,000	2,000
April 11	Purchases A/c ...Dr. To Kishore (Being the goods purchased from Kishore)		30,500	30,500
April 15	Kishore ...Dr. To purchases Return a/c (Being the goods returned to Kishore)		1,500	1,500
April 18				

April 22	Furniture & Fixture a/c …Dr. To bank a/c (Being the Furniture & Fixture bought andpaid by cheque)		9,000	9,000
April 26	Purchases A/c …Dr. To cash a/c (Being the goods purchased against cash)		1,000	1,000
April 30	Carriage a/c TO …Dr. cash a/c (Being the carriage paid)		50	50
	Interest on Loan A/c …Dr. To Cash A/c (Being the payment of interest on Loan)		500	500
	Total		**1,57,550**	**1,57,550**

4. **Transactions are posted in Ledger account: Secondary set of books includes** ledger accounts. Now let us see format of a ledger account.

Dr.			LEDGER	ACCOUNT			Cr.
DATE	PARTICULARS	J.F.	AMOUNT	DATE	PARTICULARS	J.F.	AMOUNT
1.4.16	To Account credited in Journal		xxx	5.4.16	By Account debited in Journal		Xxx
	against this ledger a/c				against this ledger a/c		

The process of transferring the information contained in a Journalto a Ledger is called Posting.

i. Posting of debited item in a Journal Entry: The steps to be followed are :

Identify in the ledger the account to be debited. Then enter the date of the transaction in the 'Date' column on the debit side of the account. Then write the name of the account which has been credited in the respective entry in the 'Particulars' column on the debit side of the account as "To (name of account credited)". Then record the page number of the Journal where the entry exists in the Journal folio (J.F.) column. Then rnter the relevant amount in the 'Amount' column on the debit side.

ii. Posting credit item in a journal entry: The steps to be followed are :

Identify in the ledger the amount to be credited then Enter the date of the transaction in the 'Date' column on the credit side of the account. Then write the name of the account which has been debited in the respective entry in the 'Particulars' column on the credit side of the account as 'By (name of account debited)'. Then record the page number of the Journal where the entry exists in the Journal folio (J.F.) column. Then enterthe relevant amount in the 'Amount' column on the credit side.

Thus every transaction has two effects viz debit and credit. Ina journal entry theses are either debited or credited. One should always remember that total of debit should always match the total of credit.

Consider the simple Journal entry to illustrate the above:

On April 16, 2014 Motor car Purchased for cash Rs. 12000

April 16 Motor car A/c ....Dr. Rs. 12,000
To cash Rs. 12,000
(Being the Motor car purchased)

An amount of Rs. 12,000 will be debited to the Motor car account and credited to cash account. The manner will be: in the Motor car account in the 'Particulars' column we shall write to cash a/c . In the account of cash will be written : 'By Motor car a/c'. The two accounts will, thus appear as under.:

Motor car A/c

Dr. Cr.

Date	Particulars	J.F.	Rs.	Date	Particulars	J.F.	Rs.
April 16	To Cash A/c		12,000				

Cash a/c

Dr Cr.

Date	Particulars	J.F.	Rs.	Date	Particulars	J.F.	Rs
				April 16	By Motor car A/c		12,000

Example 2: Received Rs.14,000 in full settlement of a debt of Rs.15,000 from Ram on Aug 8, 2014.

SULUTION - Journal Entry

	Rs.	Rs.
Cash A/c Dr.	14,000	
Discount allowed A/c Dr	1,000	
To Anant		15,000
(Cash received and		
discount allowed)		

Ledger A/c

Cash A/c

Dr **Cr**

Date	Particulars	L.F	Rs.		Date	Particulars	L.F	Rs.
2014								
Aug.8	To Anant		14,000					

Discount Allowed A/c

Dr **Cr**

Date	Particulars	L.F	Rs.	Date	Particulars	L.F	Rs.
2014							
Aug.8	To Anant		10 00				

Anant's Account

Dr **Cr**

Date	Particulars	L.F	Rs.		Date	Particulars	L.F	Rs.
					2014			
					Aug. 8	By cash A/c		14,000
						By Discount		1,000
						Allowed A/c		

5. At the end of the year ledger accounts are closed and balances are found out

Dr.			LEDGER	ACCOUNT			Cr.
DATE	PARTICULARS	J.F.	AMOUNT	DATE	PARTICULARS	J.F.	AMOUNT
1.4.16	To abc Account		Xxx	5.4.16	By opq account		Xxx
Xxx	To xyz Account		Xxx	xxx	By rst Account		xxx
Xxx	To Balance c/d		Xxx				
			Xxxx				xxxx

Using the closing balances of the ledger accounts a trial balance is drawn as on last day of the financial year : A trial balance is a list of all the general ledger accounts of a business.This list will contain the name of ledger account and the balance of that ledger. Each nominal ledger account will hold either a debit balance or a credit balance. The debit balance values will be listedin the debit column of the trial balance and the credit value balance will be listed in the credit column. A trial balance always tallies. Ledger A/Cs which shows a debit balance is put on the Debit sideof the trial balance.

The A/c's Showing credit balance are put on the Credit side of the Trial Balance. Accounts which show no balance i.e. whose Debit and Credit totals are equal are not entered in Trial Balance.
Then the two sides of the Trial Balance are totaled. If they are equal it is assumed that there are no arithmetical error in the posting and balancing of Ledger A/cs.

Normally at the year end or whenever a businessman is interestedin knowing the position of various A/C s, the accounts are balanced. Various steps for this purpose are

(1) Debit and Credit sides of each A/c are totaled.
(2) The difference between the two sides is written on the side which is shorter so as to make their totals equal.
(3) The words "Balance C/d" i.e. the balance carried down and written against the amount of difference.
(4) In the next period, the balance is brought down on the other side by writing the words 'Balance b/d'.
(5) If the Debit side exceeds the Credit Side the difference is a Debit Balance whereas.
(6) If the Credit side exceeds the Debit side the difference is a Credit Balance.

Objectives or Functions of Trial Balance
It helps in ascertaining the arithmetical accuracy of ledger accounts.
Helps in locating errors.
Provides the summary of Ledger A/cs.Helps in the preparation of Final A/cs.

ABC Ltd Trial Balance as at		
Account Title	Debit	Credit
Share Capital		xxxx
Cash	xxx	
Sales		xxxx
Buildings	xxxx	
Furniture & Fixture	xxx	
Cost of Sales	xxx	
General Administration Expenses	xxx	
Creditors		xxx
Debtors	xxx	
Total	xxxx	xxxx

6. **Closing Adjustment entries are recorded Closing entries are journal entries** made at the end of an accounting period to transfer temporary accounts to permanent accounts. adjusting entries are journal entries usually made at the end of an accounting period to allocate income and expenditure to theperiod in which they actually occurred. The revenue recognition principle is the basis of making adjusting entries that pertain to unearned and accrued revenues under accrual-basis accounting. Eg Charging depreciation, providing for outstanding incomes and expenses etc.

Treatment of items of Adjustment outside the Trial Balance

Adjustment	Effects
Closing Stock	Trading A/c Credit Side and Asset Side of balance sheet.
Outstanding expenses	Added with concerned item in trading or profita loss a/c and liabilities side of BALANCE SHEET as a current liability.
Prepaid expenses	Less from concerned item in trading or profit and loss a/c and assets side of BALANCE SHEET as a current assets.
Accrued Income (income earned but not received)	Add with concerned income in P&L and Assets side of BALANCE SHEET as a current assets
Income received in advance	Less from concerned item in P&L and Liabilities Side of BALANCE SHEET as current liabilities.

Depreciation	Dr. side of P&L A/C & Deduct from concerned assets.
Bad Debts	Dr. side of P&L A/C & Deduct from debtors in Balance sheet.
Provision for doubtful debts	Dr. side of P&L A/C & Deduct from debtors
Provision for discount on debtors	Dr. side of P&L A/C & Deduct from debtors

7. **Final accounts are drawn**

From the derived trial balance an accountant can prepare final accounts for the year for which information is available.

Format of final accounts differ from organisation to organisation. Let us see format of final accounts for some trading commercial organisations.

An organisation can adopt either horizontal or vertical format, but vertical format is compulsory for joint stock companies.

6.4 FINAL ACCOUNTS

Trading Account

Trading account is prepared to know the gross profit or gross loss arising or incurred as a result of the trading activities of abusiness. In other worlds, in case of a manufacturing concern a Manufacturing A/c is prepared to show the result of manufacturing activity,trading account indicates buying and selling of goods. If the amount of sales exceeds the amount of purchases and the expenses directly connected with such purchases, the difference is termed as gross profit. On the contrary, if the purchases, and direct expenses exceed the sales, the difference is called gross loss. The purpose of preparing the Trading Account is to find out the Gross Profit or Gross Loss of a concern during a particular period. The following equations are highly useful for determination of Gross Need and Importance of Trading Account

Preparation of Trading Account serves the following objectives:

1. It provides information about Gross Profit and Gross Loss: It informs of the gross profit or gross loss as a result of buying and selling the goods during the year. The percentage of Current Year's gross profit on the amount of sales can be calculated and compared with those of the previous years. Thus, it provides data for comparison, analysis and planning for a future period.

2. It provides information about the direct expenses: All the expenses incurred on the purchase and manufacturing of goods are recorded in the trading account in a summarised form. Percentage of such expenses on sales can be calculated and compared with those of the previous years. In this way it enables the management to control and rationalise the expenses.

3. Comparison of closing stock with those of the previous years: closing stock has to be valued and recorded in a trading account. This stock can be compared with the closing stock of the previous years and if the stock shows an increasing trend, the reasons may be inquired into.

4. It provides safety against possible losses: If the ratio of gross profit has decreased in comparison to the preceding year, the businessman can take effective measures to safeguard himself against future losses. For example, he may increase the sale price of his gods or may proceed to analyse and control the direct expenses.

6.4 (a) Preparation of Trading Account

Trading Account is a Nominal Account and all expenses which relate to either purchase or manufacturing of goods are written on the Debit side of the Trading Account.

Item written on the Debit side of the Trading Account:

1. Opening Stock: The stock of goods remaining unsold at the end of the previous year is termed as the opening stock of the current year. In other words, the closing stock of the last year becomes the opening stock of the current year. Opening Stock will include the following:

I. Opening Stock of Raw Material.
II. Opening Stock of Semi-finished goods, and
III Opening Stock of Finished goods.

2. Purchases and Purchases Returns: Goods which have been bought for resale are termed as Purchases and goods which are returned to suppliers are termed as purchase returns or returns outwards. Purchase Account will be given on the debit side of thetrial balance and Purchase Return Account on the credit side of the trial balance. Purchase returns will be shown as a deduction from Purchases on the debit side of the trading account. Purchases include cash as well as credit purchases.

3. Direct Expenses: All expenses incurred in purchasing the goods, bringing them to the godown and manufacture of goods are called direct expenses. Direct expenses include the following:

I. Wages: Wages are paid to workers who are directly engaged in the loading, unloading and production of goods and as such are debited to the trading account. It should be noted that:

(i) If the item 'Wages and Salaries' is given in the question it will be shown on the trading account. On the contrary, if 'Salaries and Wages' is given it will be shown on the profit & loss account.

(ii) If wages are paid for bringing a new machine or for its installation it will be added to the cost of the machine and hence will not be shown in the trading account.

II. Carriage or Carriage Inwards or Freight: These expenses should be debited to trading account because these are generally paid for bringing the goods to the factory or place of business. However, if any carriage or freight is paid on bringing an asset, the amount should be added to the asset account and must not be debited to trading account.

III. Manufacturing Expenses: All expenses incurred in the manufacture of goods are shown on the debit side of the trading account such as Coal, Gas, Fuel, Water, Power, Factory Rent, Factory Lighting etc.

Items written on the Credit Side of the Trading Account:

1. Sales and Sales Returns: Both Cash and Credit sales will be included in sales. The sales account will be a credit balance whereas, the sales return account or returns inwards account willbe a debit balance. Sales return will be deducted out of Sales onthe credit side of the trading account.

2. Closing Stock: The goods remaining unsold at the end of the year is known as Closing Stock. It is valued at cost price or market price whichever is less. It includes the closing stock of raw material, Closing Stock of semi-finished goods and Closing Stock of finished goods.

Normally, the Closing Stock is given outside the Trail Balance. Thisis so because its valuation is made after the accounts have been closed. It is incorporated in the books by means of the following entry:

Closing Stock A/c Dr.
To Trading A/c
(Closing Stock transferred to Trading A/c)

When the above entry is passed, the Closing Stock Accountis opened. On the one hand, it will be posted to the credit side ofthe trading account and on the other hand, will be shown on the

Assets side of the Balance Sheet, in order to complete the double entry. Sometimes, the Closing Stock is given inside the Trail Balance. This mean that the entry to incorporate the closing stockin the books has already been passed. It would imply that the Closing Stock must have been deducted out of Purchases Account. Hence, in such a case, Closing Stock will not be shown in theTrading Account but will appear on the Assets side of the Balance Sheet only.

6.4 (b) Profit And Loss Account

Trading account only discloses the gross profit earned as a result of buying and selling of goods. However, a businessman has to incur a number of expenses which are not taken to trading account. Hence, a businessman is more interested in knowing the net profit earned or net loss incurred during the year. As such, a Profit & Loss Account is prepared which contains all the items of losses and gains pertaining to the accounting period. According to Prof. Carter, "A Profit & Loss Account is an account into which all gains and losses are collected, in order to ascertain the excessgains over the losses or vice-versa".

Need and Importance of Profit & Loss A/c

1. To determine the Net Profit or Net Loss: A Trading Account only discloses the Gross Profit earned as a result of trading activities, whereas the Profit & Loss Account discloses the net profit (or net loss) available to the proprietor and credited to his capital account.

2. Comparison with previous years' profit: The net profit of the current year can be compared with that of the previous years. It enables the businessman to know whether the business is being conducted efficiently or no.

3. Control on Expenses: Profit & Loss Account helps in comparing various expenses with the expenses of the previous year. Also the percentage of each individual expenses to net profitis calculated and compared with the similar ratio of previous years. Such comparison will be helpful in taking concrete steps for controlling the unnecessary expenses.

4. Helpful in the preparation of Balance Sheet: A Balance Sheet can only be prepared after ascertaining the Net Profit through the preparation of Profit and Loss Account.

Preparation of Profit and Loss Account

A Profit and Loss Account is started with the amount of gross profit or gross loss brought down from the Trading Account. As such, all those expenses and losses which have not been debited to the Trading Account are now debited to Profit &

Loss Account. These expenses include administrative expenses, selling expenses, distribution expenses etc. These are called 'Indirect Expenses'. Profit and Loss Account is a Nominal Account and as such, all the expenses and losses are shown on its debit side and all the incomes and gains are shown on its credit side.

Items written on the Debit side of Profit & Loss Account

1. Gross Loss: If trading account discloses Gross Loss, it is shown on the debit side first of all.
2. Office and Administrative Expenses: Such as salary of office employees, office rent, lighting, postage, printing, legal charges, audit fee etc.
3. Selling and Distribution Expenses: Such as advertisement charges, commission, carriage outwards, bad-debts, packing charges etc.
4. Miscellaneous Expenses: Such as interest on loan, interest on capital, repair charges, depreciation, charity etc.

Items written on the Credit side of Profit & Loss Account

1. Gross Profit: the starting point of the Cr. side of Profit and Loss Account is the gross profit brought down from the Trading Account.

2. Other Incomes and Gains: All items of incomes and gains are shown on the credit side of the Profit & Loss Account, such as income from investments, rent received, discount received, commission earned, interest received, dividend received etc.

If the credit side of the profit and loss account exceeds thatof debit side, the difference is termed as net profit. On the other hand, the excess of the debit side over the credit side is termed as net loss. Net profit is added to the capital whereas net loss is deducted from the capital.

6.5 HORIZONTAL OR 'T' FORMAT OF TRADING &P&L A/C

Particulars	Amount (Rs)	Particulars	Amount (Rs)
To opening stock	....	By sales	
To purchases		less: returns	....
less: returns	....	By closing stock	....
To carriage inward	....		
To wages	....		
To gross profit c/d (in case of gross profit)	....	By gross loss c/d (in case of gross loss)	....
	....		....
To gross profit b/d (in case of gross loss)	....	By gross profit b/d (in case of gross profit)	....
To salaries	....	By interest earned	....
To carriage outward	....	By dividend earned	....
To rates and taxes	....	By rent earned	....
To insurance	....	By discount received	....
To depreciation	....	By profit on sale of fixed assets	....
To bad debts	....	By profit on sale of investments	....
To advertising	....		
To interest paid	....		
To travelling expenses	....		
To discount allowed	....		
To loss on sale of fixed assets	....		
To loss on sale of investments	....		
To loss by fire	....		
To net profit transferred to B/S (in case of net profit)	....	By net loss transferred to B/S (in case of net loss)	....
	....		....

E.g. Prepare Trading Account for the year ended 30st March, 2013from the following balances.

	Rs		Rs.
Stock(1st April, 2012)	10,000	Purchases	1,00,000
Wages	5,000	Carriage Inwards	1,000
Sales	1,70,000	Returns Inward	5,000
Returns Outward	8,000	Sales Tax paid	20,000
Freight	500	Octroi duty	2,500

Closing stock as on 30st March, 2013 was valued at Rs. 20,000Also, pass the Closing Entries.

Soluion: **TRADING ACCOUNT**

Dr. for the year ended 30st March, 2013 Cr.

Particulars	Rs	Particulars	Rs
To opening stock	10,000	By Sales	
To Purchases		1,70,000	1,60,000
1,00,000	90,000	Less : Sales tax	
Less: Returns Outward	5,000	10000	20,000
10,000	1,000		
To Wages	500	By Closing Stock	
To Carriage Inwards	2,500		
To freight	71,000		
To Octroi Duty			
To Profit and loss A/c (Gross profit)	1,80,000		1,80,000

VERTICAL FORMAT OF REVENUE STATEMENT TRADING & P&L A/C

Particulars	Schedule	Amount (Rs)
Income		
Sales and operating income	1	....
Other income	2	....
Total		....
Expenditure		
Cost of goods sold	3	....
Operating and other expenses	4	....
Depreciation/Amortisation		....
Interest		....
Total		....
Add/(Less): Exceptional items		....
Profit/(Loss) before tax		....
Less: Tax		....
Profit/(Loss) after tax		....

HORIZONTAL OR 'T' FORMAT OF BALANCE SHEET

Liabilties	Amount (Rs)	Assets	Amount (Rs)
Share capital		Fixed assets	
Add: net profit/less: net loss		Land & building	....
Less: drawings	....	Plant & machinery	....
		Furniture & fixtures	....
Long-term liabilities		Vehicles	....
Debentures	....	Goodwill	....
Loans & advances from banks	....		
Other loans & advances	....	Investments	....
Current liabilities		Current assets, loans & advances	
Sundry creditors	....	Sundry debtors	....
Bills payable	....	Cash in hand	....
Bank overdraft	....	Cash at bank	....
Outstanding expenses	....	Bills receivable	....
Income received in advance	....	Prepaid expenses	....
		Closing stock	....
Provisions			
For taxation	....		
For dividend	....		
	....		....

6.6 VERTICAL FORMAT OF BALANCE SHEET

Particulars	Schedule	Amount (Rs)
Sources of Funds		
Shareholder's funds		
Share capital	1	....
Reserves and surplus	2	....
Loan funds		
Secured loans	3	....
Unsecured loans	4	....
Total		....
Application of Funds		
Fixed assets		
Gross block	5	....
Less: depreciation		....
Net block		....
Capital work-in-progress		....
Investments	6	....
Current assets, loans & advances		
Inventories	7	....
Sundry debtors	8	....
Cash & bank balances	9	....
Loans & advances	10	....
Other current assets		....
Less: current liabilities & provisions		
Current liabilities	11	....
Provisions	12	....
Net current assets		....
Total		....

FINAL ACCOUNTS AS PER REVISED SCHEDULE VI FORMATBALANCE SHEET

Balance Sheet as at 31st March, 2011

Particulars	Note No	Figures as at the end of current reporting period	Figures as at the end of previous reporting period
I. EQUITY AND LIABILITIES			
(1) Shareholder's Funds			
(a) Share Capital			
(b) Reserves and Surplus			
(c) Money received against share warrants			
(2) Share application money pending allotment			
(3) Non-Current Liabilities			
(a) Long-term borrowings			
(b) Deferred tax liabilities (Net)			
(c) Other Long term liabilities			
(d) Long term provisions			
(4) Current Liabilities			
(a) Short-term borrowings			
(b) Trade payables			
(c) Other current liabilities			
(d) Short-term provisions			
Total			
II.Assets			
(1) Non-current assets			
(a) Fixed assets			
(i) Tangible assets			
(ii) Intangible assets			
(iii) Capital work-in-progress			
(iv) Intangible assets under development			
(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			

STATEMENT OF PROFIT AND LOSS

Profit and Loss statement for the year ended 31st March, 2011

Particulars	**Note No**	**Figures as at the end of current reporting period**	**Figures as at the endof previous reporting period**
I. Revenue from operations II. Other Income			
III. Total Revenue (I +II)			
IV. Expenses: Cost of materials consumed Purchase of Stock-in-Trade Changes in inventories of finished goods, work-in-progress and Stock-in-Trade Employee benefit expense Financial costs Depreciation and amortization expenseOther expenses			
Total Expenses			
V. Profit before exceptional and extraordinary items and tax	(III - IV)		
VI. Exceptional Items			
VII. Profit before extraordinary items and tax (V - VI)			
VIII. Extraordinary Items			
IX. Profit before tax (VII - VIII)			
X. Tax expense: (1) Current tax (2) Deferred tax			
XI. Profit(Loss) from the perid from continuing operations	(VII-VIII)		
XII. Profit/(Loss) from discontinuing operations			
XIII. Tax expense of discounting operations			
XIV. Profit/(Loss) from Discontinuing operations (XII - XIII)			
XV. Profit/(Loss) for the period (XI + XIV)			

SUMS FOR PRACTICE

Example : Journalize the following transactions:

2016		Rs.
May. 1	Ajay Started business with cash	50,000
May. 3	Deposited cash into Bank	40,000
May. 5	Sold goods to Ganesh	22,000
May. 9	Goods returned by Ganesh	2,000
May. 11	Goods purchased from Kishore	30,500
May. 15	Goods returned to Kishore	1,500
May. 18	Bought Furniture & Fixture for office	9,000
May. 22	use by cheque	1,000
May. 22	Purchased goods for cash	50
May. 30	Paid carriage	500
	Paid interest on loan	

Journal

Solution:

Date	Particulars	L.F.	Dr.(Rs.)	Cr. (Rs.)
2012 May. 1	Cash A/c ...Dr. To Ajay's Capital A/c (Being the business started with cash)		50,000	50,000
May 3	Bank A/c To Cash A/c (Being the amount deposited into the bank)		40,000	40,000
May 5	Ganesh ...Dr. To sales A/c (Being the goods sold to Ganesh)		22,000	22,000
May 9	Sales Returns A/cTo Ganesh (Being the goods returned by Ganesh)		2,000	2,000
May 11	Purchases A/c To Kishore (Being the goods purchased from Kishore)		30,500	30,500
May 15	Kishore To purchases Return a/c (Being the goods returned to Kishore)		1,500	1,500
May 18	Furniture & Fixture a/c To bank a/c (Being the Furniture & Fixture bought and paid by cheque)		9,000	9,000

May 22	Purchases A/c To cash a/c (Being the goods purchased against cash)		1,000	1,000
May 26	Carriage a/c TO cash a/c (Being the carriage paid)		50	50
May 30	Interest on Loan A/c To Cash A/c (Being the payment of interest on Loan)		500	500
	Total		**1,57,550**	**1,57,550**

MODULE - V

7

CAPITAL AND REVENUE EXPENDITURE-DEFERRED REVENUE EXPENDITURE-CAPITAL AND REVENUE RECEIPTS

Unit Structure

7.1 Objectives
7.2 Introduction
7.3 Misclassification and effect of error
7.4 Capital and Revenue-
7.5 Revenue expenditure
7.6 Distinction between capital expenditure and Revenue expenditure
7.7 Distinction between capital receipt and Revenue receipt
7.8 Tests to be applied to transactions
7.9 For Capital Receipt/ Revenue Receipt
7.10 Deferred Revenue Expenditure-(DRE)

7.1 OBJECTIVES

- ❖ To help the learner understand the concept of Capital and Revenue
- ❖ To help the learner distinguish between capital and revenue transactions
- ❖ To help the learner understand the importance of correctly identifying the capital and revenue transactions, the effect of errors due to misclassification and its presentation in the financial statements
- ❖ To help the learner know about the deferred revenue expenditure and its presentation in financial statements.

7.2 INTRODUCTION

The Final Accounts prepared at the end of the year consistsof Profit and Loss account and Balance sheet. The final accounts are prepared from Trial balance which gives a list of accounts showing debit balances and credit balances. The accounts appearing in the trial balance are to be taken to the trading, profitand loss account or balance sheet. The profit and loss account (also known as Revenue Statement) shows the income and gainson the credit side and the various expenses and losses are shownon the debit side. The balance sheet is a statement showing the financial position as on a particular date and shows the capital and liabilities and assets.

It is necessary to classify the items appearing in the trial balance as capital or revenue so that they can be correctly shownin the trading, profit and loss account or balance sheet as the case may be. Such classification is necessary to comply with the concept of matching costs and revenue in a given period.

7.3 MISCLASSIFICATION AND EFFECT OF ERROR

Any misclassification impacts the correctness and accuracyof the financial statements – the profit and loss account will not show the correct Profit/ Loss and the Balance Sheet will not show the true position of assets and liabilities. Thus due to misclassification, the accuracy of the financial statements are affected and the statements do not depict the true and fair view of the state of affairs of the business enterprise.

For example- A computer is purchased and the accountant records the purchase along with purchase of raw materials in the trading account. The error will affect the profit or loss position as the transaction has been wrongly shown in trading account. The computer purchased should have been recorded as an asset in the balance sheet. In this way the error due to misclassification affects both the revenue statement and the balance sheet.

Effect of error in classification

1) Trading account will not show correct gross profit/ gross loss.

2) Profit and loss account will not disclose true net profit/ net loss.

3) Balance sheet will not disclose true value of Assets and Liabilities.

4) Financial statements will not disclose True and Fair view of the state of Affairs of the organization.

5) It will be difficult to understand the capitalization of business.

6) These errors affect the accounts of the subsequent years

Error in classification	**Impact on profit and impact on balance sheet/ value of asset**
1) Revenue expenditure is wrongly treated as capitalexpenditure	Profit will be inflated , Value of asset will be inflated.
2) Capital receipt is treated as revenue receipt	Profit will be inflated , Value of asset will be inflated.
3) Capital expenditure treated as revenue expenditure	Profit will be deflated , Value of asset will be deflated.
4) Revenue receipt wrongly treated as capital receipt	Profit will be deflated.

It is thus clear that any error in classification or misclassification impacts the accuracy and correctness of the financial statements and hence it is very important to classify the transactions as capital or revenue and disclose the same correctly in the financial statements.

7.4 CAPITAL AND REVENUE

Receipt or Expenditure transactions are to be classified as capital or revenue and further classified as capital expenditure, revenue expenditure capital receipt or revenue receipts.

TRANSACTIONS

Expenditure or receipt

Expenditure transactions	**Receipt transactions**
(involves outflow of cash)	**(involves inflow of cash)**
Capital expenditure / **Revenue expenditure**	**Capital receipt/** **Revenue receipt**

Capital transactions are further classified as capital expenditure and capital receipt and revenue transactions are classified as revenue expenditure and revenue receipt.

Capital expenditure is any expenditure which has any one or all ofthe following-

- It is a non- recurring expenditure
- The benefit of such expenditure is seen for more than one year.
- The expenditure increases the revenue earning capacity of the organization.

In short, if the benefits of the expenditure are expected to accrue for a long time, the expenditure is capital expenditure. Thus capital expenditure is that expenditure which results in the acquisition of an asset, tangible or intangible.

Some common examples of capital expenditure are-

1) Purchase of an asset

Any expenditure that is incidental to the purchase of an asset or has been incurred to put the asset in working condition for example – installation charges or commissioning expenses incurred with reference to purchase of asset is also to be treated as capital expenditure. All the expenses incurred on the assets till they yield income are capital in nature.

2) Expenditure during construction-

Any expenditure incurred during construction period or capital work in progress is considered as a capital expenditure.

3) Expenditure that improves the standard of performance of an existing asset.

Any expenditure which extends the useful life of the asset or improves the efficiency of the asset is to be capitalized and addedto the cost of the fixed asset

4) Cost of an addition or extension to an existing asset

5) Investment in shares, debentures, immoveable properties

6) Cost of acquiring intangible assets like goodwill, patents, copyrights.

7) Cost of acquisition and development of wasting assets like mines, oil-wells.

Accounting of capital expenditure- Capital expenditures are shownin the asset side of Balance sheet

7.5 REVENUE EXPENDITURE

Revenue expenditure is any expenditure which has any one or allof the following-

- ❖ The expenditure is incurred in the day to day conduct of business and necessary to carry on the business.
- ❖ The expenditure is recurring in nature
- ❖ The benefit of such expenditure usually lasts for a short period of time

Kohler defines Revenue expenditure as an expenditure charged against operations.

Any expenditure which is not a capital expenditure and which is incurred for carrying out the day to day activities of business is called revenue expenditure.

Some common examples of revenue expenditure are-

1) Expenses relating to business activities-

Expenses of production-Purchase of raw materials,

Expenses of administration -Payment of Office salaries

Expenses of selling and distribution

Finance expenses

2) Expenses which are incurred to maintain the asset in a working condition-

Repairs and maintenance expenses

3) Expenses incurred to earn income- -Interest on loan taken for purchase of shares

Accounting of Revenue expenditure-Revenue expendituresare shown on the debit side of Trading/ profit and loss account.

Capital Receipt-

Any receipt or cash inflow which has any one or all of the following

- The receipt is non- recurring in nature
- The receipts do not arise through normal activities of business
- Some common examples of capital receipt are-

a) Amount received on account of issue of fresh share capital/ debentures

b) Amount of loans raised

c) Proceeds on sale of fixed assets

d) Deposits

Accounting of capital receipt- Capital receipts are shown in the balance sheet.

Revenue receipt

Revenue receipts are those items of income which are received or accrued in the ordinary course of business.

Any cash inflow generated in the normal course of business activities are to be treated as revenue receipts- Income generated from cash/ credit sales, or from services rendered.

Accounting of revenue receipt-Revenue receipts are shownon the credit side of trading/ profit and loss account

Concept of capital and revenue can be summarized as under-

Capital transactions will be recorded in the balance sheet while revenue transactions will be shown in the revenue statements- Trading, profit and loss account

.Trading, Profit and loss account(debit side)	Trading, Profit and loss account(credit side)
Revenue expenditure To Salary To rent	Revenue receipts By sale of goods

Balance sheet(Liability side)	Balance sheet (asset side)
Capital receipt Loan from bank	Capital expenditure Plant and Machinery purchased

7.6 DISTINCTION BETWEEN CAPITAL EXPENDITURE AND REVENUE EXPENDITURE

CAPITAL EXPENDITURE	REVENUE EXPENDITURE
It is non- recurring in nature	It is recurring in nature
It is shown in the Balance sheet	It is shown in the revenue account
It is incurred for acquiring fixed assets intended for use in business	It is incurred for carrying out the day to day activities of the business
It increases the revenue earning capacity of the concern	It does not increase the revenue earning capacity of the concern.
Benefit of this expenditure extends for more than one year	The benefit of this expenditure is for a short period
Example- purchase Of fixed asset	Example – Payment of salaries

7.7 DISTINCTION BETWEEN CAPITAL RECEIPT AND REVENUE RECEIPT

CAPITAL RECEIPT	REVENUE RECEIPT
They are non recurring in nature	They are recurring in nature
They appear in the balance sheet- It is disclosed as a liability in the balance sheet	They appear in Revenueaccount- It is disclosed as an income in the P&L A/c
Capital receipts which are liabilities are to be repaid	Revenue receipts are not to be repaid as they are not liabilities.

They are not gains to the concern	They are gains to the concern
It represents capital brought inby the proprietor which are not of recurring nature	It represents income such as sale of goods, interest received
Example-Amount received on issue of debentures	Example-Interest received, recovery of bad debts

7.8 TESTS TO BE APPLIED TO TRANSACTIONS

To classify a transaction as capital or revenue, one may use the following tests as indicators-

FOR CAPITAL/ REVENUE EXPENDITURE

1) **What is the period of benefit from expenditure?**

2) **What is the effect of expenditure?**

3) **What is the amount of expenditure?**

Period of benefit from expenditure- if the benefit is for short period and recurring in nature, it is generally treated as Revenue expenditure. Expenditure which will give benefit for a long period of time and which is non-recurring in nature will be generally classified as Capital expenditure. A non-recurring expenditure is always capital in nature unless materiality concept emphasizes the importance of recognizing it as revenue expenditure.

Effect of Expenditure- If the expenditure gives rise to a tangible asset or right, treat it as capital expenditure

Amount of expenditure- Generally the capital expenditures involve huge amounts but this cannot always be treated as a conclusive, reliable test for classification

7.9 FOR CAPITAL RECEIPT/ REVENUE RECEIPT

1) What is the source or cause of receipt or profit?

2) What is the nature of the receipt?

3) What is the impact of the receipt transaction on the profit / loss?

Source of receipt- If the receipt is from trading transaction, then itshould be treated as revenue receipt. Eg -sale of goods. If the receipt is from other transactions, then it should be considered as capital receipt. eg Loan taken from bank, amount realized on sale of fixed assets. Thus if receipt arises in the course of business activity, then it is to be treated as revenue receipt. If it arises out of financing activity, it is to be treated as Capital receipt.

Nature of receipt- Non- recurring receipts are capital receipts while recurring

receipts are revenue receipts.

Impact of the transaction on profit/ loss during the year- Capital receipts have no bearing on the profit made or loss incurred during the year. Only revenue receipts are taken into account to ascertain the profit made by the business. This is a fairly reliable indicator/ parameter for classifying transactions as capital receipt/ revenue receipt.

In case of receipts, the general rule is that if the receipt is against the supply of goods or services and related to period under review, the receipt is revenue receipt. This will be shown in the P&L A/C .Capital receipts are to be shown as liability or reduced from assets appearing in Balance sheet.

Sometimes a part of the receipt may be capital and a part ofit may be revenue-

For example proceeds on sale of asset-

1) If the sale proceeds is less than book value of asset , the receipt is capital receipt to be deducted from asset

2) If the sale proceeds is more than book value but less than cost , the receipts is to be segregated as-

   a) equal to book value of asset is capital receipt to be reduced from asset

   b) excess as revenue receipt giving rise to revenue profit.

3) If sale proceeds is more than cost, the receipts are to be accounted for as under-

   a) equal to book value capital receipt to be reduced from asset

   b) between book value and cost, revenue receipt giving rise to revenue profit

   c) excess over cost, revenue receipt giving rise to capital profit

.

However it is not always easy to classify transactions ascapital/ revenue. There is a good deal of difference of opinion in deciding whether a particular item is capital or revenue. Hence it has to be decided based on the facts of the case on a case to case basis.

For example- Purchase of motor car is a capital expenditure as it involves acquisition of an asset. However purchase of Motor car bya car dealer who deals with purchase and sale of motor cars on a regular basis is not a capital expenditure. In the second case the purchase of car is to be treated as revenue.

Expenditure incurred in converting an ordinary screen in a cinema hall to a cinemascope – It is difficult to accurately ascertain the nature of this

transaction. It may be argued that as the seating capacity of the hall has not changed, it should be treated as revenue expenditure. However, the second argument could be cinemascope pictures attract large audience and as the expenditure will result in higher earnings, it is to be treated as capital expenditure.

7.10 DEFERRED REVENUE EXPENDITURE-(DRE)

According to the Guidance note issued by ICAI, "Deferred Revenue Expenditure is that expenditure for which payment has been made or a liability incurred but which is carried forward on the presumption that it will be of benefit over a subsequent period/periods."

For example- Normal annual advertising expenses is considered as revenue expenditure and debited to the profit and loss a/c. If the heavy expenses are incurred on advertising campaign to launch a new product, then the whole amount should not be debited to P&L a/c of that year. The benefit accrues for a long period of time.Hence so much of the expenditure as benefits the current year may be considered as revenue and debited to profit and loss a/c the balance to be shown as deferred expenditure- revenue expenditure which is deferred or postponed.

There are some transactions which may appear revenue in nature but the benefits of such expenditure are seen for a long period of time .Such expenses are treated as deferred revenueexpenditure. For example- Heavy advertisement expenses orpromotion expenses to launch a product- As such expenditure yields the benefit for a long period,it is necessary to spread the amount over such number of years . If not spread over the years, then the revenue statement of the year in which the expenditure was incurred may not show the true picture of Profit/ loss. Hence in order to have more credible financial statements the expenditure is deferred and a part of the expenditure is shown in the current year Profit and loss account. The balance amount (not yet written off) is shown as a debit balance in the asset side of the balance sheet.

Other common examples of Deferred revenue expenditure are-

- Preliminary expenses
- Cost of market research for a new product
- Commission on issue of debentures
- Cost of issuing shares / debentures or raising loans

Accounting for Deferred Revenue expenditure-For eg - Association fees paid Rs 60,000 for three years (2016-17, 2017-18,2018-19).

1st year-Accounting for the year 2016-17-This expenditurehas to be shown in Profit and loss a/c. However it is evident that the expenditure is incurred in the financial year 2016-17, but the benefit of the expenditure is enjoyed in the subsequent periods too. Hence the amount of Rs 60,000 should be spread

over three years and the annual amount to be determined (60000/3) Rs 20,000 .The profit and loss account of the year 2016-17 will be debited with Rs 20,000. The balance (60,000-20,000) Rs 40,000 not written off will be shown in the asset side of balance sheet . Here the expenditureis – deferred and hence known as DRE.

2nd year-Accounting for the year 2017-18- The amount of Rs 20,000 will be debited to profit and loss account and the balance Rs 20,000 (40000-20000) not written off will be shown in the asset side of balance sheet

3rd year-Accounting for the year 2018-19- The amount of Rs 20,000 will be debited to profit and loss account and there is no balance to be shown in the balance sheet

Thus the amount has been spread over three years andaccounted for in the books.

The following revenue expenses under certain circumstances becomes capital expenditure

Expenses	Circumstances
1) Repairs	Amount spent on repairs of plant and machinery, furniture, building whichare regular in nature and incurred to maintain the asset in a working condition are to be considered as revenue expenditure. However repairs to the second hand assets to improve the operational efficiency is to be treated as capital expenditure.
2) Wages	Wages paid is a revenueexpenditure. Wages paid for installation of machinery or construction of fixed assets is considered as capital expenditure.
3) Legal charges	Legal charges are basically revenue in nature and are shown in the debit side of P&L a/c. Legal charges incurred in connection with purchase of fixed asset are capital in nature
4) Transport charges	Transport charges are basically revenue in nature. Transport charges incurred for purchase of machinery, furniture are capital in nature.
5) Interest on capital	Interest on capital paid during the construction of works, building and plant is capital in nature.

6) Raw material and stores	This is basically a revenue expenditure but if it is used forconstruction of fixed assets, it is considered as capital and added to the cost of the asset
7) Developmentexpenditure	The development expenditure incurred during the development period with reference to tea and rubber plantations should be treated as capital expenditure

To summarize the revenue expenditure incurred inconnection with purchase of asset or which is incidental to the purchase of asset, expenses incurred in development of asset is to be treated as capital expenditure.

Problems-

Q1- Error in classification or misclassification-

The following is the Trading account for the year ended 31 st March2016

Particulars	Amt(Rs)	Particulars	Amt (Rs)
To opening stock	60,000	By Sales	4,00,000
To purchases	3,00,000	By Closing stock	1,00,000
To wages	1,00,000		
To Gross Profit	40,000		
	5,00,000		5,00,000

Additional Information-

1) Sales included sales of old furniture Rs 10,000
2) Purchases included purchase of machinery Rs 70,000
3) Some workers were employed for construction of a gallery to the office building. Wages of these workers amounting to Rs 30,000 were included in the above wages.

Redraft the trading account to arrive at the correct profit afterconsidering the above additional information-

Solution- There has been an error in the classification of items ascapital/ revenue.

1) Sale of old furniture is a capital receipt. The same has been wrongly shown as revenue receipt. Hence Rs 10,000 has to be deducted from sales.

2) Purchase of Machinery is a capital expenditure. It has been wrongly shown as revenue and included in the purchases. Rs 70,000 has to be deducted from purchases and shown in the asset side of

Balance sheet.

3) The wages of workers who have been employed for construction of gallery to office building are of capital nature .Rs 30,000 should be deducted from wages and added to the cost of office building.

The corrected trading account will be redrafted as under-

Particulars	Amt (Rs)	Particulars	Amt (Rs)
To opening stock	60,000	By sales	
To Purchases		Less sale of old furniture	3,90,000
Less machinery purchased	2,30,000	By closing stock	1,00,000
To wages			
Less capitalized	70,000		
To gross profit	**1,30,000**		
	4,90,000		4,90,000

Q2 How would you treat the following items?

1) Carriage paid on purchases Rs 1,000- **Revenue expenditure**
2) Expenditure on advertising campaign Rs 500-**Revenue expenditure**
3) Freight and carriage of a new machinery purchased Rs 2,000**- Capital expenditure**
4) Spent Rs 6,000 as legal expenses for abuse of trademark **– Revenue expenditure**
5) Received Rs 1,00,000 on issue of equity shares-**Capital receipt**
6) Paid to the government excise duty Rs 50,000- **Revenue expenditure**
7) Paid Rs 70,000 for construction of railway sidings**- Capital expenditure**
8) Purchased Land Rs 1,00,000**-Capital expenditure**
9) Labour charge on plant and Machinery Rs 3,000-**Capital expenditure**
10) Repairs to furniture Rs 1,500- **Revenue expenditure**

Q3 State with reasons whether the following are capital ,Revenue or Deferred revenue expenditure

1) Legal expenses in issuing shares and debentures Rs 12,500
2) Legal expenses incurred in an action for infringement of

trademarks

3) Rs 25,000 spent on air-conditioning the office of the Managing Director

4) Rs 7,000 spent on registration of design

5) Legal expenses incurred in an Income tax appeal

6) Legal expenses Rs 5,000 incurred in connection the purchase of business premises

7) Rs 1,00,000 paid for the application and allotment of a plot of land

8) Legal expenses Rs 8,000 incurred in defending a suit for breach of contract to supply of goods

(**Mumbai University April 2008)**

Solution

1) **Deferred Revenue expenditure-**These expenses should be written off over certain number of years. These expenses benefit the organization for many years

2) **Revenue expenditure-**These expenses are incurred in the normal course of operation

3) **Capital expenditure-**It is capitalized as per AS-10

4) **Capital expenditure-**It is to be added to the cost of design which is an asset

5) **Revenue expenditure** These expenses are incurred in the normal course of operation

6) **Capital Expenditure** It increases the cost of business premises

7) **Capital Expenditure** It increases the cost of land

8) **Revenue expenditure** These expenses are incurred in the normal course of business operations.The benefit is exhausted within one year.

Q4 State with reasons the nature of the following expenses/receipts

1) Sold investments 4% government securities for Rs 1,40,000

2) Preliminary expenses paid Rs 42,000

3) Carriage outward paid Rs 40,000

4) Import duty paid on purchase of computer equipment Rs 85,000 to be used in the office

5) Received Rs 5,00,000 on the issue of 5% Debentures

6) Paid Rs 10,000 underwriting commission on issue of shares

7) Legal expenses Rs 6,000 paid in connection with purchase of land

8) Repairing charges Rs 15,000 paid for keeping the machinery in working condition

(Mumbai University March 2006)

Solution

1) Capital receipt-The amount is received on sale of investment and not from normal business activity

2) Deferred Revenue expenditure -The expenditure benefits the current year and subsequent years and hence the amount has to be written off over a certain number of years.

3) Revenue expenditure- It is incurred in normal business operations

4) Capital expenditure- It is a direct cost on acquiring of fixed assets and hence has to be capitalized as per AS-10

5) Capital receipt- The amount is received on issue of Debentures and not from normal business activity

6) Deferred Revenue expenditure--The expenditure benefits the current year and subsequent years and hence the amount has to be written off over a certain number of years.

7) Capital expenditure-It is a cost incurred in acquisition of fixed asset

8) Revenue expenditure-it is incurred for keeping the machinery in working condition

Summary-

An organization has to incur various expenses and receives different incomes. Some expenses are regular while some are onetime expenses .The expenses whose benefits will be enjoyed over a long period are called capital expenditure. Revenue expenditure refers to those expenses which are incurred for the day to day operations of business.

Receipts whose benefits will be enjoyed over a long periodare classified as capital receipts while day to day operational receipts such as sales are revenue receipts.

ONLY MAIN POINTS (for revision)

Capital expenditure- Large amount, Increases cost of fixed asset, increases life of fixed asset, non- recurring in nature, increasesprofit earning capacity of the business enterprise, brings the fixed asset into working condition, benefit of expenditure is not exhausted within one year, shown in balance sheet

Revenue expenditure- smaller amount, recurring in nature, benefitis exhausted within the year, shown in P&L A/c

Capital receipts do not arise in the normal course of operation Revenue

receipts are received in the normal course of operation

Deferred revenue expenditure- basically revenue in nature,benefit not exhausted within one year, expenditure to be written off over certain number of years.

Key terms-

Capital expenditure- It is the expenditure which is incurred to raiseearning capacity of an organization.

Revenue expenditure – It is the expenditure which is recurring in nature incurred in connection with day to day operations of an organization.

Capital receipt- It is a receipt which is not received in the normalcourse of operation

Revenue receipt- Revenue receipt is the receipt which is recurringand received in the normal course of operation.

Deferred Revenue expenditure –It is the revenue expenditure thebenefit of which is not exhausted within one year.

MODULE – VI

8

DEPRECIATION

Unit Structure

8.1 Objectives
8.2 Meaning, Definition and Features of Depreciation
8.3 Depreciation, Depletion and Revaluation

8.1 OBJECTIVES

- To help the learner understand the concept of Depreciation
- To help the learner understand the need for providing depreciation
- To help the learner understand the causes of depreciation
- To help the learner understand the calculation of depreciation, the methods of providing depreciation and accounting in thebooks of accounts

8.2 MEANING, DEFINITION AND FEATURES OF DEPRECIATION

The word depreciation has been derived from the Latin word 'Depretium' which means decline or reduction in price or value. Fixed assets have a definite life but they lose their value due to usage or passage of time. Depreciation refers to this decline in value due to usage, passage of time or due to obsolescence.

According to William Pickles, Depreciation is the gradual and permanent decrease in the value of the asset. Depreciation refers to the decline or reduction in the value of fixed asset. Depreciationis the permanent and continuing diminution in the quality, quantityor value of an asset.

The Institute of Chartered Accountants of India (ICAI) defines depreciation as" a measure of the wearing out , consumption or other loss of a value of a depreciable asset arising from use, efflux of time or obsolescence through technology and market changes"

Reduction in the value of the asset due to their productive use is called Depreciation. Depreciation in the value of asset is also due to natural wear and tear.

Features of Depreciation-
Depreciation is a gradual reduction in the value of an asset.The reduction could be due to various reasons.
Depreciation is charged on assets- fixed assets

Depreciation is a part of operating expenses. It is non cashin nature as there is no real cash outflow even if it is accounted asan expense. It is to be provided on fixed assets which are used in the process of production and in the conduct of business. It is charged to profit and loss account.

The amount of Depreciation charged to P&L Account has to be deducted from value of asset shown in the balance sheet.

Depreciation is to be provided even if the business is incurring a loss.

Depreciation is a gradual and permanent decrease in the value of asset which is to be accounted for in the financial statements to arrive at the correct profit/ loss.

Thus, Depreciation means a fall in the quality or value of an asset.

Accounting Standard (AS) -6 (Revised) deals with Depreciation Accounting.

Depreciation is to be provided on pro-rata basis for the period for which the asset was used in a particular year at the specified rate.

The company adopts a policy regarding depreciation and as per AS-1- namely, disclosure of Accounting Policies, the method adopted in providing depreciation should be disclosed in the notesto accounts.

8.3 DEPRECIATION, DEPLETION AND REVALUATION

Depreciation refers to a decrease in the value of the asset while depletion refers to the decrease in the value of wasting assets like oil wells, mines.

Revaluation refers to a revision in the value of the assetwhich could mean a decrease or an increase in the value of the asset.

8.3 (A) Need for depreciation-The Companies Act requires companies to write off or provide for depreciation in a specified manner.

1) **To ascertain true and correct profit/ loss**-Depreciation is an operating expense which is provided on assets used in the process of production. Thus it is an expense to be included in the cost of production. It is therefore logical that it must be matched with the income earned and charged to P&L Accountto calculate the true and real profit/ loss of the business. Unless depreciation is charged to P&L Account, the correct profit/ loss cannot be

arrived at.

2) **To present a true financial position of business**-Balance sheet is a statement which shows the financial position of the business enterprise as on a particular date. The fixed assets are to be shown at their true values. The balance sheet shows the true financial position only if the depreciation is deducted from the value of the asset. If the depreciation is not provided on assets, the assets will be overvalued and the balance sheet will not reflect the true financial position.

3) **Replacement of asset**-Every asset has a useful life. At the end of the useful life of the asset, it needs to be replaced. Providing the depreciation enables the business to replace the asset.

4) **Statutory requirement**-It is necessary to charge depreciation to comply with the provisions made under the Companies Act and the Income Tax Act. Providing the depreciation enables the business to compute and pay correct tax on taxable profit.

8.3 (B) Causes of Depreciation

1) **Natural wear and tear**-Wear and tear is the main cause of depreciation. Wear and tear takes place in case of tangible fixed assets like furniture, machinery due to its use. It the asset is used more, the wear and tear is also more.

2) **Efflux of time-**Even if the asset is not used and kept idle, its value falls over a period of time. Hence depreciation is provided on idle machinery too.

3) **Obsolescence-** A loss or reduction on account of new invention is called as obsolescence. With the new technological improvements, inventions and improvements in techniques of production, the old machinery becomes outdated and needs tobe replaced.
4) **Depletion-**An asset like mines, oil wells may get exhausted due to continuous extraction due to which the value of the asset goes on diminishing. There comes a stage when the asset has been completely utilized and there is nothing left to beextracted. Such a decrease in the value of the asset is depletion.

5) **Natural calamities-** An asset may be damaged due to fire, flood and lose its value and may be disposed off as scrap. The loss of value is written off as depreciation.

8.3 (C) Factors affecting Depreciation

a) **Cost of the asset**-The cost of the asset refers to the purchase price of the asset. The expenses related to the purchase of the asset are to be added to the purchase price to arrive at the cost of the asset. Incidental expenses like installation charges, wages for erection of asset, freight and transport charges are to be added to the purchase price. For example- purchase price of machinery is Rs 1,00,000 and Rs 5,000 were incurred on installation of

machinery. The total cost of the asset is Rs 1,00,000+5,000= 1,05,000

b) **Residual value or estimated scrap value**-Residual value refers to the value that can be realized at the end of the usefullife of the asset when the asset will be sold as scrap .Such scrap value is to be deducted from the cost of the asset.

c) **Estimated useful life of the asset-**The useful life of the assetin terms of number of years that the asset can be put into productive use needs to be estimated for calculatingdepreciation.

8.3 (D) Formula for calculating depreciation- After consideringthe above factors, the amount of depreciation can be calculated by using formula-

Depreciation per annum=Original cost of the asset-estimatedscrap value

Estimated useful life of the asset.

Depreciation = original cost of the asset x rate ofdepreciation (where the estimated scrap value is zero)

Where the original cost of the asset = Purchase price + Incidental charges.

A company purchased machinery for Rs 44,000 and spentRs 1,000 on the installation. It is estimated that the useful life of the asset is 10 years and at the end of the useful life the residual valueis Rs 5,000. The depreciation per year will be worked out as under Cost of the asset= 44,000+1,000= 45,000

Depreciation p.a =45,000-5,000 =4,000
10

Depreciation as per Companies Act 2013 for Financial year 2014-15 and thereafter. (These provisions are applicable from 01.04.2014 vide notification dated 27.03.2014.)

a) Depreciation is calculated by considering useful life of asset, cost and residual value.

b) Any method WDV or SLM can be used.

c) Schedule – II contains a list of useful life according to class of assets and the residual value shall not be more than five percent of the original cost of asset. However companies are free to adopt a useful life different from what specified in Schedule II and residual value more than 5%. The financial statements shall disclose such difference and providejustification in this behalf duly supported by technical advice.

8.3 (E) Methods for providing depreciation-

Straight line method or fixed instalment method Reducing
Balance method or Written down value methodAnnuity method
Depreciation fund method
Insurance fund method
Revaluation method

Sum of the digits method
Depletion method Machine hour rate methodRepairs provision method.
The first two methods are discussed.

- **Straight line method (SLM) or fixed instalment method (FIM) or original cost method**

Meaning-Under this method a fixed percentage of the original value of the asset is written off every year. The value of the asset is reduced to zero at the end of the useful life of the asset. As the amount of depreciation remains constant every year, this method is called as fixed instalment method.

- **Reducing balance method (RBM) or Written down method(WDV)**

Meaning- Under this method, depreciation is charged at a certain percentage each year on the balance of the asset which is brought forward from the previous year. The amount of depreciation charged in each year is not fixed but goes on reducing at the later years. As the amount of depreciation keeps reducing, it is known as reducing balance method. The depreciation is charged on the written down value of the asset hence known as written down value method.

8.3 (F) Distinction between FIM and WDV methods –
The following illustration will help to bring out the distinction between the two methods-
Let us assume the machinery was purchased for Rs 1,00,000 and Depreciation is to be provided @10% p.a.

Year	Depreciation as per FIM @10%	Depreciation as per WDV @10%
1	1,00,000x10%for 1 year=10,000 Value of asset at the end of the first year is 1,00,000-10,000= 90,000	1,00,000x10%for 1 year=10,000 Value of asset at the end of the first year is 1,00,000- 10,000= 90,000
2	Depreciation @ 10% on 1,00,000= Rs 10,000. Value of assetat the end of the second year is 90,000-10,000=80,000	Depreciation @ 10% on 90,000= Rs 9,000. Value of asset atthe end of the second year is 90,000 -9,000=81,000
3	Depreciation @ 10% on 1,00,000= Rs 10,000. Value of assetat the end of the third year is 80,000-10,000=70,000	Depreciation @ 10% on 81,000= Rs 8,100. Value of asset at the end of the third year is 81,000-8,100=72,900

4	Depreciation @ 10% on 1,00,000= Rs 10,000. Value of assetat the end of the fourth year is 70,000-10,000=60,000 Thus depreciation is always @ 10% of original cost	Depreciation @ 10% on 81,000= Rs 8,100. Value of asset atthe end of the fourth year is 72,900-7,290=65,610 Thus depreciation is always on 10% on the balance or WDV

The following points are observed from the above table-

The amount of depreciation remains same for all the years as per the FIM method while it keeps decreasing as per the WDV method.

The value of asset at the end of the tenth year would be zero as per the FIM while the asset value will never become zero as per the WDV method.

There is no difference in the amount of depreciation and the value of asset after charging depreciation in the first year under both the methods.

Fixed instalment or straight line method	Written down value or Reducing balance method
1)It is a method of depreciation in which depreciation at fixed percentage (rate) is charged every year on original cost of fixed asset and the amount of depreciation remains the same (constant) every year	1)It is a method of depreciation in which depreciation at fixed percentage (rate) is charged every year . The amount of depreciation goes on reducing every year
2)The amount of depreciation is charged on the original cost of the asset	2)The amount of depreciation is charged on the written down value of the asset
3)After certain number of years the value of the asset becomes zero	3) The book value of the asset never becomes zero
4)This method of depreciation is not accepted for Income tax purposes	4)This method of depreciationis accepted for calculation and payment of Income tax
5)This method of depreciation is easy to calculate and more suitable for assets of lower value	5)This method of depreciationis suitable for assets of higher value having longer life requiring heavy expenditure in later life of the asset

8.3 (G) Accounting treatment of Depreciation- The transactionsrelating to purchase of asset and depreciation are recorded throughjournal entries and later posted in the relevant ledger accounts. Journal entries

A) When Provision for depreciation account is not maintained-

The transactions of purchase of asset, providing depreciation on asset, sale of asset, profit/ loss on sale ofasset are recorded in the asset account.

For purchase of asset for cash-	Asset a/c Dr To cash/ bank a/c

For purchase of asset on credit	Asset a/c Dr To supplier/party a/c
For payment of installation charges	Asset a/c Dr To cash/ bank a/c
For providing depreciation	Depreciation a/c Dr To Asset a/c
For transfer of depreciation to Profit and Loss a/c	Profit and Loss a/c Dr To Depreciation
For sale of asset	Cash/ bank a/c Dr To Asset a/c
For loss on sale of asset	Profit and Loss a/c Dr
	---To Asset a/c
For profit on sale of asset	Asset a/c Dr To Profit and Loss a/c

After passing the journal entries the relevant ledger accounts are to be prepared. The balance in the asset account will be carried down to the next accounting period and the balance in the depreciation account will be transferred to profit and loss a/c.

At the end of the year, while preparing final accounts, Depreciation amount will be shown on the debit side of profit and loss account.

The asset will appear in the balance sheet at the written down value (value after providing for depreciation on the asset)

When the above entries are posted in the asset a/c the entries will be appearing in the asset account as under

Dr **ASSET A/C** **Cr**

Date	Particulars	Amt	Date	Particulars	Amt
	To cash/ bank a/c (cash Purchase)			By Depreciation (yearly depreciation)	
	To suppliers a/c (Credit purchase)			By cash/ Bank(sale of asset)	
	To cash/ Bank (installationcharges)			By profit and loss a/c (loss on sale)	
	To profit and lossa/c (profit on sale)				
	To balance c/d (balancing figure)				

B) When provision for depreciation account is maintained-

- For purchase of asset for cash-

  Asset a/c Dr
  To cash/ bank a/c
- For purchase of asset on credit

  Asset a/c Dr
  To supplier/ partys a/c
- For payment of installation charges

  Asset a/c Dr
  To cash/ bank a/c
- For providing depreciation-

  Depreciation a/c Dr
  To Provision for Depreciation a/c
- For transfer of depreciation to Profit and Loss a/c

  Profit and Loss a/c DrTo Depreciation
- For sale of asset

  Cash/ Bank a/c Dr
  To Asset a/c
- On sale of asset, the amount of provision created for the asset sold is to be transferred to Asset a/c

Provision for Depreciation a/c DrTo Asset a/c

- For profit on sale of asset

Asset a/c Dr
To Profit and Loss a/c

- For loss on sale of asset----

Profit and Loss a/c DrTo Asset a/c

Under this method, the amount of depreciation to be provided is not recorded in the Asset a/c but is shown in the Provision for Depreciation a/c.

The asset account will always show a debit balance and the provision for depreciation account will show a credit balance.

The Asset a/c appears in the Balance sheet at its original value on the Asset side and the provision for depreciation appears in the balance sheet on the liability side.

Solved Problems- straight line method

1) M/s Raj and Sons purchased Machinery on 1st October 2007 at Rs 90,000 and spent Rs 10,000 on its installation. The firmprovides depreciation at 10% p.a .under straight line method.

Show machinery a/c and depreciation a/c for the years 2007- 08,2008-09 and 2009-10 assuming books of accounts are closed on 31st March every year.

Solution- In the books of Raj and Sons
Working note for calculation of depreciation under SLM @ 10% p.a.

1 Oct 2007- cost of asset (90,000+10,000)	=	1,00,000
Less depreciation @ 10% for 6 months	=	-5,000
WDV as on 31 March 2008	=	95,000
Less depreciation @ 10% for 1 year	=	- 10,000
WDV as on 31st March 2009	=	85,000
Less depreciation @ 10% for 1 year	=	- 10,000
WDV as on 31st March 2010	=	75,000

Dr **Machinery account** **Cr**

Date	Particulars	Amt	Date	Particulars	Amt
2007 1oct	To Bank To Bank	90,000 10,000	2008 31march	By DepreciationBy balance c/d	5,000 95,000
		1,00,000			1,00,000
2008 1 April	To balance c/d	95,000	2009 31march	By depreciationBy balance c/d	10,000 85,000
		95,000			95,000
2009 1 April	To balance b/d	85,000	2010 31march	By DepreciationBy balance c/d	10,000 75,000
		85,000			85,000
2010 1 April	To balance b/d	75,000			

Dr **Depreciation account** **Cr**

Date	Particulars	Amt	Date	Particulars	Amt
2008 31march	To Machinery a/c	5,000	2008 31march	By P&La/c	5,000
		5,000			5,000
2009 31march	To Machinery a/c	10,000	2009 31march	By P&La/c	10,000
		10,000			10,000
2010 31march	To Machinery a/c	10,000	2010 31march	By P&La/c	10,000
		10,000			10,000

2) Written down value method-

On 1st April 2005, Karan Bros purchased furniture for Rs 40,000.On 1st October, 2005, additional furniture was purchased for Rs 20,000.

On 1st October 2007, they sold furniture which was purchased on 1st April 2005 for Rs 28,000.The accounts were closed on 31st March every year .Depreciation was provided @10% p.a. by WDV method

Prepare Furniture account and Depreciation account.

Solution-Working note for calculation of Depreciation @ 10% p.a. on WDV

Particulars	Furniture1	Furniture 2	Depreciation
Cost of furniture Less depreciation(on F-2 for 6 months)	40,000 4,000	20,000 1,000	 5,000
WDV	36,000	19,000	
Less Depreciation	3,600	1,900	5,500
WDV	32,400	17,100	
Less Depreciation (on F-1 for 6 months)	1,620	1,710	3,330
WDV	30,780	15,390	
Sold for Loss on sale	28,000 2,780		

In the books of Karan Bros

Dr **Furniture a/c** **Cr**

Date	Particulars	Amt	Date	Particulars	Amt
2005 1 April 1 Oct	To Cash/ Bank To Cash/ Bank	40,000 20,000	2006 31march	By Depreciation By balance c/d	5,000 55,000
		60,000			60,000
2006 1 April	To balance b/d	55,000	2007 31march	By Depreciation By balance c/d	5,500 49,500
		55,000			55,000
2007 1April	To balance b/d	49,500	2007 1 oct 2008 31March	By Depreciation By cash/ bank By P& La/c By Depreciation By balance c/d	1,620 28,000 2,780 1,710 15,390
		49,500			49,500
2008 1April	To balance b/d	15,390			

Dr **Depreciation a/c** **Cr**

Date	Particulars	Amt	Date	Particulars	Amt
2006 31march	To Furniture	5,000	2006 31march	By P&La/c	5,000
		5,000			5,000
2007 31march	To Furniture	5,500	2007 31march	By P&La/c	5,500
		5,500			5,500
2007 1 oct 2008 31march	To Furniture To Furniture	1,620 1,710	2008 31march	By P&La/c	3,330
		3,330			3,330

3) Provision for depreciation-

On 1st April 2009, following balances appeared in the booksof Mangesh Traders

Machinery a/c Rs 4,00,000 Provision for Depreciation a/cRs 1,60,000

On the above date , they decided to sell the machinery forRs 1,00,000 which was purchased on 1st April 2006 for Rs 1,50,000.The firm provides Depreciation on 31 March every year@ 10% p.a. under straight line method.

Show Machinery account and Provision for depreciation account as on 31 march 2010.

Solution- Working note Depreciation @10% on SLM
Original cost of the machinery sold - 1,50,000 and depreciation at 10% p.a.is 15,000

Depreciation for three years (1-april 2006 to 31 march 2009) is 15000x 3 years =45,000

WDV as on 31 march 2009 = 150000-45,000= 105000

Sold for	1,00,000
Loss on sale of machinery	5,000

In the books of Mangesh Traders

Dr Machinery account Cr

Date	Particulars	Amt	Date	Particulars	Amt
2009 1april	To balance b/d	4,00,000	2009 1april	By cash/bank	1,00,000
				By Provision for Depreciation a/c	45,000
				By P&L a/c (Loss on sale)	5,000
			2010 31march	By balance c/d	2,50,000
		4,00,000			4,00,000
2010 1april	To balance b/d	2,50,000			

Dr **Provision for Depreciation a/c** **Cr**

Date	Particulars	Amt	Date	Particulars	Amt
2009 1 april	To Machinery a/c	45,000	2009 1april	By balance b/d	1,60,000
2010 31march	To balance c/d	1,40,000	2010 31march	By Depreciation	25,000
		1,85,000			1,85,000
			2010 1april	By balance b/d	1,40,000

Summary

Depreciation is the gradual and permanent decrease in the value of the asset. Depreciation refers to the decline or reduction in the value of fixed asset. Depreciation is the permanent and continuing diminution in the quality, quantity or value of an asset. Depreciation is required to be provided on fixed assets and charged to Profit and loss account so that the correct profit or loss can be ascertained and the balance sheet reflects the true financial position .Depreciation is caused due to natural wear and tear, efflux of time, obsolescence, depletion, natural calamities .The three factors affecting depreciation are- cost of the asset, estimated useful life of the asset and the residual or scrap value of the asset at the end of its useful life. Thus, Formula for calculatingdepreciation ----

Depreciation per annum=Original cost of the asset-estimated scrap value

Estimated useful life of the asset.

There are two methods of calculating depreciation. They are-

Straight line method (SLM) or fixed instalment method (FIM) or original cost method -Under this method a fixed percentage of the original value of the asset is written off every year. The value of the asset is reduced to zero at the end of the useful life of the asset. As the amount of depreciation remains constant every year, this method is called as fixed instalment method.

Reducing balance method (RBM) or Written down method (WDV)- Under this method, depreciation is charged at acertain percentage each year on the balance of the asset which is brought forward from the previous year . The amount of depreciation charged in each year is not fixed but goes on reducing at the later years. As the amount of depreciation keeps reducing, it is known as reducing balance method. The depreciation is charged on the written down value of the asset hence known as written down value method.

Accounting Standard (AS) -6 (Revised) deals with Depreciation Accounting.

Depreciation is to be recorded in the debit side of Profit and Loss account and deducted from the value of the asset in the balance sheet.

Key terms

Depreciation- Depreciation is the gradual and permanent decrease in the value of the asset

Cost of the asset- The cost of the asset refers to the purchase price of the asset. The expenses related to the purchase of the asset are to be added to the purchase price to arrive at the cost of the asset.

Residual value - Residual value refers to the value that can be realized at the end of the useful life of the asset when the asset will be sold as scrap .Such scrap value is to be deducted from the costof the asset.

Straight line method- It is a method of providing depreciation where the amount of depreciation remains constant or fixed every year. The depreciation is charged at a certain rate on the original cost of the asset.

Written down value method- It is a method of providing depreciation where the amount of depreciation goes on reducing every year. The depreciation is charged on the written down value of the asset.

MODULE - VII

9

INVENTORY CONTROL

Unit structure

9.1 Objectives
9.2 Introduction
9.3 Definition of Inventory
9.4 Purchase of Materials
9.5 Methods of Stock Taking
9.6 Inventory / Material Control Systems or Techniques
9.7 Stock Levels
9.8 Economic Re-Order Quantity Solved Problems
9.9 Inventory Turnover Ratio
9.10 Questions

9.1 OBJECTIVES

After studying the unit the students will be able to

- Define the concept Inventory and explain the various costs related to Inventory.
- Explain the material purchase procedure.
- Discuss about the function in storing the material.
- Know the techniques of Material Control.
- Solve the practical problems related to Stock Levels, EOQ and Inventory Turnover Ration.

9.2 INTRODUCTION

Inventory means stock of items kept in reserve for certain period of time. It includes raw materials, work-in-progress or semi- finished goods, finished goods and spare parts for the maintenance of equipment etc. Raw materials are those inputs that areconverted into finished products. Work in progress represents semi-finished goods that requires some work before they are ready

for sale. Finished products are those which are ready for sale. Inventory is the physical stock of items that a business or production organisation keeps in hand for efficient running of its production function.

9.3 DEFINITION OF INVENTORY

9.3.1 Meaning and Definition

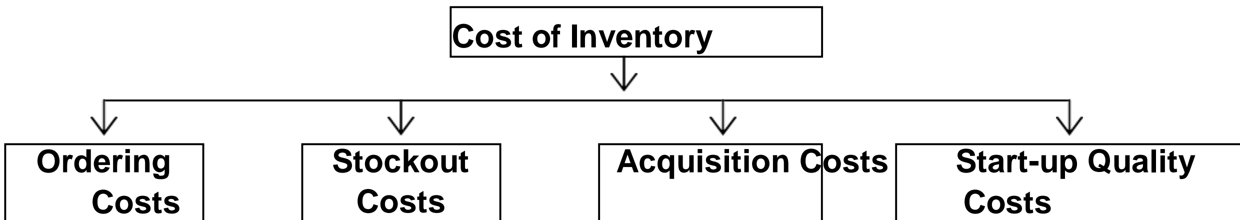
According to **Gordon B. Carson**, inventory includes raw materials and component parts. Inventories consist of raw material, component parts, supplies and finished assemblies which an organisation purchases from an outside source and parts, assemblies and finished products which the company manufacturesitself. In simple words inventory means 'stock items' or items in stock.

It is very essential that material of the correct quantity andquality is made available as and when required, with due regard to economy in storage and ordering costs, purchase prices and working capital. Inventory control involves (i) Assessing the items tobe held in stock. (ii) Deciding the extent of stock holding of items individually and collectively. (iii) Regulating the input of stock intothe store houses and (iv) Regulating the issue of stock from the stores houses.

9.3.2 COST OF INVENTORY

Inventory control is generally concerned with the procurement of raw-materials and purchased parts (i.e. components) and their supply to the production departments. Supplies and stores are the indirect materials. They do not form a part of the finished products. They are closely related to the maintenance services and so they should be controlled by the maintenance department. Work-in- progress is primarily concerned with the manufacturing department,because it is results from the various operations performed on the shop. It is proper to assign the control functions of work-in-progress to manufacturing department.

Every business organisation, however big or small, has to maintain inventory and it constitutes as integral part of the working capital. It has been estimated that inventory in Indian industries constitutes more than 60% of current assets. Inventories are significant elements in cost process. Inventories require a significant investment, not only in acquiring them but also in holdingthem. The various types of cost of inventory are as follows :



1. **Ordering Costs :** Each time we purchase a batch of raw material from a supplier, a cost is incurred for processing the purchase order, expediting, record keeping, and receiving the order into the warehouse. Each time we produce a production lot, a changeover cost is incurred for changing production over from a previous product to the next one. The larger the lot sizes, the more inventory we hold, but we order fewer times during the year and annual ordering costs are lower.

2. **Stockout Costs :** Each time we run out of raw materials or finished-goods inventory, costs may be incurred. In finished-goods inventory, stockout costs can include lost sales and dissatisfied customers. In raw-materials inventory, stockout costs can include the cost of disruptions to production and sometimes even lost sales and dissatisfied customers. Additional inventory, called **safety stock**, can be carried to provide insurance against excessive stockouts.

3. **Acquisition Costs :** For purchased materials, ordering larger batches may increase raw-materials inventories, but unit costs may be lower because of quantity discounts and lower freight and materials-handling costs. For produced materials, larger lot sizes increase in-process or finished-goods inventories, but average unit costs may be lower because changeover costs are amortized over larger lots.

4. **Start-up Quality Costs :** When we first begin a production lot, the risk of defectives is great. Workers may be learning, materials may not feed properly, machine settings may need adjustment, and a few products may need to be produced before conditions stabilize. Larger lot sizes mean fewer changeovers per year and less scrap.

9.4 PURCHASE OF MATERIALS

There is a purchase department which carries out the function of purchases of materials. The purchase manager is responsible for ensuring the items ordered are of the standard quality, lower cost and received in time. The purchase procedure vary with different business firms. The purchase procedure is given below:

a) Purchase Requisition:

Purchase requisition is the formal request made by the storekeeper to the purchase department for giving order of rawmaterials or stores. It serves the dual purpose of authorizing the purchase department to make purchases and provides a record of the description and quantity of materials required. It also fixes the responsibility of the department or personnel making purchase requisition.

b) Purchase order:-

After receiving the duly approved requisition, the purchase department has to place an order with a supplier. It is an offer to buy certain materials at stated price and terms. For routine purchases, the order is placed through established supplies. Inother cases, the purchase department may ask for bids or send out request for quotation before placing an order. The purchase orderis a formal contract for the supply of materials. Copies of the purchase order are sent to the departments concerned.

c) Receiving and Inspection of materials:

The stores department is responsible for taking delivery of packages and to get a physical verification of the contents. When the materials are received, the stores official gets the packages, open them and make a detailed verification of the contents. After the contents of the packages are checked, the details are entered into a Goods Received Note. Copies of the G.R.Note are issued to the supplier, purchase and accounts department, where the factory has to test the materials received for quality and specifications. It has to ensure that the quality of materials is as per purchase order.

d) Approval of Invoices and Payment

Invoice received by the purchase department is forwarded to the Accounts department for payment with their recommendation. Accounts department has to check the authenticity, arithmetical

accuracy and G. R. Note in order to make sure that the goods areas per purchase order. When it is found that everything is in order,it is passed for payment by the Accountant. Then the cashier will draw the cheque as per terms and conditions of the purchase order and invoice and finally payment is made to the supplier.

9.5 METHODS OF STOCK TAKING

9.5.1 Meaning

Methods of taking inventories / stock

Method of Inventory

(1)Periodic inventory method (2) Perpetual inventory Method

1. Periodic inventory method :

Under this method of taking inventories, value of stock is determined by physical counting of the stock on the accountingdate of preparation of the final accounts. It is possible that stock taking may take a week or so in large enterprises and purchases and sales may have to be suspended for that period to get correct figure of closing inventory. This method of ascertaining the value of stock at the end of the year is also known as annual stock taking. Thus this method is based physical stock taking. It provides data once in a year is simple and economical method of stocktaking can be adopted in small concerns, but it does not provide basis for control.

2. Perpetual Inventory Method :

Perpetual inventory defined as a system if records maintained by the controlling department, which reflects the physical movements of stock and their current balance. Under this method stock registers are maintained to make a record of thephysical movements of stock and their current balance. Stores ledger is maintained to keep a record of the receipt and issue of the materials and also reflects the balance in store. Similarly, work-in- progress ledger is maintained to give the value of work-in-progress on hand and a finished goods ledger is maintained to know the value of finished goods on hand. Thus this system provides a running record of inventories on hand at any time. To ensure the accuracy of perpetual inventory records physical verification of the inventory is made by a program of continuous stock taking.

It is possible that the balance of stock by the perpetual inventory may differ from the actual balance of stock as ascertainedby physical verification. Any difference noted between actual stocks as disclosed by the physical verification and the stocks shown by stock records should be investigated and rectification made then and there. If the physical verification reveals that actual balance of stock, is more that the balance shown by the stores ledger or work-in-progress ledger or finished goods ledger debit note is prepared and stock record are adjusted accordingly so that balance mayreconcile with actual balance. A Stock Adjustment Accounts is prepared and debited with the shortage of stock and credited with surplus.

Continuous stock taking is an essential feature of the perpetual inventory system. But the two terms, perpetual inventory and continuous stock taking should not be taken as one; perpetual means the system of stock records and continuous stock taking whereas continuous stock taking means only the physical verification of stock records with actual stocks.

In continuous stock taking, physical verification is spreadthroughout the year. Every day 10 to 15 items are taken at rotation and checked so that surprise, element in short verification is maintained and each item is checked for a number of times during the year. On the other hand, surprise element is missing in case of periodical checking because checking is usually done at the end of the year. In short this method is based on records. It requires a lotof recording and is thus expensive. It can be adopted only in big concerns. It provides data on running basis and thus facilitates the preparation of financial statements at shorter intervals. It also provides basis for control by investigation the basis for control by investigation the discrepancies arising from the comparison of physical stock with their book values.

9.5.2 Difference between Periodic inventory and Perpetual inventory.

The following are the main differences between the two methods of taking inventory.

Periodic Inventory	Perpetual Inventory
1. It is based on physical Stocktaking	1. It is based on records.
2. It provides data periodically i.e. once in year.	2. It provides the data on running basis and thus facilitates the preparation of financial statements at shorter intervals.
3. It does not provide basis control.	3. It provides basis for control by investigating the discrepancies arising from the comparison of physical stock with book values.
4. It is simple and economical method oftaking inventory and can be adopted in small concern.	4. It is expensive as it requires a lotof recording due to an elaborate method of taking inventory. It can be adopted by big concerns only.

9.6 INVENTORY / MATERIAL CONTROL SYSTEMS OR TECHNIQUES

9.6.1 Meaning

Material control is the function of ensuring that the sufficient stocks are maintained to meet all requirement without any problem. It also includes to avoid carrying unnecessary stock. It is for safeguarding company's priority in the form of materials by keeping systematic records and maintaining them at optimum level considering requirements and financial resources of company's business. It needs proper planning organising and controlling the receipt and issues of material and its storage to achieve the objectives of the company efficiently.

9.6.2 Objectives of material control

a) To maintain continuous supply of material.

b) To avoid over stocking of materials

c) To obtain minimum quantity of materials from reliable sources.

d) To minimize total cost.

e) To avoid waste and loss of stock during storage period.

f) To maintain up dated stock level.

g) To supply required information to the management in decision making and its execution process.

9.6.3 Techniques of Material Control

Various techniques are used in controlling the inventories. Some popular and important techniques are as under :

A. Re-order Point (ROP).
B. Economic Ordering Quantity (EOQ).
C. ABC Analysis.

A. RE-ORDER POINT (ROP) :

Receiving and issuing of inventories are the common and recurring phenomena in a manufacturing organisation. When the inventories fall below a particular point, they are replenished by the fresh purchases. Re-order point (ROP) is the point when the inventories have to be replenished by fresh order. It fundamentally deals with 'when to order' or to replenish the inventories.

Re-order point is a stock level at which fresh supplies of materials should be ordered. The level is fixed between somewherebetween minimum level and maximum level. It is fixed in such a way that fresh supply of materials are received before the level reaches the minimum level. The re-order point also called re-order level depends upon two factors:

(a) Maximum consumption and (b) Lead time i.e. the anticipated time lag between the dates of issuing orders and receiving supplies. The formula for calculating re-order level is :

Re-order Level = Maximum usage × Minimum re-order period.

Re-order Quantity : Re-order quantity is the quantity for which an order is placed when stock reaches the re-order level. The term is used generally in synonymous with the Economic Order Quantity since order is placed only in such size which will be economical for the enterprise in all respect.

B. ECONOMIC ORDER QUANTITY :

The Economic Order Quantity (also known as re-order quantity) refers to the size of the order which gives the maximum economy in purchasing any material. It is an optimum or standard order size. When the stock reaches the recorder level, the companyshould give a fresh order of optimum size.

This quantity is also called "Economic Purchase Quantity, or Economic lot size, or optimum lot size or Minimum Cost Inventory."

In fixing the economic order quantity, the following costs are considered:

1. **Ordering Cost :** This is the cost of placing an order with the supplier and includes cost of stationery, salary of those who are engaged in placing a order and in receiving and inspecting the materials. It is a fixed cost and therefore cost of placing an order varies from time to time depending upon the number of order placed and the quantity of items ordered. The number of orders increase, the ordering cost goes up and vice-versa.

2. **Inventory Carrying Cost :** It is the cost of holding the stock in storage and includes interest on investment, obsolescence losses, store keeping cost, such as rent of warehouse, salary of store keeper, stationery used in maintaining records of stores, etc, insurance cost, deterioration and wastage of material. The larger the volume of inventory, the great will the inventory carrying cost and vice-versa.

The above two costs are of opposite nature. If for example, an attempt is made to reduce of inventory carrying cost by holding the stores as low as possible, the number of orders will increase and consequently the ordering cost will go up. On the other hand, if orders are placed for a larger quantity, the inventory carrying cost will increase and ordering cost, the economic order quantity (EOQ) is fixed to keep the aggregate cost to the minimum.

Assumptions of Economic Order Quantity (EOQ) : The EOQ model is based on the following assumptions:

(i) There is only one product involved; (ii) Annual usage (demand) requirements are known; (iii) Usage is spread evenly throughout the year so that the usage rate is reasonably constant; (iv) Lead time does not vary; (v) Each order is received in a single delivery and (vi) There are no quantity discounts.

Precautions in Applying EOQ : The following precautions are necessary in applying E.O.Q.

1. **Simplification of Routine :** If the E.O.Q. formula tells us that 13 orders have to be placed in a year, we may place 12 orders, i.e. once a month.

2. **Ordering in Package Sizes :** Many goods are packed in units of one gross. If figure shows a quantity of 11 dozens, it should be changed to 12 dozens.

3. **Economical Freight Rates :** If the mathematical figure gives 9/10th of a lorry or rail wagon load, it is better to increase the quantity to have one full lorry load or one full wagon load. This would be cheaper, because the full wagon load rates would be lower than transporting the material as smalls.

4. **Perishable Articles :** For perishable articles whose shelf-life is very low, E.O.Q. should be very much less than the theoretical figure and should be based on practical considerations.

5. **Seasonal Articles :** For articles of a seasonal nature, e.g., cotton or groundnuts or oilseeds, bulk purchases during the season will be cheaper than purchases based on E.O.Q.

6. **Bulk Purchases :** In certain cases, considerable discounts would be available for bulk purchases. This should be compared to the savings as a result of the application of E.O.Q. formula and a decision should be taken based on which is creeper.

7. **Import of Materials :** E.O.Q. cannot be successfully applied in the case of imports of materials which is based on import licences.

Importance of Economic Order Quantity (EOQ) : If re-order quantity is determined in advance and adjusted it ensures the following advantages :

1. The cost of storage can be kept at a minimum.
2. Purchase orders can be easily prepared at intervals.
3. The advantages of placing large orders can be derived as far as possible.

Limitations of Economic Order Quantity (EOQ) : The following are the limitations of EOQ:

(a) Where rate of consumption fluctuates very often ordering a fixed quantity may lead to over or under stocking.

(b) Very often, consumption rate cannot be anticipated because of certain unavoidable reasons such as power failure, slackening of customers' demand etc.

(c) Sometimes, estimating of carrying cost and ordering cost in advance is not easy.

C. A.B.C. ANALYSIS:

A most useful guide to devising stock control system is often known as 'Pareto Analysis' (after the name of an Italian Philosopher). The term is also known as ABC analysis because it analyses the range of stock items held into three sectors, known as A, B and C.

ABC analysis is a new technique of classifying and controlling production and store inventories both purchased and manufactured in accordance with value

of the item. It is the starting point for material management. It is the basic analytical management tool which enables top management to place the effort where the results will be greatest. The technique is popularly known as Always Better Control or the Alphabetical approach. The technique tries to analyse the distribution of any characteristic by money valueof importance in order to determine its priority. In materials management the technique has been applied in areas needing selective control such as inventory, criticality of items, obsoletestocks, purchasing orders, receipt of materials, inspection, store- keeping and verification of bills.

ABC analysis or classification is the principle of Selective Control of inventories and a technique of grouping thousands of stock items handled by an organisation. The principle involved is that the degree of control on stock items and amount of safety stock carried should vary directly with the consumption value of the item involved.

Advantages of ABC Analysis : The following are the advantages of ABC Analysis :

1. **Selective Control :** This approach helps the materials manager to exercise selective control and focus his attention only on a few items when he is concerned with lakhs of store items.

2. **Control Inventories :** By concentrating on 'A' class items, the materials manager is able to control inventories and show visible results in a short span of item.

3. **Obsolete Stocks :** By controlling the 'A' items obsolete stocks are automatically pin pointed.

4. **Clerical Cost :** The system also helps in reducing the clerical cost and better planning and improved inventory turnover.

5. **Equal Attention :** ABC Analysis has to be resorted to because equal attention to A, B and C items will not be worthwhile and would be very expensive.

Material cost is defined as cost of material of any kind or nature used for the purpose of production of goods or services. Direct materials are the materials whose cost can be attributed to a cost object in economical feasible way and indirect materials are those whose cost cannot be directly attributed to a particular cost object.

9.7 STOCK LEVELS

9.7.1 Meaning

Stock levels is the technique which fixes the stock control level in terms of quantity for ensuring the optimum quantity of materials purchased and stored. This raise the questions when to buy and where from to buy and helps the management while preparingbudget and schedule of purchases.

A. Maximum Level :-

This level of stock indicates the maximum figure of inventory quantity held in stock at any time. The quantity of stock should not exceed the level.

Following factors should be considered while fixing the maximum level of various stock.

1. **Re-order level :-** The product of maximum consumption of inventory item and its maximum delivery period.
2. **Minimum Consumption :-** Minimum Consumption and minimum delivery period for each stock should be known.
3. **Adequacy of working capital :-** It should know to maintain maximum level of inventory.
4. **Storage space :-** It should be stored properly in stores.
5. **Additional storage cost :-** Cost required for additional storage should be considered.
6. Additional insurance cost should be considered.
7. **Regular supply :-** In case of importance materials due to their irregular supply, the maximum level should be high.

Maximum Level= (Reorder level) + (Reorder quantity) –

(Maximum consumption x Minimum Reorder period)

B. Minimum Level :-

Minimum level shows the lowest figure of inventory balance, which must be maintained in hand at all times, so that there is no stoppage of production due to non-availability inventory. This levelis possible to maintain fixed level after takking into consideration the rate of consumption and the time required to acquire sufficient material to avoid dislocation of production.

Factors responsible to maintain minimum level of inventory.

a. Average rate of consumption for each inventory items.
b. Maximum consumption and maximum delivery period in respect of each item to determine its re-order level.
c. Average re-order level to each item. This period can be calculated by averaging minimum and maximum period.

Minimum level = (Re order level) –

(Average consumption x Average/Normal Reorder Period)

C. Re-order level

This level is between the minimum and maximum levels in such away at which purchase requisition should be made out for fresh supply. The object of maintaining this level is to place order so that stock is not reduced to a level less than the minimum level.

Following factors are considered white maintain this re-order level.

1. Maximum consumption
2. Maximum Re-order period
3. Minimum level

Re-order level = Minimum level + (Normal Consumption x Normal Reorder Period)

OR

= (Maximum Consumption x Maximum Re-order Period)

D. Average stock/ inventory level :-

It is the level of average of minimum level and Maximum level. Itmeans the average level is maintained in states.

Average stock level = $\frac{\text{Maximum level} + \text{Minimum level}}{2}$

OR

= Minimum level + ½ reorder quantity

E. Danger level :-

This is the level below the minimum stock level. When stock reaches this level, immediate action is need to take for replacement of stock. If the stock is reached at this level, the normal lead time is not available and hence regular purchase procedure can not be adopted. This may results in high cost remedial action only. If this is fixed below the re-order level and above minimum level it will be possible to take preventive action.

Danger level = (Average rate of consumption) × urgent supply time

OR

= (Normal consumption) × (maximum re-order period foremergency purchases)

9.7.2 SOLVED PROBLEMS

1) In Aniket and Co, weekly minimum and maximum consumption of material 'A' are 50 and 120 units respectively. The reorder quantity as fixed by the company is 350 units. The material is received within 4 to 6 weeks from issue of supply order.

Calculate the following.

a) Minimum level

b) Maximum level

c) Re-Order level

Solution :- Average consumption = (50 + 120)/2 = $\frac{170}{2}$ = 85

Average re-order period = (4 + 6) ÷ 2 = 5 weeks

a) Re-order level = Maximum consumption × Maximum Re-order period

= 85 × 6

= 510 units

b) Minimum level = (reorder level) –

(Average consumption × Average re-order period)

= 510 – (85 × 5)

= 510 – 425

= 85 units

c) Maximum level = Re-order level + Re-order quantity –

(minimum consumption × minimum Re-order period)

= 510 + 350 – (50 units × 4 weeks)

= 860 – 200

= 660 units.

2) The following information is available in respect of material in ABC Co. Ltd of Aurangabad,

a) Re-order quantity = 2,500 units

b) Re-order period = 6 to 8 weeks

c) Maximum consumption = 600 units per week

d) Normal consumption = 300 units per week

e) Minimum consumption = 200 units per week

calculate i) Re-order level

ii) Minimum level

iii) Maximum level

iv) Average stock level

Solution

i) Re-order level = Maximum consumption $\times$ Maximum Reorder period

= 600×8 = 4800 units

ii) Minimum level = (Re-order level) – (Normal consumption $\times$ (Average Reorder period)

= $4800 - (300 \times \frac{8+6}{2})$

= $4800 - (300 \times 7)$

= 4800 – 2100

= 2700 units

iii) Maximum level = Re-order level + Reorder quantity – (Minimum consumption $\times$Minimum Re-order period)

= $4800 + 2500 - (200 \times 6)$

= 7300 – (1200)

= 7300 – 1200

= 6100 units

iv) Average stock level = $\frac{\text{Minimum level} + \text{Maximum level}}{2}$

= 2700+6100/2

= 8800/2

= 4400 units

9.8 ECONOMIC RE-ORDER QUANTITY SOLVED PROBLEMS

9.8.1 Formula to calculate EOQ

Economic order Quantity = $\sqrt{\frac{2 \times A0}{c}}$

WhereA = Annual unit consumed / used

O = Ordering cost per order

C = Annual carrying cost of one unit i.e. Carrying cost percentage p.a × cost per unit.

9.8.2 Solved Problems

Illustration 3

From the following particulars, calculate Economic Order Quantity and number of order to be placed in the year by using

a) Tabulation method

b) Formula method

i) Annual consumption of material - 6000 kg

ii) Cost of placing an order - ` 60

iii) Cost per kg - ` 5

iv) Storage and carrying cost – 10 % an average inventory.

Ans.

a) Tabulation method

Particulars	Formula	1	2	3	4	5	6	7	8	9	10
Annualusage	A	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
Order size	Q	6000	3000	2000	1500	1200	1000	857	750	667	600
Ordering cost p.u.	O	60	60	60	60	60	60	60	60	60	60
Carrying cost p.u.	C = 10% of ` 5	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
No. of orders	N = A/Q	1	2	3	4	5	6	7	8	9	10
Total carrying cost	TC = Q × C	1500	750	500	375	300	250	214	188	167	150
Total Ordering cost	TO = N × O	60	120	180	240	300	360	420	480	540	600
Total Annual cost	TAC = TC + TO	1560	570	680	615	600	610	634	668	707	750

Box indicates EOQ = 1200 unit. When 5 order of 1200 kg each are placed, the carrying cost 300 and the total cost 600 is the lowest.

Tabulation method is useful for computing EOQ when the order size / lot is shifted, ii) Supplier offers volume discount that higher discount for large quantities.

b) Formula method

$$EOQ = \sqrt{\frac{2AO}{C}}$$

Where, A = Annual consumption – 6000 kg

O = costing of placing an order – ` 60

C = storage and carrying cost per unit = $\frac{5 \times 10}{100}$ = ` 0.50

$$\therefore \ EOQ = \sqrt{\frac{2 \times 6000 \times 60}{0.50}} = \sqrt{\frac{2 \times 6000 \times 60 \times 100}{50}} = \sqrt{1440000}$$

= 1200 unit

Illustration 4

From the following figures, calculate Economic order Quantityand order to be placed for number kg in each year.

Annual consumption of material : 4000 kgCost per

unit = Rs. 20 Per kg

Cost of Buying per order = Rs 5 /-

Storage and carrying cost = 87.0 average inventory

Ans. EOQ = $\sqrt{\frac{2AO}{C \times S}}$

Where A = Annual usage – 4000 kg

O = cost of buying per order = 5 /-

C = cost per unit = 2 /-

S = storage and carrying cost

$\therefore$ EOQ = $\sqrt{\frac{2 \times 4000 \times 5}{8\ \%\ \text{of}\ 2}}$

= $\sqrt{\frac{40000}{0.16}}$

= $\sqrt{250000}$

= 500 kg

Illustration 5

From the following information, calculate EOQSemi -

Annual consumption – 6000 units Purchase price of

input unit – ` 25 /-

Ordering cost per order - ` 45 /-

Quarterly carrying cost – 3 %

EOQ = $\sqrt{\frac{2AO}{C}}$

Where, A = Annual consumption = 6000 × 2 = 12000 units

O = Ordering cost per order = ` 45 /-

C = Annual carrying cost of one unit = 3 % of 25 × 4

= $\frac{3 \times 25}{100} \times 4$ = `3

$\therefore$ EOQ = $\sqrt{\frac{2 \times 12000 \times 45}{3}}$

= $\sqrt{3,60,000}$

= 600 units

Illustration 6

PQR Ltd produces a product which has monthly demand of52,000 units. The product requires a component × which purchasedat 15 /- per unit. For every finished product, 2 unit of component × are required. The ordering cost is 350 /- per order and carrying cost is 12 % p.a.

You are required

a) Calculate Economic Order Quantity for component 'X".

b) If minimum lot size is supplied 52000 units what is the extra cost, the company has to incur?

c) What is the minimum carrying cost, the company has to incur?

Ans. Annual consumption of component "x"

52000 units × 12 months × 2 = 12, 48,000 units

a) Economic order Quantity = $\sqrt{\frac{2AO}{C}}$

Where A = Annual consumption = 12,48,000 units

O = Ordering cost Due order = ` 350 /-

C = Annual carrying cost = $\frac{12^{3}}{100\ 20_{5}} \times 15\ 3$

$\therefore$ EOQ = $\sqrt{\frac{2 \times 1248000 \times \text{`}\ 350}{\text{`}\ 15 \times 12 \div 100}}$

= $\sqrt{\frac{87,36,00000}{180 \div 100}}$

= $\sqrt{\frac{87,36,00000}{108}}$

= 22030 units

b) Calculation of Extra cost if minimum lot size is 52000 units

i) If Lot size is 52000 units

Ordering cost $= \left(\frac{1248000}{52000} \times 350\right) = 8400$

Carrying cost $= \left(52000 \times \frac{1}{2} \times 15` \times 12 \div 100\right) = 46800$

Total Cost = 46800 + 8400 = 55200 (I)

ii) If cost size is 22030 units

Ordering cost $= \left(\frac{1248000}{22030} \times 350\right) = 19828$

Carrying cost $= \left(22030 \times \frac{1}{2} \times `15 \times \frac{12}{100}\right) = 19827$

Total Cost = 19828 + 19827 = 39655 (II)

Extra cost = I – II = 55200 – 39655 = 15545

c) Minimum Carrying cost :

$22030 \text{ units} \times \frac{1}{2} \times ` 15 \times \frac{12}{100} = 19{,}827$

Illustration 7

A manufacturer has to supply to his customer 600 units of his produce per year. Storage is not allowed and the inventory carrying cost amounts to ` 0.60 per unit per year. The set up cost per run is ` 80

Find the

a) Economic order Quantity,
b) Minimum average yearly cost,
c) Optimum number of order per year and
d) Optimum period of supply per optimum order.

Ans :- a) Economic order Quantity = $\sqrt{\frac{2AS}{C}}$

Where A = Annual usage - 600 units

S = set – up cost per run - ` 80

C = carrying cost per unit - ` 0.60

$\therefore$ EOQ = $\sqrt{\frac{2 \times 600 \times 80}{0.60}}$

= $\sqrt{1,60,000}$

= 400 units

b) Optimum number of orders p.a

Optimum number of order per year = $\frac{\text{Annual usage}}{\text{EOQ}}$

= $\frac{600}{400}$

= 1.5

Since number of order can not be fractional we round it off to thenext whole number. Thus, optimum number of order per year = 2

c) Minimum Average yearly cost

Minimum Average yearly cost = set up cost + carrying cost

= ` 160 + ` 120

= ` 280

$\therefore$ set – up cost = ` 80 $\times$ 2 = `160

Carrying cost = Average inventory $\times$ carrying cost per unit

= $\frac{400}{2} \times 0.60$

= ` 120

d) Optimum supply period per optimum order

Optimum supply period per optimum order =EOQ / Average monthly requirement

= $\frac{400}{\frac{600}{12}}$

= $\frac{400}{50}$

= 8 months

Illustration 8

A firm's inventory planning period is one year. Its inventory requirement for this period is 1,600 units. Assume that its order costs are ` 50 /- order. The carrying cost expected to be

` 1 per unit per year for an item.

The firm can produce inventories in the various lots as follows :

i) 1,600 units ii) 800 units iii) 900 units iv) 200 units and

v) 100 units

Which of these order quantities is the economic order quantity ?Usea)

Equation method b) Tabulation method.

Ans : a) Equation method

EOQ = $\sqrt{\frac{2AO}{C}}$

Where, A = Annual usage – 1600 units

O = Ordering cost per order - ` 50

C = Carrying cost per unit per annum. ` 1

$\therefore$ EOQ = $\sqrt{\frac{2 \times 1600 \times 50}{1}}$

= $\sqrt{1,60,000}$

= 400 units

b) Tabulation method

Inventory cost for different order Quantities

Particulars	**Formula**	**1**	**2**	**3**	**4**	**5**
Annual usage	A	1600	1600	1600	1600	1600
Order size	Q	1600	800	400	200	100
Ordering cost per order	O	50	50	50	50	50
Carrying cost p.u.p.a.	C	1	1	1	1	1
No. of orders	N = A/Q	1	2	4	8	16
Total Ordering cost	TO = N × O	50	100	200	400	800
Total carrying cost	TC = Q × C	800	400	200	100	50
Total Annual cost	TAC = TC + TO	850	500	400	500	850

It can be seen from the table that the carrying and ordering cost taken together are the lowest for the order size 400 units. Therefore, Economic order Quantity is 400 units.

9.9 INVENTORY TURNOVER RATIO

9.9.1 Meaning

There are several items in the stores which are issued to the production after long gap from the date of purchases. There are several other items which are never issued to the production asthey have become outdated which needs to be disposed off. These items need to be identified so that management can avoid thecapital locked up in such items. It is necessary to compute the inventory turn over ration for finding these items. This ratio indicates not only replacement of stock during the year but the efficiency or inefficiency with inventories are maintained in the organisation. This ratio measures how quick sales of inventories is done. It is the test of efficient inventory management. A higher inventory turnover ratio indicates good inventory management. A low inventory turnover ratio may adversely affect the ability of an organisation to meet consumer's demand and not cope up with requirement.

9.9.2 Formula

This ratio measures relationship between cost of goods sold andthe inventory level. Inventory turnover ratio is calculated as follows :

Inventory turnover ratio = Cost of goods sold or material consumed /Average Inventory or Stock

= ....times

Where, cost of material consumed = opening stock + purchases – closing stock

$$\text{Average Inventory} = \frac{\text{Opening stock} + \text{Closing stock}}{2}$$

This ratio can also be calculate in days as follows :

$$\text{Inventory turnover ratio} = \frac{\text{Number of days in a year}}{\text{Inventory Turnover Ratio}}$$

= Number of days

However serious limitation of this approach is that detailed data may not be available in respect of inventory level and cost of goods. In order to overcome this difficulties another approach for computation of inventory turnover Ratio is used which is based on the relationship between sales and closing inventory. Alternatively,

$$\text{Inventory turnover Ratio} = \frac{\text{Sales}}{\text{Closing Inventory}}$$

In short, of the two approach of calculating inventory turnover ratio, the first which relates to the cost of goods sold to average

inventory and theoretically it is superior whereas advantages of second approach is that it is free from practical problems of computations.

9.9.3 Solved Problems

Illustration 9

The following date are available in respect of material 'Y' for theyear ended 31st march 2015

Particulars	
Opening stock	1,10,000
Closing stock	1,50,000
Purchases during the year	320000

Calculate i) Inventory turnover Ratio

ii) Number of days for which average inventory is held.

Ans :-

Cost of material consumed = Opening stock + Purchases – closing stock

= 11,0000 + 32,0000 – 1,50,000

= 2,80,000

Average Inventory = $\frac{\text{Opening stock} + \text{Closing stock}}{2}$

= $\frac{110000 + 150000}{2}$

= $\frac{260000}{2}$

= 130000

Inventory turnover Ratio = $\frac{\text{Cost of material consumed}}{\text{Average Inventory}}$

= $\frac{280000}{130000}$

= 2.15 times

ii) Number of days for which average inventory is held

$= \dfrac{\text{Number days in a year}}{\text{Inventory turnover ratio}}$

$= \dfrac{280000}{130000}$

= 169. 76 days **OR** 170 days

Illustration 10

Inventory records of Aishwarya Ltd. Shows as following information :

Particulars	Material A	Material B	Material C
Opening stock	1400 kg	400 liters	200 kg
Purchases	23,000 kg	2200 liters	3600 kg
Closing stock	400 kg	2400 liters	2400 kg

Inventory is valued of ` per kg and ` 2.5 per liter. Calculate material turnover ratio for each of the materials.

Ans : Material consumed = opening stock + purchases – closing stock

Material A = 1400 + 2300 – 400 = 2400 kg

Material B = 400 + 22000 – 2400 = 20,000 liter

Material C = 200 + 3600 – 2400 = 1400 kg

Average Inventory $= \dfrac{\text{Opening stock} + \text{Closing stock}}{2}$

Material A = (1400 + 400) / 2 = 900 kg

Material B = (400 + 2400) / 2 = 1400 liter

Material C = (200 + 2400) / 2 = 1300 kg

Material turnover ratio $= \dfrac{\text{Cost of material consumed}}{\text{Average Inventory or Stock}}$

Material A $= \dfrac{2400 \times 2\ `}{900 \times 2\ `} = \dfrac{4800}{1800} =$ 2.666 or 2.6 Times

Material B $= \dfrac{20000 \times 2.50\ `}{1400 \times 2.50\ `} = \dfrac{50000}{3500} =$ 14.285 or 14.29 Times

Material C $= \dfrac{2400 \times 2\ `}{1300 \times 2\ `} = \dfrac{2800}{2600} =$ 1.076 or 1.08 Times

$$\text{Material Inventory} = \frac{\text{Number days in a year}}{\text{I.T. ratio}}$$

$$\text{Material A} = \frac{365}{2.67} = 136.704 \text{ or } 137 \text{ days}$$

$$\text{Material B} = \frac{365}{14.29} = 25.542 \text{ or } 26 \text{ days}$$

$$\text{Material C} = \frac{365}{1.08} = 337.962 \text{ or } 338 \text{ days}$$

Illustration 11

From the following data for the year ended 31st March 2015, calculate the inventory turnover ratio of two items and put forward your comments on them.

Particulars	Material 'X'	Material 'Y'
Opening Stock (01.04.2014)	30,000	27,000
Purchases (01.04.2014 to 31.05.2014)	1,56,000	81,000
Closing Stock (31.03.2014)	18,000	33,000

Ans : Cost of Material consumed = Opening stock + Purchase – closing stock

Material X = 30,000 + 156000 – 18000 = ` 168,000

Material Y = 27000 + 81000 – 33000 = ` 75000

Average Inventory = (opening stock + closing stock) ÷ 2

Material 'X' = (30,000 + 18000) ÷ 2 = ` 24,000

Material 'Y' = (27000 + 33000) ÷ 2 = ` 30,000

$$\text{Inventory turnover ratio} = \frac{\text{Cost of material consumed}}{\text{Average Inventory or Stock}}$$

Material 'X' = ` 168000 ÷ ` 24000

= 7 Times

Material 'Y' = ` 75000 ÷ ` 30,000

= 2.5 times

Comment :

Result : Comparatively inventory turnover ratio of material 'X' is higher than that of material Y (4.5 times)

Decision :- The management of this organisation needs to concentrate on material y as its turnover is 2.5 times only. It has toanalysis the causes and take remedial measures for remaining material idle for long time / period in warehouse.

Illustration 12

From the following information supplied by Sanket Ltd, calculate

i) Inventory turnover Ratio

ii) Number of days for which the inventory is held.

Particulars	Material 'P' (E)	Material 'Q' (i)
Opening stock	30,000	45000
Purchases	2,00,000	3,00,000
Closing stock	45,000	50,000
Sales	36,000	4,50,000

Ans :-

Cost of Material consumed =opening stock +Purchases– closing stock

Material P = 30,000 + 200000 – 45000 = ` 185000

Material Q = 45000 + 300000 – 50,000 = ` 29,5000

Average Inventory = (Opening stock + Closing stock) ÷ 2

Material P = (30,000 + 45000) ÷ 2 = ` 375000

Material Q = (45000 + 50000) ÷ 2 = ` 47,500

i) Inventory turnover ratio = $\frac{\text{cos t of material consumed}}{\text{Average Inventory}}$

Material 'P' = 1,85,000 ÷ 37500 = 4.93 = 5 times

Material 'Q' = 2,95,000 ÷ 47500 = 6.21 = 6 times

Alternatively, Inventory turnover ratio is as follows : Inventory turnover ratio = sales / closing inventory Material 'P' =

360000 / 45000 = 8 times

Material 'Q' = 450000 /50,000 = 9 times

ii) Number of days for which the inventory is held

∴ Number of days = $\frac{\text{Number of days in a year}}{\text{Inventory Turnover Ratio}}$

Material 'P' = $\frac{365}{5}$ = 73 days

Material 'Q' = $\frac{365}{6}$ = 61 days

9.10 QUESTIONS

1.Define Inventory and explain the various costs of inventory?2.Why we do not want to hold inventories?

3. What do you understand by inventory control? Explain its objectives and importance.
4. What are the selecting techniques of inventory control?
5. What is the significance of Economic Order Quantity?
6. What are the objectives of Inventory Control?
7. Write short notes on the following :
   a. Inventory,
   b. Inventory control
   c. Cost of inventory,
   d. ABC analysis/Pareto analysis.
   e. Inventory Turnover Ratio

8. Practical Problems

1) Following information is available from the books of manufacturing company for material 'X' for the year ending 2015.

Normal usage	□	900 units per week each
Maximum usage	□	1200 units per week each
Minimum usage	□	600 units per week each
Reorder quantity	□	850 units
Reorder period	□	4 to 6 week

Calculate Re-order level, Minimum level, Maximum level andAverage stock level.

(Ans. Reorder level - 7200 units, Minimum level–2700 units Maximum level - 5650 units, Average level - 4,175 units)

2) From the following information calculate
   a) Re-order stock level
   b) Minimum stock level
   c) Maximum stock level
   d) Average stock level

Re-order quantity - 36000 units
Time required for delivery - 2 to 4 months
Maximum consumption - 9000 units per month
Normal consumption - 6000 units per month

Ans :

a)	**Re-order**	**-**	**36000 units,**
b)	**Minimum level**	**-**	**18000 units,**
c)	**Maximum level**	**-**	**66000 units,**
d)	**Average level**	**-**	**42000 units**

3) A manufacturing company produces a special product 'Sorbina' the monthly demand for which is 500 units. The following particulars are available in respect of the material used for manufacturing product.

Cost of placing an order - ` 120
Annual carrying cost per unit - ` 12
Normal usage per week - 60 units
Minimum usage per week - 30 units
Maximum usage per week - 90 units
Delivery period - 4 to 6 weeks

Compute : a) Economic Re-order quality
b) Re-order level
c) Minimum level
d) Maximum level and
e) Average level

(Ans. EOQ – 250 units, Re-orders level – 540 units. Minimum level –240unts, maximum level – 670 units, Average level – 455 units.)

4) The following information is available from the books of a company where two types of materials are used, namely A and B.

Normal usage – 300 units per week each
Maximum usage – 450 units per week each
Minimum usage – 150 units per week each
Re-order quantity - A - 2400 units, B - 3600 units
Re-order period- A- 4 to 6 weeks, B - 2 to 4 weeks
Compute 1) Re-order level2) Minimum level
3) Maximum level and 4) Average stock level

Ans. :

		Material A	**Material B**
a)	**Re order level**	**2700 units**	**1800 units**
b)	**Minimum level**	**1200 units**	**900 units**
c)	**Maximum level**	**4500 units**	**5100 units**
d)	**Average stock level**	**2850 units**	**3000 units**

5) From the following particulars, compute Economic order quantity

Annual consumption- 405000 units

Order placing and receiving cost -` 20 per orderAnnual stock holding- 20 % of consumption

(Ans. EOQ - 9,000)

6) X ltd. Produces a product that has monthly demand of 4000 units. The product requires a component A, which is purchased at ` 10 for every finished product one unit at component, is required. The ordering cost is ` 60 and the holding cost is 10% of per annum consumption. Calculate Economic order Quantity

(Ans. EOQ = 6,928)

7) From the following information, calculate Economic order Quantity by using formula and tabulation method.

Annual Requirement (unit)	6400
Ordering cost (per order `)	100
Carrying cost per unit (`)	8
Per unit price(`)	80

The firm can produce inventories in various lots such as

i) 6400 units ii) 3200 units iii) 1600 units
iv) 800 units v) 400 units vi) 200 units
and vii) 100 units

(T.Y.B.Com. M. U. Nov. 14)

(Ans. EOQ =400 units)

8) Find the Economic order Quantity from the following information by Tabulation and Formula method.

Annual Demand	-	20000 units
Cost per article	-	` 1
Inventory carrying cost	-	15%
Cost per order	-	` 15

(Ans. EOQ =2000 units.)

9) The following information relating to a type of material is available.

Annual demand	-	2000 units
Ordering cost	-	` 20/- per order
Storage cost	-	` 2%
Unit Price	-	` 20 /-
Interest due	-	8%
Lead Time	-	. ½ month

Calculate Economic order Quantity and Inventory cost of rawmaterial.

(**Ans. EOQ =200 units, Inventory cost = 40400)**

10) From the following information, calculate Economic order Quantity and the number of orders to be placed in one quarter of the year.

i) Quarterly consumption of materials-2000 kg

ii) Cost of placing an order-` 50

iii) Cost per unit -` 40

iv) Storage and Carrying cost- 8% on average inventory

(**Ans. EOQ -500 units, No. of orders per quarter – 04 orders)**

11) A manufacturer requires 9600 units of a certain commodity annually. This is currently purchased from a regular supplier at ` 50 per unit. The cost of placing an order is ` 60 per order and annual carrying cost is ` 5 per piece. What is EOQ for placing an order ?

(Ans. EOQ -480 units)

12) The following information is available from the books of M/s Mahi Enterprises for the year 2015.

Particulars	Materials 'A' (`)	Material 'B' (`)
Opening stock	2000	3000
Purchases	26000	7000
Closing stock	3000	3500

Calculate the material Turnover Ratio and determine whichmaterial is moving fast.

(Ans. Material / Inventory Turnover Ratio – A – 10 times, B - 2 times)

13) From the following for the year ending 31st March 2015. Compute

a) Cost of material consumed
b) Average inventory
c) Inventory Turnover Ratio
d) Number of days for which material is held.
e) Which material is moving fast.

Particulars	Materials No. 1(`)	Materials No. 2(`)
Opening stock (01.04.14)	10000	15000
Closing stock (31.03.15)	25000	5000
Purchases during the year	100000	75000

(Ans.

		Materials No. 1( )	Materials No. 2(`)
a)	**Material Consumed**	**85000**	**85000**
b)	**Average Inventory**	**17500**	**10000**
c)	**Inventory Turnover ratio**	**4.85 times**	**8.5 times**
d)	**No. of days for material held**	**75.25days**	
		75 days	**42.94 days**
		43 days	
e)	**Material 1 is moving fast)**		

14) Calculate stock holding period for material if, Opening stock ` 12000, Closing stock - ` 10,000 and Purchases during theyear ` 53000 Assumption : No. of working days in a year – 364

(Ans. Material / Stock period – 73 days.)

15) From the following information, calculate
a) EOQ and b) Total annual carrying ordering cost at that quantity.

Semi annual consumption	-	6000 units
Purchase price of input unit	-	` 25
Quarterly carrying cost	-	3%
Order cost per order	-	` 45

(Ans. EOQ – 600 units, Total Annual carrying and Ordering Cost - ` 1800)

16) From the following information, calculate EOQ and Total Annual carrying and ordering cost at that quantity and material holding period also.

Quarterly consumption	-	750 units
Purchase price per unit	-	` 25/-
Semi – Annual carrying cost	-	6%
Order cost per order	-	` 45/-

(Ans. EOQ – 300 units, carrying and ordering cost - ` 900)

17) Calculate the stock turnover ratio from the following

Opening stock	-	` 80000
Closing stock	-	` 160000
Sales	-	` 620000
Sales Return	-	` 20000
Gross Profit Ratio	-	20% on sales

(Ans. Stock Turnover Ratio = 4 times)

Net sales 62000 - 20000 `600000() G.P.

20% of sales `12000

Cost of Goods sold - 480000

18) Calculate stock turnover Ratio and stock of material holding period in days

Opening stock	-	` 60000
Closing stock	-	` 140000
Net sales	-	` 300000
Gross profit @	-	20 % on sales
Working days of year	-	365

(Ans. Stock turnover ratio – 4 times, Stock holding period – 91.25 or91 days)

10

INVENTORY ACCOUNTING

Unit Structure:

10.1Objectives
10.2 Stores Records
10.3 Issue of Materials
10.4 Pricing of Materials Issued
10.5 First In First Out (Fifo)
10.6 Average Cost
10.7 Solved Problems
10.8 Exercise

10.1 OBJECTIVES

After studying the unit students will be able to:

- Know the important store records.
- Explain about issue of material.
- Explain the methods of stock valuation.
- Know the advantages and disadvantages of FIFO method and Average cost method.
- Solve the problems of stock valuation.

10.2 STORES RECORDS

The important function of the storekeeper is to maintain records of receipts, issues and balances of various items of materials. Bin Card and store ledger are two important stores records that are kept for making a record of the various items at stores,

I) BIN CARD :

A bin is a place where the materials are stored. It may be a shelf, an aluvarch, open space etc. depending upon the nature of the commodity. A bin card provides a quantitative record of the receipts, issues and balance of materials. The bin cards are usually attached to or placed near to the bin so that receipts and issues may be entered therein as soon as they take place. Separate bin cards are prepared for each item of stores. Thus, bin card provides a continuous record of the stock in each bin and assist the storekeeper to control the stock. For each materials, the maximum stock to be held are noted on the card. An ordering level is also indicated therein so that fresh supplies may be ordered before the minimum is reached. A specimen of the bin card is given

below:

BIN CARD
Name ....
Description
....
Bin No. ....
Location Code

Maximum level ....
Minimum level ....
Ordering level ,........
Re-ordering quantity .....
Unit ....

Date Receipts Issues Balance Audit
G.R. No. Qty. Date Req. No. Qty Qty
Date Initials

ii) Stores Ledger

Stores ledger is a continuous record of stores received and issued and discloses the balance in hand at any time both in quantity and value. It includes an account of each class of materialsand facilitates ascertainment of all details relating to the material in minimum time. It provides management with a perpetual inventory. A specimen of the stores ledger is given below:

STORES LEDGER

Name ....
Description
....

Maximum level ....
Minimum level ....
Ordering level ,........
Re-ordering quantity .....
Unit ....

Date RECEIPTS ISSUES BALANCE Remarks
G.R. No. Qty. Rate Req. No. Qty Amt. Qty.
Rate Amt.

10.3 ISSUE OF MATERIALS

All materials in the stores are meant for issue to various departments. The procedure for the issue is normally laid down by the management. The storekeeper issues materials to various department against material requisition note, the specimen of whichis given below:-

Specimen of Materials Requisition

MATERIAL REQUISITON

Department Serial

Job No. Date

Code No. Description Quantity Weight Bin Card No. Stores Ledger Folio Rate Amount

Rs.

Authorised by	Received by….. Checked by

On receipt of material requisition, the storekeeper issues the necessary materials after obtaining the signature of the personreceiving the materials. Materials requisitioned from the storekeeper and not needed or found to be defective are returnedto the storeroom and a returned materials report is prepared by the concerned person upon receipt of the materials. Sometimes, it is necessary to return any rejected, excess or damaged materials to the supplier after making correct entries in the stores ledger.

Materials are issued from stores on properly prepared and approved materials requisition. It is a written order to the storekeeper to deliver materials to the place and the department. The materials requisition note includes date, requisition number, department charged, name of the stores, ledger account to be credited, description of materials, quantity, unit price, total value, delivery point and the signature of the person requisitioning the material and signature of the departments executive approving the requisition or comparatively fixed list of materials generally use a special form of material requisition which is called as `bill of materials’. Materials requisitioned from the stores and not required

or found to be defective are returned to the stores, where a returned material report is prepared by the concerned person. The amount and value of materials returned to the stores are deducted from total value of materials issued. Similarly, the amount shown bymaterials returned is deducted from the total amount charged to each department. It may be necessary to return any rejected, excess or damage materials to the supplier. This also requiressome correction entries in the stores ledger.

10.4 PRICING OF MATERIALS ISSUED

When materials are purchased they are recorded at price at which they are purchased after asking necessary adjustments for discounts, transportation charges, cost of containers etc. But, when it comes to the issue of materials, the problem arises with regard to the price at which each issue should be recorded because thedifferent quantities of materials are purchased at different prices.For this purpose, a number of methods of pricing the issue of materials are used which are as follows:-

a) **FIFO Method :-** The first in first out method is used when the materials received but are to be issued first. The price of the earliest lot/ quantity is taken first and then for the next lot. The value of closing stock confirms more or less, to the current market price. This method is suitable for falling price.

b) **LIFO Method : -** The last in first out method, is used when materials received last are issued first. The storekeeper will charge the cost price of the latest lot purchased. This is suitable in the times of rising prices.

c) **Average Rate Method:-** Under this method the materials are issued at a price which is an average price of materials purchased. The simple average is an average of prices without having regard to the quantities involved. Weighted average price is used in order to avoid fluctuation in price and reduce the number of calculations. Weighted average of the total cost and total quantities of materials purchased. is calculated each time a purchase is made.

10.5 FIRST IN FIRST OUT (FIFO)

10.5.1 MEANING

Under the method the earliest lot of materials or goods purchased or goods manufactured are exhausted first and closing stock is out of the latest consignments received or goodsmanufactured and is valued at the cost of such goods. In other words: cost of goods sold is calculated keeping in view the earliest lots exhausted on the presumption that units are sold in which they were acquired. In short under this method it is assumed that goods or materials which are purchased first are issued first stock consist of latest purchase. Hence items lying in the stock should be valued at latest purchase price.

10.5.2 ADVANTAGES

(1) This method is simple to understand and easy to operate.

(2) It is logical method because it takes a into consideration the normal procedure of utilizing first those items of inventory which are received or manufactured first.

(3) This method is very useful when prices are falling because cost of goods so sold will be high on account of using earliest lots which are costly.

(4) Closing stock is valued nearer the market price as it would consist of recent purchase of units.

(5) This method is useful when transactions are not too many and prices are fairly steady.

(6) This method is useful when inventory is subject to deterioration and obsolescence.

10.5.3 DISADVANTAGES

(1) This method increases the possible of clerical errors if the price fluctuates, considerably as every time as issue of material is sold, the store ledger clerk will have to go through his asctain the price to be changed.

(2) If the prices fluctuate, comparison between different jobs executed by the concern becomes difficult because one job started a few minutes later than another of the same nature may have consumed the supply of lower priced or higher priced stock.

(3) Market prices as it is calculated keeping in view the earliest last which were purchased at lower rate.

10.6 AVERAGE COST

The principal on which the average cost method is based is that all items on the store are so mixed up that consumption of material or sale of finished goods cannot at the average cost of the various items on hand. Average may be of two types :

(a) Simple Average Method (not in syllabus)
(b) Weighted Average Method

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Weighted average method is quite superior to other methods
and it is better to follow this method. This method can be used with advantage in those cases where price and quantity vary widely.The average rate does not change with issue but would vary with a fresh supply of materials received when a new average will have to be calculated, in a period of fluctuating price this method will even out the fluctuations. This method is also goods as the weighted average rate lies in between the extreme rates as shown by FIFO and LIFO method. However the difficulty is that fresh calculations are needed at every purchase of materials or goods.

10.7 SOLVED PROBLEMS

Illustration No. 1

From the following particulars prepared Stores ledger for the monthof Mar 08

(a) FIFO to "ABC", (b) Weighted average to "XYZ".

	ABC	XYZ
Stocks (kgs) on1-3-2008	2000 @ Rs. 28	4,000 @ Rs. 13
Purchases (kgs)		
[i] On 11-3-2008	1,800 @ Rs. 27	2,500 @ Rs. 14
[ii] On 21-3-2008	1,700 @ Rs. 25	2,000 @ Rs. 18
Sales (kgs)		
[i] On 6-3-2008 1,300	2,500	
[ii] On 15-3-2008	1,400	2,000
[iii] On 18-3-2008	700	1,300
[iv] On 29-3-2008	1,100	1,70

(IDE, Nov. 1999, adapted)

Solution :

(A) FIFO to "ABC"

STOCK LEDGER OF ABC

Date	Receipts			Issues			Balance		
	Units	Price	Amt.	Units	Price	Amt.	Units	Price	value
01-3-2008	Opening	-	-	-	-	-	2,000	28.00	56,000
06-3-2008	-	-	-	1,300	28.00	36,400	700	28.00	19,600
11-3-2008	1,800	27.00	48,600	-	-	-	700 1,800	28.00 27.00	19,600 48,600
15-3-2008	-	-	-	700 700	28.002 7.00	19,600 18,900	1,100	27.00	29,700
18-3-2008	-	-	-	700	27.00	18,900	400	27.00	10,800

Date	Receipts			Issues			Balance		
	Units	Price	Amt.	Units	Price	Amt.	Units	Price	Amt.
21-3-2008	1,700	25.00	42,500	-	-	-	400 1,700	27.00 25.00	10,800 42,500
29-3-2008	-	-	-	400 700	27.00 25.00	10,800 17,500	1,000	25.00	25,000

Therefore, the value of stock of ABC as on 31-3-2004 : 1,000 units@ Rs. 25.00 = Rs. 25,000

(B) Weighted Average (Under Perpetual System of Inventory)

STOCK LEDGER OF XYZ

Date	Receipts			Issues			Balance	
	Units	Price	Amt.	Units	Wt. Avg. Rate	Amt.	Units	Value
01-3-2008	Opening	-	-	-	-	-	4,000	52,000
06-3-2008	-	-	-	2,500	13.00	32,500	1,500	19,500
11-3-2008	2,500	14	35,000	-	-	-	4,000	54,500

15-3-2008	-	-	-	2,000	13.63	27,250	2,000	27,250
18-3-2008	-	-	-	1,300	13.63	17,712	700	9,538
21-3-2008	2,000	18	36,000	-	-	-	2,700	45,538
29-3-2008	-	-	-	1,700	16.87	28,671	1,000	16,867

Working Notes :

1] Issued of XYZ on March 15 is valued at Rs. 13.63 which is the weighted average rate, arrived at as follows :

$$\frac{19,500+35,000}{1,500+2,500} = \frac{54,500}{4,000} = 13.625 \text{ r / o } 13.63$$

2] Issue of XYZ on March 29 is valued at Rs. 16.87 per kg. which is the weighted average rate arrived at as follows :

$$\frac{9,538+36,000}{700+2,000} = \frac{45,538}{2,700} = 16.865 \text{ r / o } 16.87$$

Therefore, the value of stock as on 31-3-2008 : 1,000 units @Rs. 16.87 = Rs. 16,867

Illustration : 2

From the following information relating A to Z item, value closingstock on 31-12-2008 applying – (a) FIFO, (b) Weighted average

Stocks (kgs) on 1-12-2008	5,000 units @ Rs. 14
Purchases (kgs)	
[i] On 18-12-2008	4,200 units @ Rs. 13
[ii] On 23-12-2008	3,800 units @ Rs. 9
Sales (kgs)	
[i] On 7-12-2008	1200 units
[ii] On 16-12-2008	2600 units
[iii] On 19-12-208	1800 units
[iv] On 30-12-2008	3400 units

(IDE, April 1999, adapted)

Solution :

(A) FIFO
STOCK LEDGER

Date	Receipts			Issues			Balance		
	Units	Price	Amt.	Units	Price	Amt.	Units	Price	value
01-12-2008	Opening	-	-	-	-	-	5,000	14.00	70,000
07-12-2008	-	-	-	1,200	14.00	16,800	3,800		53,200
16-12-2008	-	-	-	2,600	14.00	36,400	1,200	14.00	16,800
18-12-2008	4,200	13.00	54,600	-	-	-	1,200 4,200	14.00 13.00	16,800 54,600
19-12-2008	-	-	-	1,200 600	14.00 13.00	16,800 7,800	3,600	13.00	46,800
23-12-2008	3,800	9.00	34,200	-	-	-	3,600 3,800	13.00 9.00	46,800 34,200
30-12-2008	-	-	-	3,400	13.00	44,200	200 3,800	13.00 9.00	2,600 34,200

Therefore, the value of stock as on 31-12-2008 : 4,000 units @ Rs.36,800

B] Weighted Average (Perpetual Inventory system)
STOCK LEDGER

Date	Receipts			Issues			Balance	
	Units	Price	Amt.	Units	Wt. Avg. Rate	Amt.	Units	Value
01-12-2008	Opening	-	-	-	-	-	5,000	70,000
07-12-2008	-	-	-	1,200	14.00	16,800	3,800	53,200
16-12-2008	-	-	-	2,600	14.00	36,400	1,200	16,800
18-12-2008	4,200	13.00	54,600	-	-	-	5,400	71,400
19-12-2008	-	-	-	1,800	13.22	23,796	47,607	47,604
23-12-2008	3,800	9.00	34,200	-	-	-	7,400	81,804
30-12-2008	-	-	-	3,400	11.05	37,570	4,000	44,234

Working Notes :

[1] Issue on December 19 is valued at Rs. 13.22 which is the weighted average rate, arrived at as follows :

$$\frac{16,800+54,600}{1,200+4,200} = \frac{71,400}{5,400} = 13.222 \text{ r/o } 13.22$$

[2] Issue on December 30 is valued at Rs. 11.05 per kg. which is the weighted average rate arrived at as follows :

$$\frac{47,604+34,200}{3,600+3,800} = \frac{81,804}{7,400} = 11.054 \text{ r/o } 11.05$$

Therefore, the value of stock as on 31-12-2003 : 4,000 units @Rs. 11.05 = Rs. 44,234

Illustration : 3

Sumit Ltd. has purchased and issued the materials in the followingorder :

Month	Date	Particulars	Units	Cost Per Unit Rs.
August, 2003	01	Purchases	300	3
	04	Purchases	600	4
	06	Issues	500	-
	10	Purchases	700	4
	15	Issues	800	-
	20	Purchases	300	5
	23	Issues	100	-

Ascertain the quantity of closing stock as on 31st August, 2003 andsales what will be the value under the following methods.

[i] First in first out method. [ii] Weighted Average method.

(IDE, Nov. 2000, adapted)

Solution :

(A) FIFO
STOCK LEDGER

Date	Receipts			Issues			Balance		
	Units	Price	Amt.	Units	Price	Amt.	Units	Price	value
1-8-2003	Opening	-	-	-	-	-	Nil	Nil	Nil
1-8-2003	300	3.00	900	-	-	-	300	3.00	900
4-8-2003	600	4.00	2,400	-	-	-	300 600	3.00 4.00	900 2,400
6-8-2003	-	-	-	300 200	3.00 4.00	900 800	400	4.00	1,600

10-8-2003	700	4.00	2,800	-	-	-	400 700	4.00 4.00	1,600 2,800
15-8-2003	-	-	-	400 400	4.00 4.00	1,600 1,600	300	4.00	1,200
20-8-2003	300	5.00	1,500	-	-	-	300 300	4.00 5.00	1,200 1,500
23-8-2003	-	-	-	100	4.00	400	200 300	4.00 5.00	800 1,500

Therefore, the value of stock as on 31-8-2003 : Rs. 2,300

[B] Weighted Average (Perpetual Inventory System)

STOCK LEDGER

Date	Receipts			Issues			Balance	
	Units	Price	Amt.	Units	Wt. Avg. Rate	Amt.	Units	Value
01-8-2003	Opening	-	-	-	-	-	Nil	Nil
01-8-2003	300	3.00	900	-	-	-	300	900
04-8-2003	600	4.00	2,400	-	-	-	900	3,300
06-8-2003	-	-	-	500	3.67	1,835	400	1,465
10-8-2003	700	4.00	2,800	-	-	-	1,100	4,265
15-8-2003	-	-	-	800	3.88	3,104	300	1,161
20-8-2003	300	5.00	1,500	-	-	-	600	2,661
23-8-2003	-	-	-	100	4.44	444	500	2,217

Working Notes :

[1] Issue on August 6 is valued at Rs. 3.67 which is the weighted average rate, arrived at as follows :

$$\frac{900+2,400}{300+600} = \frac{3,300}{900} = 3.666 \text{ r/o } 3.67$$

[2] Issue on August 15 is valued at Rs. 3.88 per kg. which is the weighted average rate arrived at as follows :

$$\frac{1,465+2,800}{400+700} = \frac{4,265}{1,100} = 3.877 \text{ r/o } 3.88$$

[3] Issue on August 23 is valued at Rs. 4.44 per kg. which is the weighted average rate arrived at as follows:

$$\frac{1,161+1,500}{300+300} = \frac{2,661}{600} = 4.435 \text{ or } 4.44$$

Therefore, the value of stock as on 31-8-2002 : 500 units @ Rs. 4.44 = Rs. 2,217

Illustration :4

Keep stock record on FIFO, and Weighted Average basis from thefollowing transactions :

Purchases : March 2004.

Date	Units	Rate Per unit (Rs.)
01	500	18
04	700	20
09	900	18
15	300	25
25	200	20
31	500	25

Sales : March 2004

02	200	22
07	500	25
11	400	21
18	800	28
27	500	25

Find out the goods sold and the profit.

Solution :

FIFO METHOD

STOCK LEDGER

Date	Purchases		Sales	Stock	
March, 2004	Units	Rate	Units	Units × Rate =	Amount
01	500	18	-	500 × 18 =	9,000
02	-	-	200	300 × 18 =	5,400
04	700	20	-	300 × 18 =	5,400
				700 × 20 =	14,000
					19,400
07	-	-	500	500 × 20 =	10,000
09	900	18	-	500 × 20 =	10,000
				900 × 18 =	16,200
					26,200
11	-	-	400	100 × 20 =	2,000
				900 × 18 =	16,000
					18,200
15	300	25	-	100 × 20 =	2,000
				900 × 18 =	16,200
				300 × 25 =	7,500
					25,7□0
18	-	-	800	200 × 18 =	3,600
				300 × 25 =	7,500
					11,100
25	200	20	-	200 × 18 =	3,600
				300 × 25 =	7,500
				200 × 20 =	4,000
					15,100
27	-	-	500	200 × 20 =	4,000
31	500	25	-	200 × 20 =	4,000
				500 × 25 =	12,500
					16,500

Value of stock under FIFO is Rs. 16,500.

Profit when stock is valued under FIFO basis. Opening Stock

Nil Rs.

Add : Purchases

500 × 18 = 9,000
700 × 20 = 14,000
900 × 18 = 16,200
300 × 25 = 7,500
200 × 20 = 4,000
500 × 25 = 12,500 63,200

63,200

Less : Closing Stock (as valued under FIFO) 16,500 Cost of Goods Sold (A) 46,700

Sales

200 × 22 = 4,400
500 × 25 = 12,500
400 × 21 = 8,400
800 × 28 = 22,400
500 × 25 = 12,500

(B) 60,200

Profit (B-A) 13,500

[B] Weighted Average (Perpetual Inventory System)

STOCK LEDGER

Date	Receipts			Issues			Balance	
	Units	Price	Amt.	Units	Wt. Avg. Rate	Amt.	Units	Value
01-3-2004	500	18.00	9,000	-	-	-	500	9,000
02-3-2004	-	-	-	200	18.00	3,600	300	5,400
04-3-2004	700	20.00	14,000	-	-	-	1,000	19,400
07-3-2004	-	-	-	500	19.40	9,700	500	9,700
09-3-2004	900	18.00	16,200	-	-	-	1,400	25,900
11-3-2004	-	-	-	400	18.50	7,400	1,000	18,500
15-3-2004	300	25.00	7,500	-	-	-	1,300	26,000
18-3-2004	-	-	-	800	20.00	16,000	500	10,000
25-3-2004	200	20.00	4,000	-	-	-	700	14,000
27-3-2004	-	-	-	500	20.00	10,000	200	4,000
31-3-2004	500	25.00	12,500	-	-	-	700	16,500
Total			63,200			46,700		

Working Notes :

[1] Issue on March 7 is valued at Rs. 19.40 which is the weighted average rate, arrived at as follows :

$$\frac{5,400+14,000}{300+700} = \frac{19,400}{1,000} = 19.40$$

[2] Issue on March 11 is valued at Rs. 18.50 which is the weighted average arrived at as follows :

$$\frac{9,700+16,200}{500+900} = \frac{25,900}{1,400} = 18.50$$

[3] Issue on March 18 is valued at Rs. 20 which is the weighted average rate on arrived at as follows :

$$\frac{18,500+7,500}{1,000+300} = \frac{26,000}{1,300} = 20$$

[4] Issue on March 27 is valued at Rs. 20.00 which is the weighted average rate, arrived at as follows :

$$\frac{10,000+4,000}{500+200} = \frac{14,000}{700} = 20$$

Therefore, the value of stock as on 31-3-2000 : 700 units Rs.16,500.

[5] Cost of Goods sold = Opening Stock + Purchases – Closing Stock = 63,200 – 16,500 = 46,700

[6] Profit = Sale – Cost of goods sold = 60,200 – 46,700 = 13,500

Illustration : 5

Following are the purchases and sales of wheat in the months of March, 2004. Prepare a statement showing valuation of stock on the basis of (i) FIFO and (ii) Weighted Average Cost method.

Date	Purchases	Rate	Sales
2004	(Kg.)	(Rs.)	(Kg.)
March 1	600	4	-
4	-	-	300
5	300	3.80	-
10	-	-	200
18	200	4.20	-
23	-	-	400
29	400	4.40	-
31	-	-	300

Out of purchases March 5, 50 Kgs. were returned to the supplier onMarch 8.

Out of Sales on March 23, a customer returned 20 Kgs. on March26.

Solution :FIFO

STOCK LEDGER

Date	Purchases / Returns		Sales / Returns	Stock	
2004	Units (Kg.)	Rate (Rs.)	Units (Kg)	Units × Rate =	Amt.
Mar. 1	600	4	-	600 × 4 =	2,400
04	-	-	300	300 × 4 =	1,200
05	300	3.80	-	300 × 4 =	1,200
				300 × 3.8 =	1,140
					2,340
08	-	-	50	300 × 4 =	1,200
			(Returns)	250 × 3.8 =	9,50
					2,150
					(Note – 1)
10	-	-	200	100 × 4 =	400
				250 × 3.8 =	9,50
					1,350
18	200	4.20	-	100 × 4 =	400
				250 × 3.8 =	9,50
				200 × 4.2 =	840
					2,190
23	-	-	400	150 × 4.2 =	630
26	20	4.20	-	170 × 4.2 =	714
	(returns)				(Note – 2)
29	400	4.40	-	170 × 4.2 =	714
				400 × 4.4 =	1,760
					2,474
31	-	-	300	270 × 4.4 =	1,188

Value of Stock under FIFO is Rs. 1,188.

Note : 1

50 Kgs. returned on March, 8 are out of March 5 Purchases, hence they are shown as issued at a rate of 3.8 per Kg. and accordingly stock is calculated.

Note : 2

Sales returns on March 26 are out of March 23 Sales. Under FIFO method Sales on March 23 are out of Kg. 100 @ Rs. 4 + Kg. 250 @Rs. 3.8 + Kg. 50 @ Rs. 4.2. Hence 20 Kg. received are priced atRs. 4.20 per Kg.

B] Weighted Average (Perpetual Inventory System)

STOCK LEDGER

Date	Receipts			Issues			Balance	
	Units	Price	Amt.	Units	Wt. Avg. Rate	Amt.	Units	Value
01-3-2004	600	4.00	2,400	-	-	-	600	2,400
04-3-2004	-	-	-	300	4.00	1,200	300	1,200
05-3-2004	300	3.80	1,140	-	-	-	600	2,340
05-3-2004	-	-	-	50	3.90	195	550	2,145
10-3-2004	-	-	-	200	3.90	780	350	1,365
18-3-2004	200	4.20	840	-	-	-	550	2,205
23-3-2004	-	-	-	400	4.01	1,604	150	601
26-3-2004	20	4.01	80	-	-	-	170	681
29-3-2004	400	4.40	1,760	-	-	-	570	2,441
31-3-2004	-	-	-	300	4.28	1,284	270	1,157

Working Notes :

[1] Issue on March 5 & March 10 is valued at Rs. 3.90 which is the weighted average rate, arrived at as follows :

$$\frac{1,200+1,140}{300+300}=\frac{2,340}{600}=3.90$$

[2] Purchase returns of 50 kg. are out of the total stock of 600 kg. which was valued at Rs. 3.90 per kg.

[3] Issue on March 23 is valued at Rs. 4.01 per kg. which is the weighted average rate arrived at as follows :

$$\frac{1,365+840}{350+200} = \frac{2,205}{550} = 4.01$$

[4] Sales on March 23 are out of stock valued at Rs. 4.01 per kg. Hence returns of 20 kg. are also taken at a rate of Rs. 4.01 per kg.

[5] Weighted Average Rate on March 31 is arrived at as follows :

$$\frac{681+1,760}{170+400} = \frac{2,441}{570} = 4.28$$

Therefore, the value of stock as on 31-3-2008 : 270 units @ Rs.4.28 = Rs. 1,157

Illustration : 6

A company deals in 3 products viz. A, B and C. The details for purchases and sales for January 2004 are as under.

Product	A		B		C	
	Units	Rs.	Units	Rs.	Units	Rs.
Selling Price per Unit		100		200		250
Opening Stock	100	60	100	100	50	120
Purchases :						
Jan 9	300	65	200	110	50	135
Jan 20	100	64	50	120	100	140
Jan 29	50	68	50	125	20	130
Closing Stock	140		70		60	

You are required to prepare a trading and profit and loss account for the month assuming the selling and distribution expenses to be Rs. 63,000. Use FIFO method for stock valuation.

Solution

Stock Ledger (FIFO Method)Product – A

Date	Purchases	Sales	Closing Stock	
	Qty. Rs.	Qty.	Qty. × Rs. =	Amount
01-1-2004	-	-	100 × 60 =	6,000
09-1-2004	4300 × 65	-	100 × 60 =	6,000
			300 × 65 =	19,500
				25,500
20-1-2004	100 × 64	-	100 × 60 =	6,000
			300 × 65 =	19,500
			100 × 64 =	6,400
				31,900
29-1-2004	50 × 68	-	100 × 60 =	6,000
			300 × 65 =	19,500
			100 × 64 =	6,400
			50 × 68 =	3,400
				35,300
Total Sales		100 ×60	90 × 64 =	5,760
During		300 ×65	50 × 68 =	3,400
January		10 × 64		9,160
		410		

Product – B

Date	Purchases	Sales	Closing Stock	
	Qty. Rs.	Qty.	Qty. × Rs. =	Amount
01-1-2004	-	-	100 × 100=	10,000
09-1-2004	200 × 110	-	100 × 100=	10,000
			200 × 110=	22,000
				32,000
20-1-2004	50 × 120		100 × 100=	10,000
			200 × 110=	22,000
			50 × 120 =	6,000
				38,000
29-1-2004	50 × 125		100 × 100=	10,000
			200 × 110=	22,000
			50 × 120 =	6,000
			50 × 125 =	6,250
				44,250
Total Sales		100× 100	20 × 120 =	2,400
During		200 × 110	50 × 125 =	6,250
January		30 × 120		8,650
		330		

Product C

Date	Purchases	Sales	Closing	Stock
	Qty. Rs.	Qty.	Qty. × Rs. =	Amount
01-1-2004	-	-	50 × 120 =	6,000
02-1-2004	50 × 135		50 × 120 =	6,000
			50 × 135 =	6,750
				12,750
20-1-2004	100 × 140	-	50 × 120 =	6,000
			50 × 135 =	6,750
			100 × 140=	14,000
				26,750
29-1-2004	20 × 130	-	50 × 120 =	6,000
			50 × 135 =	6,750
			100 × 140=	14,000
			20 × 130 =	2,600
				29,350
Total Sales		50 × 120	40 × 140 =	5,600
During		50 × 135	20 × 130 =	2,600
January		60 × 140		8,200
		160		

Note : 1

Number of units sold during January :

Product	**A**	**B**	**C**
Opening Stock	100	100	50
Add : Total Purchase	450	300	170
	550	400	220
Less : Closing Stock	140	70	60
Units Sold	410	330	160

Dr.	Trading Account		Cr.
Particulars	**Rs.**	**Particulars**	**Rs.**
To Opening StockA 100 × 60 =6,000 B 100 × 100 = 10,000 C 50 × 120 = 6,000	22,000	By sales A 410 × 100 = 41,000 B 330 × 200 = 66,000 C 160 × 250 = 40,000	1,47,000
To Purchases A 29,300 B 34,250		By Closing Stock A 9,160 B 8,650	
C 23,350	86,900	C 8,200	26,010
To Gross Profit c/d	64,110		
	1,73,010		**1,73,010**

Dr.	Profit & Loss Account		Cr.
Particulars	**Rs.**	**Particulars**	**Rs.**
To Selling & Distribution Expenses	63,000	By Gross Profit b/d	64,110
To Net Profit	1,110		
	64,110		64,110

10.8 EXERCISE

1. Write short Notes
    a. FIFO Method
    b. Weighted average method
2. Practical problems

Problem 1

Prepare a Stores Ledger Account from the followingtransactions assuming that issue of stores have been made on the principle of and also on “First in First Out”.

2000			
January 2	Purchased	2000 units	at Rs. 4.00 per unit
January 20	Purchased	250 units	at Rs. 5.00 per unit
February 5	Issued	1000 units	
February 10	Purchased	3000 units	at Rs. 6.00 per unit
February 12	Issued	2000 units	
March 2	Issued	500 units	
March 15	Purchased	2500 units	at Rs. 5.50 per unit
March 20	Issued	1500 units	(P.U.)

Ans. FIFO Stock : 150 units at Rs. 5.50 = Rs. 8,250

Problem 2

Value the stock under Weighted Average method.

Receipt			
01-1-2000	Opening stock	200 units at	Rs. 3.50 per unit
03-1-2000	Purchased	300 units at	Rs. 4.00 per
13-1-2000	Purchased	900 units at	Rs. 4.30 per unit
23-1-2000	Purchased	600 units at	Rs. 3.80 per unit
Issues			
05-10-2000	Issued	400 units	
15-10-2000	Issued	600 units	
25-10-2000	Issued	600 units	

Ans.

Issue Price rate	**5th**	**15th**	**25th**	**Closing Stock**
a] Weighted Average	**3.80**	**4.25**	**3.98**	**400 units Rs. 1,592**

3. **Select the correct alternative:**

1. In times of rising prices, the pricing of issues will be at a more recent current market prices in

   i) FIFO　　iii) **LIFO**
   ii) Weighted Average　　iv) SimpleAverage

2. When prices fluctuate widely, the method that will smooth out the effect of fluctuations is

   i) Simple Average　　iii) FIFO
   ii) **Weighted Average**　　iv) LIFO

3. The total cost of goods available for sale with a company during the current year is Rs.12, 00,000 and the total sales during the period are Rs.13, 00,000. If the gross profit margin of the company is 33 % on cost, the closing inventory during the current year is

i. Rs.4,00,000
ii. Rs.3,00,000
iii. Rs.2,25,000
iv. Rs.2, 60,000.

4. Consider the following for Alpha Co. for the year 2010-11:
   Cost of goods available for sale Rs.1, 00,000

Total sales Rs. 80,000
Opening stock of goods Rs. 20,000Gross profit margin 25%
Closing stock of goods for the year 2010-11 wasi.
Rs.80,000
ii. Rs.60,000
iii. Rs.40,000
iv. Rs.36, 000.

5. Record of purchase of T.V. sets.

Date	Quantity	Price per unit
	Units	Rs.
March 4	900	5
March 10	400	5.50

Record of issues March 5　600
March 12　400

The value of T.V. sets on 15 March, as per FIFO will bei.
Rs.1,500
ii. Rs.1,650
iii. Rs.1, 575.
iv. None of the three.

6. A firm dealing in cloth has 15000 meters of cloth on April 1,2005 valued at Rs.1, 50,000 according to FIFO. The firm purchased 20000 meters @ Rs.12 per meter during the year ending 31st March, 2006 and sold 30000 meters @ Rs.25 per meter during the same period. As per FIFO, the closing stock will be valued at:

i.Rs.60,000
ii. Rs.1,25,000
iii. Rs.50,000
iv. None of the above.

7. A minimum quantity of stock always held as precaution againstout of stock situation is called ____
   i. Zero stock.
   ii. Risk stock.
   iii. Base stock.
   iv. None of the above.

8. Opening stock of the year is Rs.20, 000, Goods purchasedduring the year is Rs.1, 00,000, Carriage Rs.2, 000 and Selling expenses Rs.2, 000.Sales during the year is Rs.1, 50,000 and closing stock is Rs.25, 000. The gross profit will be

i. Rs.53, 000.
ii. Rs.55, 000.
iii. Rs.80, 000.
iv. Rs.51, 000.

9. The cost of stock as per physical verification of Bharat Ltd. on 10th April, 2011 was Rs.1, 20,000. The following transactions took place between 1st April, 2011 to 10th April, 2011:

Cost of goods sold Rs.10, 000, Cost of goods purchased Rs.40,000, Purchase returns Rs.6, 000
The value of inventory as per books on 31st March, 2011 will be

i. Rs. 1, 56,000.
ii. Rs. 1, 51,000.
iii. Rs. 1, 50,000.
iv. Rs.1, 52,000.

Answers: 1-i, 2- ii, 3-iii, 4-ii, 5-ii, 6-ii, 7-iii, 8-iv, 9-i.

MODULE – VIII

11

INTRODUCTION TO FUND FLOW STATEMENT

Unit Structure

11.1 Learning Objectives:
11.2 Fund Flow Statement
11.3 Benefits of Fund Flow Statement
11.4 Procedure of Preparation of Fund Flow Statement
11.5 Importance of Fund Flow Analysis

11.1 LEARNING OBJECTIVES

- Understanding the concept of fund
- Calculation of fund from operation
- Calculation of changes in working capital
- Preparation of statement of Sources & Application of Funds

11.2 FUND FLOW STATEMENT

Funds flow statement is a financial statement which shows as to how a business entity has obtained its funds and how it has applied or employed its funds between the opening and closing balance sheet dates (during the particular year/period). It can be described as – WHERE GOT-WHERE GONE statement Funds usually refers to cash resources and funds statement is prepared to show the net effect of various business events on the current resources of the organization. In this topic fund should be understood as working capital & funds flow as to mean any change in working capital.

Funds Flow Statement is a statement prepared to analyse the reasons for changes in the financial position of a company between 2 Balance Sheets. It shows the inflow & outflow of funds
i.e. SOURCES and APPLICATIONS of funds for a particular period. In other words Funds flow statement is prepared to explain the changes in the working capital position of a company. There are two types of inflows of funds –

a. Long term funds raised by issue of Shares, Debentures or sale of Fixed Assets
b. Funds generated from operations

If the long term fund requirements of a company are met just out of the Long term Sources of funds, then the whole fund generated from operations will be represented by increase in working capital. However if the funds generated from operations are not sufficient to bridge a gap of long term fund requirement,then there will be a decline in working capital.

11.3 BENEFITS OF FUND FLOW STATEMENT

Funds flow statement is useful for long term analysis. It is very useful tool in the hands of the management for judging the financial & operating performance of the company. The Balance Sheet and the Profit & Loss A/c (Income Statement) fails to provide the information which is provided by the funds flow statement i.e. changes in Financial Position of an enterprise. Such an analysis is of great help to the management, shareholders, creditors etc.

Fund Flow Statement answers the following questions

- Where have the profits gone?
- Why is there an imbalance existing between liquidity position and profitability position of an enterprise?
- Why is the concern financially solid in-spite of losses

Fund flow statement analysis helps the management to test whether the working capital has been effectively used or not andthe working capital level is adequate or inadequate for the requirements of the business. The working capital position helpsthe management in taking policy decisions regarding payment of dividend etc.

Fund flow statement analysis helps the investors to decide whether the company has managed the funds properly. It also indicates the credit worthiness of a company which helps the lenders to decide whether to lend money to the company or not. It helps the management to take policy decisions and to decide about the financing policies and capital expenditure for the future.

11.4 PROCEDURE OF PREPARATION OF FUND FLOWSTATEMENT

Step I - Prepare the statement of changes in working capital
Step II - Analyse the changes in non-current assets and noncurrentliabilities to find out inflow or outflow of funds
Step III - Find out funds from operation

Step IV - Prepare statement of Sources & Application of Funds(Funds Flow Statement)

Step – I

STATEMENT OF CHANGES IN WORKING CAPITAL				
			Change in WC	
Particulars	**Previous Year**	**Current Year**	**Increase Rs.**	**Decrease Rs.**
A. CURRENT ASSETS				
Stock	xx	xx		
Debtors	xx	xx		
Cash/Bank	xx	xx		
Bills Receivable	xx	xx		
Prepaid Expenses	xx	xx		
Accrued Income	xx	xx		
Short term loans & advances	xx	xx		
Marketable Investments	xx	xx		
Total	xxx	xxx		
B. CURRENT LIABILITIES				
Creditos for Goods	xx	xx		
Bills Payable	xx	xx		
Outstanding Expenses	xx	xx		
Bank Overdraft	xx	xx		
Unclaimed/Unpaid Dividend	xx	xx		
Short term loans & advances	xx	xx		
Prov. For Doubtful debts	xx	xx		
Prov. For Discount on debtors	xx	xx		
Total	xxx	xxx		
WORKING CAPITAL (A-B)	xxx	xxx		
Increase / Decrease in Working Capital	x	x		
Total	xxx	xxx	xxx	xxx

Step – II - Working Capital Changes

- **Increase in Current Assets – Increase in Working Capital- Outflow**
- **Increase in Current Liabilities – Decrease in Working Capital - Inflow**
- **Decrease in Current Assets – Decrease in Working Capital - Inflow**
- **Decrease in Current Liabilities – Increase in Working Capital - Outflow**

Step III – Finding Funds from Operations

In this step, we need to calculate the funds generated only from the Operating activities of the business and not from the Investing / Financing activities of the business. The funds from operations shall be prepared as follows:

ADJUSTED PROFIT & LOSS A/C			
Particulars	**Amt**	**Particulars**	**Amt**
		By Balance B/d	xx
To Depreciation	xx	By Profit on sale of non current assets	xx
To Preliminary Expenses w/off	xx	BY Transfer from reserves	xx
To Goodwill w/off	xx	By Income from Investments	xx
To Discount on	xx		
To Loss on sale of non current assets	xx	**By Funds from Operations (Bal Fig.)**	xx
To Prov. For tax	xx		
To Proposed Dividend	xx		
To Transfer to reserves	xx		
To Interim Dividend	xx		
To Balance C/d	xx		
	xxx		xxx

	Particulars	Amt	Amt
	Net Income		xxx
Add	Depreciation on Fixed Assets	xx	
	Amortization of Ingangible Assets	xx	
	Amortization of loss on sale of investments	xx	
	Amortization of loss on sale of fixed assets	xx	
	Losses from other non operating incomes	xx	
	Tax provision (created out of current profits)	xx	
	Proposed Dividend	xx	
	Transfer to Reserves	xx	xxx
Less	Deferred Credits	xx	
	Profit on Sale of Investments	xx	
	Profit on sale of Fixed Assets	xx	
	Any written back reserve or provision	xx	xxx

Step – IV – While preparing the fund flow statement, the sourcesand uses of funds are to be disclosed clearly so as to highlight the sources from where the funds have been generated and uses to which these funds have been applied. This statement is also sometimes referred to as the sources and applications of fundsstatement or statement of changes in financial position.

Funds Flow Statement as on			
Sources of Funds	**Amt**	**Application of Funds**	**Amt**
Funds from operations	xx	Drawings	xx
Sale of Fixed Assets	xx	Purchase of fixed assets	xx
Issue of Shares	xx	Redemption of Pref. Shares	xx
Issue of Debentures	xx	Redemption of Debentures	xx
Loans Taken	xx	Payment of taxes	xx
Sale of Long Term Investment	xx	Payment of Dividend	xx
Receipts of Dividends, Legal Claims, Refund of tax etc.	xx	Repayment of Loans	xx
Decrease in working capital	xx	Increase in working capital	xx
	xxx		xxx

Sources of Funds

- Issue of Equity & Preference Shares
- Receipt of Securities Premium
- Issue of Debentures
- Receipt of Long Term Loans from Banks & Other Financial Institutions
- Receipt of Public Deposits & other Unsecured Loans
- Sales of Fixed Assets, Sale of Investments
- Extraordinary receipt awarded in legal suit
- Income from long term investments
- Funds from operations
- Decrease in Working Capital

Application of Funds

- Redemption of Preference share capital, Redemption of Debentures
- Premium paid on redemption of debentures and preference shares
- Repayment of temporary loans, secured & unsecured
- Purchase of Fixed Assets, Purchase of Investment
- Extraordinary payments and non recurring losses like loss by fire & damages paid
- Payment of Dividend & Interim Dividend, Payment of Tax
- Increase in Working Capital

Formats of Fund Flow Statement

There is no prescribed format as such for the preparation of Funds Flow Statement. The only point to be remembered is that it should be presented in a clear and systematic manner. However, Funds Flow Statements may be prepared in any of the following formats

- Report Form – Remainder Type
- Report Form – Self Balancing Type
- Report Form – Reconciling Type

I	**Remainder Type**				
A	Sources of Funds		xx		
B	Application of Funds		xx		
C	Change in Working Capital (A-B)		xx		
II	**Self Balancing Type**				
A	Sources of Funds	xx	Application of Funds		xx
	Decrease in WC (b/f)	xx	Increase in WC (b/f)		xx
		xxx			xxx
III	**Reconciling Type**				
	Working Capital at the beginning of the year			xxx	
Add	Sources of Funds			xxx	
Less	Application of Funds			xxx	
	Working Capital at the end of the year			xxx	

Fund Flow Analysis
Flow analysis consists of two different analysis namely

Working Capital Analysis – is the analysis & reporting of working capital. Working capital is the excess of current assets over current liabilities. This analysis consist of two statements namely

- Statement of changes in working capital
- Statement of Sources & Application of Funds

Cash Flow Analysis – is the analysis of inflows and outflows of cash. Cash flow analysis results in separate reports viz. Sources and Applications of Cash

Funds flow statement explains as to what caused the changes inthe balance sheet items between two balance sheet dates

11.5 IMPORTANCE OF FUND FLOW ANALYSIS

Funds flow statement is an important financial tool, which analyze the changes in financial position of a firm showing the sources and applications of its funds. It provides useful information about the firm's operating, financing and investing activities during a particular period. The following points highlight the importanceof funds flow statement.

1. Helps in identifying the change in level of current assetsinvestment and current liabilities financing.
2. Helps in analyzing the changes in working capital level of a firm.
3. Shows the relationship of net income to the changes in funds from business operation.

4. Reports about past fund flow as an aid to predict future funds flow.
5. Helps in determining the firms' ability to pay interest and dividend, and pay debt when they become due.
6. Shows the firms' ability to generate long-term financing to satisfy the investment in long-term assets.
7. Helps in identifying the factor responsible for changes in assets, liabilities and owners' equity at two balance sheet date.

COMPARATIVE ANALYSIS			
Point	**Income Statement**	**Balance Sheet**	**Fund Flow Statement**
Meaning	Statement showing results of activities conducted during the year	Statement of assets & liabilities of an organisation	Statement of changes in assets & liabilities of an organisation
Objective	To ascertain profit/loss	To ascertain financial position	To know the change in financial position over the year or how the profit has been utilised
Legality	Obligatory to prepared as per schedule VI of the Indian Companies Act, 1956	Obligatory	Non Obligatory
Format	No format but should be subject to certain requirements	Prescribed Format	No prescribed format
Sections	Incomes & Expenses	Assets & Liabilities	Sources & Applications
Basis	Prepared on the basis of nominal accounts & other information	Prepard on the basis of ledger balances and additional information	Prpepared on the basis of two consucutive balance sheets

Illustration - 1

From the records of a company the following information has been extracted.

	Particulars	Amount
	Net profit after providing for the following items	80000
	Loss on sale of equipments	15000
	Premium on redemption of debentures	1000
	Discount on issue of debentures	2000
	Depreciation on buildings	15000
	Depletion of wasting assets	5000
	Goodwill written off	20000
	Interim Dividend	20000
	Profit on sale of fixed assets	35000
	Excess taxation provided	20000
	Income from investments	5000
	Transfer to general reserve	6000
	Preliminary expenses written off	1500
	Profit on revaluation of investments	2000

Solution

	Particulars		
	Net Profit		80000
Add:	**Non Cash & Non Operating Expenses**		
	Loss on sale of equipments	15000	
	Discount on issue of debentures	2000	
	Depreciation on Buildings	15000	
	Depletion of wasting assets	5000	
	Goodwill written off	20000	
	Excess taxation provided	20000	
	Transfer to general reserve	6000	
	Preliminary expenses written off	1500	
	Premium on redemption of debentures	1000	
	Interim Dividend	20000	105500
			185500
Less:	**Non Cash & Non Operating Incomes**		
	Profit on revaluation of investments	2000	
	Profit on sale of Non current assets (fixed assets)	35000	
	Income from investments	5000	42000
	Funds from Operations		**143500**

Illustration 2

From the following data calculate funds from operations

Sales	400000	Excess provison for	
Cost of goods sold	280000	tax writen back	31000
Salaries	30000	Loss on sale of Fixed Assets	60000
Rent	20000	Interest received on Investments	10000
Selling Expenses	7000	Profit on sale of Investments	20000
Office Expenses	2000	**Profit & Loss A/c**	
Preliminary exp. w/off	9000	- Opn Balance	29000
Trf. To General Reserve	21000	- Closing Balance	60000
Postage & Telegram	1000		

Solution:

	Operating Incomes		
	Sales		400000
Less:	**Operating Expenses**		
	Cost of Goods Sold	280000	
	Salaries	30000	
	Rent	20000	
	Selling Expenses	7000	
	Office Expenses	2000	
	Postage & Telegram	1000	340000
	Funds from Operations		**60000**

Illustration 3

From the following data, prepare Fund Flow Statement

Liabilities	**2015**	**2016**	**Assets**	**2015**	**2016**
Equity Share Capital	100,000	150,000	Plant & Machinery	200,000	180,000
Pref. Share Capital	50,000	30,000	Furnitures	90,000	130,000
Profit & Loss A/c	40,000	65,000	Investments	80,000	85,000
Debentures	80,000	120,000	Stock	20,000	30,000
Other Secured Loans	90,000	100,000	Debtors	50,000	65,000
Sundry Creditors	65,000	20,000	Bank	5,000	7,000
Bills Payable	5,000	7,000	Cash	1,000	200
Outstanding Expenses	16,000	5,200			
	446,000	**497,200**		**446,000**	**497,200**

Solution

A. Statement of Changes in Working Capital

Particulars	**2015**	**2016**	**Increase in WC**	**Decrease in WC**
Current Assets (A)				
Stock	20000	30000	10000	
Debtors	50000	65000	15000	
Bank	5000	7000	2000	
Cash	1000	200		800
Total	**76000**	**102200**		
Current Liabilities (B)				
Sundry Creditors	65000	20000	45000	
Bills Payable	5000	7000		2000
O/s Expenses	16000	5200	10800	
Total	**86000**	**32200**		
Working Capital (A-B)	-10000	70000	82800	2800
Net Increase in Working Capital (82800-2800)				**80000**

B. Fund Flow Statement

Sources of Funds		**Application of Funds**	
Increase in Share Capital	50000	Redemption of Debentures	20000
Issue of Debentures	40000	Purchase of Furniture	40000
Secured Loans Received	10000	Purchase of Investments	5000
Sale of Plant & Machinery	20000	Increase in Working Capital	80000
Funds from Operations	25000		
(P&L A/c 65000-40000)			
	145000		**145000**

Illustration 4

Liabilities	2015	2016	Assets	2015	2016
Capital - Opn Balance		80,000	Goodwill	10,000	8,000
Add: Capital Introduced		10,000	Plant	30,000	46,000
Add: Net Profit		7,000	Furniture	7,000	6,000
Less: Drawings		6,000	Investment	31,000	57,000
Capital - Cl. Balance	80,000	91,000	Stock	22,000	17,000
Bank Loan	45,000	64,000	Sundry Debtors	15,000	19,500
Creditors	12,000	10,000	Bills Receivable	21,000	18,000
Bills Payable	17,000	14,000	Bank Balance	18,000	7,500
	154,000	**179,000**		**154,000**	**179,000**

Depreciation written off against plant is Rs.4000 & Furniture Rs.1000

Prepare - Statement of sources & uses of funds

- Statement of changes in working capital

Solution

A. Statement of Changes in Working Capital

Particulars	2015	2016	Increase in WC	Decrease in WC
Current Assets (A)				
Stock	22000	17000		5000
Debtors	15000	19500	4500	
Bills Receivables	21000	18000		3000
Bank Balance	18000	7500		10500
Total	**76000**	**62000**		
Current Liabilities (B)				
Creditors	12000	10000	2000	
Bills Payable	17000	14000	3000	
Total	**29000**	**24000**		
Working Capital (A-B)	47000	38000	9500	18500
Net Decrease in Working Capital (47000-38000)				**9000**

B. Fund Flow Statement for the year 2016

Sources		Applications	
Bank Loan taken	19000	Investments Purchased	26000
Capital Introduced	10000	Plant Purchased	20000
Funds from Operations	14000	Drawings	6000
Increase in Working Capital	9000		
	52000		**52000**

c. Adjusted Profit & Loss A/c

To Goodwill Written off	2000	By Funds from Operations	14000
To Depreciation On			
Plant	4000		
Furniture	1000		
To Net Profit	7000		
	14000		**14000**

d. Plant A/c

To Opn Balance	30000	By Depreciation	4000
To Bank (Bal. figure)	20000	By Balance c/d	46000
	50000		**50000**

e. Capital A/c

To Drawings	6000	By Balance b/d	80000
To Balance c/d	91000	By Bank	10000
		By Net Profit	7000
	97000		**97000**

f. Furniture A/c

To Balance b/d	7000	By Depreciation	1000
		By Balance c/d	6000
	7000		**7000**

Illustration 5

Timbaktu Limited furnishes the following details with the direction to prepare Fund Flow Statement for the year 2007

Liabilities	2007	2006	Assets	2007	2006
Share Capital	90,000	80,000	*Working Capital*		
Profit & Loss A/c	46,000	30,000	Current Assets	120,000	96,000
			Less- Current Liabilities	42,000	30,000
				78,000	**66,000**
			Fixed Assets	56,000	40,000
			Share Issue Expenses	2,000	4,000
	136,000	**110,000**		**136,000**	**110,000**

1. An old machine costing Rs.8000/- (WDV Rs.6000) was sold during the year for Rs.7000/-
2. Depreciation for the year was Rs.2000/-
3. Interim Dividend of Rs.4000 was paid during the year. Final dividend was not declared
4. The company made the bonus issue of shares during the year at one equity share for 8 equity shares held by the existing shareholders by utilising the profits.

Solution 5

a. Statement of Changes in Working Capital

Particulars	2006	2007	Increase in WC	Decrease in WC
Current Assets	96000	120000	24000	
Less - Current Liabilities	30000	42000	12000	
Working Capital	66000	78000	12000	

Net Increase in Working Capital (78000-66000) ... Rs.12000

b. Funds Flow Statement as on 31.03.2007

Sources		Applications	
Sale of Machinery	7000	Increase in Working Capital	12000
Funds from Operations	33000	Interim Dividend Paid	4000
		Purchase of Fixed Assets	24000
	40000		**40000**

c. Adjusted Profit & Loss A/c

To Depreciation on Fixed Assets	2000	By Balance b/d	30000
To Interim Dividend	4000	By Profit on Sale of Machinery	1000
To Bonus to Shareholders	10000	By Funds from Operations (Balancing Figure)	33000
To Share issue expenses	2000		
To Balance c/d	46000		
	64000		**64000**

d. Fixed Assets

To Balance b/s	40000	By Machine Sold ***	6000
To Bank (Bal. figure)	24000	By Depreciation	2000
		By Balance c/d	56000
	64000		**64000**

*****Working Note**

Machinery at Cost	8000
Less - Accumulated Depreciation	2000
WDV (Written Down Value)	**6000**
Less - Sale Proceeds	7000
Profit on Sale	**1000**

Important Terms

- ✓ **Fund –** It refers to working capital, **Flow –** It is a movement of fund
- ✓ **Current Items –** It includes current assets and current liabilities
- ✓ **Non Current Items –** It includes share capital, reserves, loans, fixed assets, investments etc
- ✓ **Fund from Operation** – it is the cash profit generated from operations
- ✓ **Working Capital –** Excess of current assets over current liabilities is called as working capital.

Theory Questions

1. Why are funds flow statements important?
2. Explain – funds from operations
3. Explain the concept of fund & how the funds flow?

Practical Questions

1 The following are the Balance Sheets of Commerce Colleges Limited as on 31st March, 2011 & 2012

Liabilities	2011	2012	Assets	2011	2012
Share Capital	120,000	156,000	Goodwill	-	12,000
Reserves	30,000	35,000	Land & Building	89,100	86,550
Profit & Loss A/c	23,814	24,732	Plant & Machinery	67,770	69,720
Sundry Creditors	23,700	19,681	Cash	1,500	1,620
Bills Payables	20,268	6,915	Sundry Debtors	51,105	43,575
Bank Overdraft	35,706	-	Sundry Advances	1,389	441
Provision for Tax	24,000	30,000	Stock	66,624	58,422
	277,488	**272,328**		**277,488**	**272,328**

1 During the year ended 31.03.2012 an interim dividend of Rs.16000/- was paid
2 Income Tax paid during the year amounted to Rs.15000/-
3 The assets & Liabilities of another company were purchased for Rs.36000/- payable in fully paid shares of the company. These assets consist of Stock Rs.14984/-, Machinery Rs.11016/- and Goodwill Rs.12000/-, Creditors Rs.2000/-. Additional plant for Rs.3390/- was purchased

2 The following are the summarised Balance Sheets of Archana Polygraph Ltd as on 31st March, 2010 & 2011

Liabilities	2010	2011	Assets	2010	2011
Share Capital	460,000	460,000	Land & Building	300,000	300,000
Profit & Loss A/c	32,000	46,000	Machinery	104,000	140,000
Reserve for Contingency	120,000	120,000	Investments	220,000	148,000
8% Debentures	180,000	140,000	Stock	164,000	212,000
Depreciation Fund	80,000	88,000	Debtors	134,000	86,000
Creditors	206,000	192,000	Cash	180,000	180,000
O/s Expenses	26,000	24,000	Prepaid Expenses	2,000	4,000
	1,104,000	**1,070,000**		**1,104,000**	**1,070,000**

1 10% Dividend was paid during the year 2006
2 Machinery for Rs.6000 was purchased and old machinery costing Rs.24000 (accumulated depreciation Rs.12000) was sold for Rs.8000
3 Rs.40000 8% Debentures were redeemed by purchase from open market at Rs.96 for a Debenture of Rs.100
4 Investments worth Rs.72000/- were sold at book value
You are required to prepare a schedule of changes in working capital and a statement showing sources and application of funds.

12

INTRODUCTION TO CASH FLOW STATEMENT

Unit Structure

12.1 Learning Objectives
12.2 Cash Flow Statement
12.3 Analysis of Cash Flow Statement
12.4 Cash Flow from Operating Activities
12.5 Cash from Investing Activities
12.6 Cash from Financing Activities
12.7 Benefits/Importance of Cash Flow Analysis
12.8 Limitations of Cash Flow Analysis
12.9 Accounting Standard – AS3 on Cash Flow Statement
12.10 Distinction between Cash Flow V/S Funds Flow

12.1 LEARNING OBJECTIVES

- Understanding concept of cash flow
- Accounting standard for Cash Flow Statement (AS-3)
- Preparation of Cash Flow Statement
- Importance & Limitations of Cash Flow Statement

12.2 CASH FLOW STATEMENT

In financial accounting, a **cash flow statement**, also known as **statement** of **cash flows**, is a financial **statement** that shows how changes in balance sheet accounts and income affect **cash** and **cash** equivalents, and breaks the analysis down to operating, investing and financing activities.

Cash Flow Statement gives information about cash receipts (sources) and cash payments (application). It contains opening balances & closing balances of cash for a given period and explains how the closing balance as per last balance sheet changed by various inflows & outflows of cash to a closing balance of cash as per the next balance sheet. As per AS-3, cash would include cash in hand and savings, current a/c balances with banks& cash equivalents. Cash equivalents are short term & highly liquid

investments that are readily convertible into cash. An investment would normally be called a cash equivalent only when it has a short term maturity of say 3 months or less from the date of acquisition.

12.3 ANALYSIS OF CASH FLOW STATEMENT

The cash flow statement is distinct from the income statement and balance sheet because it does not include the amount of future incoming and outgoing cash that has been recorded on credit. Therefore, cash is not the same as net income, which, on the income statement and balance sheet, includes cash sales *and* sales made on credit. Cash flow is determined by looking at three components by which cash enters and leaves a company: **core operations, investing and financing**,

12.3 (a) Operations

Measuring the cash inflows and outflows caused by corebusiness operations, the operations component of cash flow reflects how much cash is generated from a company's products or services. Generally, changes made in cash, accounts receivable, depreciation, inventory and accounts payable are reflected in cash from operations.

Cash flow is calculated by making certain adjustments to net income by adding or subtracting differences in revenue, expenses and credit transactions (appearing on the balance sheet and income statement) resulting from transactions that occur from one period to the next. These adjustments are made because non-cash items are calculated into net income (income statement) and total assets and liabilities (balance sheet). So, because not all transactions involve actual cash items, many items have to be re- evaluated when calculating cash flow from operations.

For example, depreciation is not really a cash expense; it is an amount that is deducted from the total value of an asset that has previously been accounted for. That is why it is added back into net sales for calculating cash flow. The only time income from an asset is accounted for in CFS calculations is when the asset is sold.

Changes in accounts receivable on the balance sheet from one accounting period to the next must also be reflected in cash flow. If accounts receivable decreases, this implies that more cash has entered the company from customers paying off their credit accounts - the amount by which AR has decreased is then added to net sales. If accounts receivable increase from one accounting period to the next, the amount of the increase must be deducted

from net sales because, although the amounts represented in ARare revenue, they are not cash.

An increase in inventory, on the other hand, signals that a company has spent more money to purchase more raw materials. If the inventory was paid with cash, the increase in the value of inventory is deducted from net sales. A decrease in inventory would be added to net sales. If inventory was purchased on credit, an increase in accounts payable would occur on the balance sheet, and the amount of the increase from one year to the other would be added to net sales.

The same logic holds true for taxes payable, salaries payable and prepaid insurance. If something has been paid off, then the difference in the value owed from one year to the next hasto be subtracted from net income. If there is an amount that is still owed, then any differences will have to be added to net earnings.

12.3 (b) Investing

Changes in equipment, assets or investments relate to cash from investing. Usually cash changes from investing are a "cash out" item, because cash is used to buy new equipment, buildings or short-term assets such as marketable securities. However, when a company divests of an asset, the transaction is considered "cashin" for calculating cash from investing.

12.3(c) Financing

Changes in debt, loans or dividends are accounted for in cash from financing. Changes in cash from financing are "cash in" when capital is raised, and they're "cash out" when dividends are paid. Thus, if a company issues a bond to the public, the company receives cash financing; however, when interest is paidto bondholders, the company is reducing its cash.

Major Cash Inflows

12.3.1 Issue of new shares for cash
12.3.2 Receipt of short term & long term loans from banks, financial institutions etc
12.3.3 Sale of assets & investments, Dividend & Interest received,
12.3.4 Cash generated from operations

Major Cash Outflows

12.3.5 Redemption of preference shares, Purchase of fixed assetsor investments
12.3.6 Repayment of long term and short term borrowings

12.3.7 Decrease in deferred payment liabilities, Loss from operations
12.3.8 Payment of tax, dividend etc.

Classification of Activities

As per AS-3 the cash flow statement should report cash flowsduring the period classified by

12.3.9 OPERATING ACTIVITIES
12.3.10 INVESTING ACTIVITIES
12.3.11 FINANCING ACTIVITIES

12.4 CASH FLOW FROM OPERATING ACTIVITIES

- The cash flows generated from major revenue producing activities of the entities are covered under this head.
- Cash flow from operating activities is the indicator of the extent to which the operations of the enterprise have generated sufficient cash to maintain the operating capability to pay dividend, repay loans & make new investments. Main Examples are
- Cash receipts from sale of goods & services
- Cash receipts from royalties, fees, commission etc
- Cash payments to employees
- Cash payments or refunds (receipt) of income tax
- Cash receipts & payments relating to future contracts, forward contract etc
- Cash receipts and payments arising from purchase and sale of trading securities

12.5 CASH FROM INVESTING ACTIVITIES

- These are the acquisition and disposal of long term assets and other investments not included in cash equivalents. This represents the extent to which the expenditures have been made for resources intended to generate future incomes & cash flows, Examples are
- Cash payments for purchase of fixed assets
- Cash receipts from sale of fixed assets
- Cash payments for purchase of shares/debentures etc. in other entities
- Loans and advances given to third parties
- Repayments of loans given

12.6 CASH FROM FINANCING ACTIVITIES

- Financing activities are the activities that result in changes in the size and composition of the owner's capital and borrowings of the enterprise.
- Separate disclosure is important because it is useful in predicting claims on future cash flows by providers of funds
- Examples
- Cash receipts from issue of share capital , debentures & short term & long term loans
- Cash Repayments of loans borrowed
- Cash payment to redeem preference shares

I	CASH FROM OPERATING ACTIVITIES		
	Net Profit Before Tax (if profit & loss A/c is given)		XX
	Closing Bal - Opening Bal (if profit & loss A/c Balances are given in B/S)		XX
Add	**Non Cash & Non Operating Expenses**		
	- Depreciation on Fixed Assets	xx	
	- Goodwill written off	xx	
	- Preliminary Expenses written off	xx	
	- Discount on issue of Shares & Debentures	xx	
	- Underwritting commission	xx	
	- Cost of issue of shares & debentures written off	xx	
	- Loss on sale of Investments & Fixed Assets	xx	
	- Foreign Exchange Loss	xx	
	- Interest Paid / Dividend Paid	xx	
	- Loss by fire, theft etc.	xx	
	- Proposed Dividend	xx	
	- Trf. to Gen Reserve, Debenture Red. Fund etc	xx	
	- Loss by fire, theft etc.	xx	
Less	**Non Cash & Non Operating Incomes**		
	- Gain on sale of Fixed Assets & Investments	xx	
	- Interest & Dividend Received	xx	
	- Any other extra-ordinary income	xx	
	- Foreign exchange Gain	xx	
Add	**Increase in Current Liabilities**	xx	
Less	**Decrease in Current Liabilities**	xx	
Add	**Decrease in Current Assets**	xx	
Less	**Increase in Current Assets**	xx	
Less	Income Tax Paid	xx	
	CASH FROM OPERATING ACTIVITIES		xxx

II	CASH FROM INVESTING ACTIVITIES		
	- Purchase of Fixed Assets & Investments	(xx)	
	- Sale of Fixed Assets & Investments	xx	
	- Interest Received	xx	
	- Dividend Received	xx	xxx
III	CASH FROM FINANCING ACTIVITIES		
	- Proceeds from Issue of Share Capital, Debentures etc.	xx	
	- Proceeds from Long Term Borrowings	xx	
	- Repayment of Long Term Borrowings	(xx)	
	- Redemption of Debentures & Preference Shares	(xx)	
	- Interest Paid	(xx)	
	- Dividend Paid	(xx)	
IV	**Net Increase / (Decrease) in Cash**	xx	
	Add: Opening Cash Balance at the beginning of period	xx	
	Closing Cash Balance at the end of period	xx	

	CASH FLOW STATEMENT AS ON		
	PARTICULARS	**AMT**	**AMT**
I	**CASH FROM OPERATING ACTIVITIES**	XX	
II	**CASH FROM INVESTING ACTIVITIES**	XX	
III	**CASH FROM FINANCING ACTIVITIES**	XX	
IV	**Net Increase / (Decrease) in Cash**		**XXX**
	Add: Opening Cash Balance at the beginning of period		**XX**
	Closing Cash Balance at the end of period		**XXX**

12.7 BENEFITS/IMPORTANCE OF CASH FLOWANALYSIS

- **Efficient Cash Management** – manage the cash resources in such a way that adequate cash is available for meeting the expenses
- **Internal Financial Management** – useful for internal financial management as it provides clear picture of cash flows from operations
- **Knowledge of change in Cash Position** – It enables the management to know about the causes of changes in cash position
- **Success or Failure of Cash Planning** – Comparison of actual & budgeted cash flow helps the management to know the success or failure in cash management
- It is a **supplement to fund flow statement** as cash is a part of fund
- Cash Flow Statement is a **better tool of analysis for short term decisions**

12.8 LIMITATIONS OF CASH FLOW ANALYSIS

- **Misleading Inter Industry Comparison** - Cash flow does not measure the economic efficiency of one company in relation to another company
- **Misleading Inter Firm Comparison** - The terms & conditions of purchases & sales of different firms may not be the same. Hence inter firm comparison becomes misleading
- **Influence of Management Policies** – Management policies influence the cash easily by making certain payments in advance or by postponing certain payments
- **Cannot be equated with Income Statement** – Cash flow statement cannot be equated with income statement. Hence net cash flow does not mean income of the business
- **CFS cannot substitute the B/S & Funds Flow**.

12.9 ACCOUNTING STANDARD – AS3 ON CASH FLOWSTATEMENT

Objective of AS-3 is to provide desired information about historical changes in cash & cash equivalents of an enterprise classified in to Operating, Investing and Financing activities.

12.9.1 An enterprise should disclose the components of cash and cash equivalents and should present a reconciliation of the amount in the cash statement with the equivalent items reported in the balance sheet

12.9.2 An enterprise should disclose the amount of cash & cash equivalent balance held by the enterprises that are not available for use by it with explanation of Management

12.10 DISTINCTION BETWEEN CASH FLOW V/S FUNDSFLOW

	CASH FLOW	FUNDS FLOW
1	Shows net change in position of "Cash & Cash Equivalents"	Shown net changes in position of "Working Capital"
2	Based on narrower concept of funds i.e. Cash & Cash Equivalents	Based on broader concept of funds i.e. Working Capital
3	Mandatory for all the listed companies & is more widely used in India & Abroad	Not mandatory & not used by many companies
4	Classification of inflow & outflow is done in three categories - Operating, Investing & Financing	Such a meaningful classification is not used in fund flow statement
5	No Statement of changes in working capital is prepared as the changes are adjusted in ascertaining cash from operating activities	Statement of changes in working capital is prepared
6	Increase in CA - Decrease in Cash	Increase in CA - Increase in WC
	Increase in CL - Increase in Cash	Increase in CL - Decrease in WC
	Decrease in CA - Increase in Cash	Decrease in CA - Decrease in WC
	Decrease in CL - Decrease in Cash	Decrease in CL - Increase in WC

Practical Sums

Problem No.1

From the following information, prepare cash flow statement for the year ended 31.03.2014

Opening Cash Balance	10000
Closing cash balance	12000
Decrease in Debtors	5000
Increase in creditors	7000
Sale of Fixed Assets	20000
Redemption of Debentures	50000
Net Profit for the year	20000

Solution

	Cash Flow Statement for the year ended 31.03.2014		
	Particulars	**Amt**	**Amt**
I	**Cash Flow from Operating Activities**		
	Net Profit for the year		20000
Add:	Decrease in Current Assets - Debtors (Inflow)	5000	
Add:	Increase in Current Liabilities - Creditors (Inflow)	7000	12000
			32000
II	**Cash Flow from Investing Activities**		
	Sale of Fixed Assets (Inflow)		20000
III	**Cash Flow from Financing Activities**		
	Redemption of Debentures (Outflow)		-50000
	Total Cash Flows Generated		2000
Add:	**Opening Cash Balance**		10000
	Closing Cash Balance (Bal. figure)		**12000**

Problem No.2

From the following information, prepare cash flow statement for the year ended 31.03.2014 by Direct Method

1. Cash sales Rs.6586000
2. Cash collected from debtors during the year amounted to Rs.3323400
3. Cash paid to suppliers was Rs.7936810
4. Rs.987500 was paid to and for employees
5. Furniture of the book value of Rs.18500 was sold for Rs.11000 and a new furniture costing Rs.83160 was purchased
6. Debentures of the face value of Rs.300000 were redeemed at a premium of 2% interest on debentures. Interest on debentures, Rs.84000 was also paid
7. Dividend of Rs.450000 for the year ended 31st March,2014 was distributed in May, 2014
8. Cash in hand and at Bank as on 31.03.2013 and 31.03.2014 was Rs.51070 and Rs.574000 respectively

Solution:

Cash Inflows		**Cash Outflows**	
Cash Sales	6586000	Cash paid to Suppliers	7936810
Cash collected from Debtors	3323400	Paid to employees	987500
Sale of Furniture	11000	Purchase of Furniture	83160
Opening Cash Balance	51070	Interest on Debentures Paid	84000
		Redemption of Debentures	300000
		Int. on Redemtion of Debentures	6000
		Closing |Cash Balance	574000
	9971470		**9971470**

Total Cash Inflows	9920400
Less - Cash Outflows	9397470
Net Cash Flows	**522930**
Add - Opn Cash Balance	**51070**
Closing Cash Balance	**574000**

Problem No.3

From the summary cash a/c of X Ltd, prepare the cash flow statement for the year ended 31.03.2014 by direct method

DR		CASH BOOK for the year ended 31.03.2014	CR
Particulars	**Amt**	**Particulars**	**Amt**
To Balance on 1.4.2013	50000	By Payment to Suppliers	2000000
To Issue of Equity Shares	300000	By Purchase of Fixed Assets	200000
To Receipts from Customers	2800000	By Overhead Expenses	200000
To Sale of Fixed Assets	100000	By Wages & Salaries	100000
		By Income Tax Paid	250000
		By Dividend Paid	50000
		By Repayment of Bank Loan	300000
		By Balance on 31.03.2014	150000
	3250000		**3250000**

Solution:

Particulars		
Cash from Operating Activities		
Receipt from Customers (inflow)	2800000	
Payment to Suppliers (outflow)	-2000000	
Overhead Expenses (outflow)	-200000	
Wages & Salaries (outflow)	-100000	500000
Cash from Investing Activities		
Sale of Fixed Assets	100000	
Purchase of Fixed Assets	-200000	-100000
Cash from Financing Activities		
Issue of Equity Shares (inflow)	300000	
Dividend Paid (outflow)	-50000	
Repayment of Bank Loan (outflow)	-300000	-50000
Total Cash Flows		**350000**
Less - Income Tax Paid		-250000
Net Cash Flow after Tax		**100000**
Add: Opening Cash Balance		50000
Closing Cash Balance		**150000**

Problem No.4

Financial position of ABC Limited as on 31.03.2014 was as follows

Liabilities	**2013**	**2014**	**Assets**	**2013**	**2014**
Current Liabilities	72000	82000	Cash	8000	7200
Loan from Z Ltd	0	40000	Debtors	70000	76800
Loan from Bank	60000	50000	Stock	50000	44000
Share Capital	200000	200000	Land	40000	60000
Profit & Loss A/c	96000	98000	Buildings	100000	110000
			Machinery	214000	244000
			Prov for Depreciatio	(54,000)	(72,000)
	428000	**470000**		**428000**	**470000**

During the year Rs.52000 were paid as Dividend. Prepare Cash Flow Statement

Solution:

Cash Flow Statement for the year ended 31.03.2014

	Particulars	**Amt**	**Amt**
I	**Cash from Operating Activities**		
	Net Prodit during the year		2000
Less:	Increase in Current Assets - Debtors	-6800	
Add:	Decrease in Current Assets - Stock	6000	
Add:	Increase in current liability - Prov for Depreciation	18000	
Add:	Increase in current liability	10000	
Add:	Dividend Paid	52000	79200
II	**Cash from Investing Activities**		
	Purchase of Land	-20000	
	Purchase of Building	-10000	
	Purchase of Machinery	-30000	-60000
III	**Cash from Financing Activities**		
	Loan from Z taken	40000	
	Repayment of Bank Loan	-10000	
	Dividend Paid	-52000	-22000
	Total Cash Flow		-800
	Add - Opening Cash Balance		8000
	Closing Cash Balance (Balancing Figure)		**7200**

Problem No.5

From the following Financial Statement you are required to prepare cash flow statement of Dolphine Ltd for the year ended 31st March, 2006

Balance Sheet as on 31.03.2006

Liabilities	2005	2006	Assets	2005	2006
Share Capital	140000	140000	Plant & Machinery	100000	182000
Secured Loan	0	80000	Inventory	30000	80000
P&L A/c	14000	20000	Debtors	10000	40000
Creditors	28000	78000	Cash	40000	18000
Tax Payable	2000	6000	Preliminary Exp.	4000	4000
	184000	**324000**		**184000**	**324000**

Revenue Statement for the year ended 31.03.2006

To Opening Inventory	30000	By Sales	200000
To Purchases	196000	By Closing Inventory	80000
To Gross Profit	54000		
	280000		**280000**
To General Expenses	22000	By Gross Profit b/d	54000
To Depreciation	16000		
To Provision for Tax	8000		
To Net Profit	8000		
	54000		**54000**
To Dividend Paid	2000	By Balance b/d	14000
To Balance c/d	20000	By Net Profit b/d	8000
	22000		**22000**

Solution:

CASH FLOW STATEMENT OF DOLPHINE LIMITED AS ON 31.03.2006

	Particulars	Amt	Amt
I	**Cash from Operating Activities**		
	Net Profit after tax	8000	
	Add - Provision for tax	8000	
	Net Profit before tax		**16000**
Add	**Non Cash/Non Operating Expenses**		
	Depreciation	16000	
Less	**Increase in Current Assets**		
	Inventory	-50000	
	Debtors	-30000	
Add	**Increase in Current Liabilty**		
	Creditors	50000	**-14000**
	Total Cash Flow		**2000**
Less	Tax Paid (working note - tax payable A/c)		**-4000**
	Net Cash Flow from Operating Activities		**-2000**
II	**Cash from Investing Activities**		
	Purchase of Plant & Machinery (working note P&M A/c)		**-98000**
III	**Cash from Financing Activities**		
	Secured Loan taken	80000	
	Dividend Paid	-2000	**78000**
	Total Cash Flows		**-22000**
Add	Opening Cash Balance		**40000**
	Closing Cash Balance (Bal.Figure)		**18000**

Tax Payable A/c

To Bank A/c	4000	By Balance b/d	2000
To Balance c/d	6000	By P&L A/c	8000
	10000		**10000**

Plant & Machinery a/c

To Balance c/d	100000	By P&L (dep)	16000
To Bank A/c	98000	By Balance b/d	182000
	198000		**198000**

Problem No.6

Calculate cash flow from operating activities from the following P&L A/C

Particulars	Amount	Particulars	Amount
Salaries	20000	Gross profit	50000
Rent	10000	Profit on sale of Land & Building	5000
Depreciation	5000	Income Tax Refund	5000
Loss on sale of plant	2000		
Goodwill w/off	5000		
Proposed Dividend	6000		
Provision for taxation	5000		
Net Profit	7000		
	60000		**60000**

Cash Flow from Operating Activities		**Amt**	**Amt**
	Net Profit		7000
Add	Proposed dividend	6000	
	Depreciation	5000	
	Loss on sale of Plant	2000	
	Goodwill W/off	5000	
	Provision for taxation	5000	23000
Less:	Profit on sale of Lans & Building		-5000
Less:	Income Tax Refund - to be shown separately		-5000
	Cash Flow from Operating Activities		**20000**

Key Terms:

Cash – It includes cash and demand deposits with Banks

Cash Equivalents – These are short term and highly liquidinvestments

Cash Flows – It is movement of cash

Non Cash Expenses – These are the expenses which do notinvolve any cash payment

Revenue Activities - These are the activities which are revenueproducing

Investing Activities – These are related to acquisition anddisposal of long term assets

Financing Activities – These are the activities relating to changesin capital & borrowings

Theory Questions:

1. Explain the technique of cash flow statement?
2. What is utility of cash flow statement to financial management?
3. Explain the concept of "Flow of Cash" & enumerate the sources of cash?
4. What data would you require to prepare a cash flow statement?

Suggested Readings for Fund Flow & Cash Flow Statements

Management Accounting – Bhattacharya Debarshi

Introduction to Management Accounting – Dr.Varsha Ainapure(Manan Prakashan)

Principles of Financial Management – Satish Inamdar (EverestPublishing House)

Management Accounting – Chopde (Sheth Publishers)

Practical Sums:

Problem No.7

Prepare cash flow statement from the following balance sheets.

Liabilities	2005	2006	Assets	2005	2006
Share capital	4300	5000	Plant	6250	7450
Reserves	3000	3850	Investment	125	375
Loan	375	625	Stock	1625	2000
Creditors	1375	1125	Debtors	1000	750
O/s Exp for Admin	125	50	Cash	375	325
Prov for Deprec.	200	250			
	9375	**10900**		**9375**	**10900**

Income Statement for 2006

	Sales		5000
Less :	Cost of Sales (including depreciation Rs.50)		3750
			1250
Less :	Selling & Distribution Expenses	250	
	Other Expense	125	
	Interest on Loan	25	400
	Net Profit		**850**

Problem No.8

Prepare cash flow statement from the following balance sheets.

Liabilities	2005	2006	Assets	2005	2006
Eq.Share capital	250000	325000	Fixed Assets	200000	250000
Gen.Reserves	50000	75000	Depreciation W/off		-25000
Profit & Loss A/c	25000	75000	Investment	50000	50000
7% Debentures	100000	100000	Stock	100000	125000
Creditors	100000	100000	Debtors	100000	150000
Proposed Dividend	25000	32500	Cash	75000	157500
			Misc. Expenses	25000	
	550000	**707500**		**550000**	**707500**

Problem No.9

Prepare cash flow statement from the following balance sheets.

Liabilities	2005	2006	Assets	2005	2006
Eq.Share capital	70000	70000	Fixed Assets (Net)	45000	43500
Gen.Reserves	37000	52500	Cash	37500	48500
Sundry Creditors	16000	17500	Debtors	21500	20000
Wages O/s	1500	2000	Inventories	24500	29000
Mis. Exp O/s	5500	1500	Prepaid Rent	1500	2500
	130000	**143500**		**130000**	**143500**

Accumulated Depreciation was Rs.8000 for the year ended 31.03.2005 and Rs.9500 for the year ended 31.03.2006

Other Information		
	Sales	150000
	Cost of goods sold	95000
	wages	11500
	rent	3000
	Mis. Expenses	23500
	Depreciation	1500

MODULE - IX

13

INTRODUCTION TO COST ACCOUNTING

Unit structure

13.1 Objectives
13.2 Introduction
13.3 Meaning of Cost, Costing and Cost Accounting
13.4 Objectives of Cost Accounting
13.5 Cost Centre and Cost Units
13.6 Classification of Cost
13.7 Elements of Cost
13.8 Summary
13.9 Exercise

13.1 OBJECTIVES

After studying this unit students will be able to:

- Understand the need of Cost Accounting
- Know the meaning of Cost, Costing and Cost Accounting
- Explain the objectives of Cost Accounting
- Understand the classification of Cost
- Discuss about the Elements of Cost
- Know the methods of Costing

13.2 INTRODUCTION

Cost Accounting is the system of accounting which is concerned with determination of costs of doing something whichcan be manufacturing or rendering service or even conducting any activity or function. The objective of Cost Accounting is to render detailed and useful information for guidance to Management.

Financial accounting is developed over the time to record, summarise and present the financial transaction or events which can be expressed in terms of money. This function was primarily concerned with record keeping, leading to preparation of Profit and Loss Account and Balance Sheet. The information obtained through financial statements is useful to the Management or Owner in several respects. However, the information provided by financial

accounting is not sufficient for several purposes of decision making in many areas such as : determining output level, determining product selection – addition or dropping or changing product combination in the case of multi product company, determining or revising prices of products, whether Profit earned is optimum as compared with competitors and in comparison to earlier years. The need of data for such details lead to the development of Cost Accountancy.

13.3 MEANING OF COST, COSTING AND COST ACCOUNTING

13.3.1 Cost :

Institute of Cost and Works Accountants of India, defines cost as "measurement, in monetary terms, of the amount of resources used for the purpose of production of goods or rendering services".

Thus the term cost means the amount of expenditure, actual or notional incurred or attributable to a given thing. It can beregarded as the price paid for attaining the objective. For e.g. Material cost is the price of materials acquired for manufacturing a product.

13.3.2 Costing :

The term costing has been defined as "the techniques and processes of ascertainment of costs. **Whelden** has defined costing as, "the classifying recording and appropriate allocation of expenditure for the determination of costs the relation of these costs to sale value and the ascertainment of profitability."

Therefore costing involves the following steps.

13.3.2.1 Ascertaining and Collecting of Costs

13.3.2.2 Analysis or Classification of Costs

13.3.2.3 Allocating total costs to a particular thing i.e. product, acontract or a process.

Thus costing simply means cost finding by any process ortechnique.

13.3.3 Cost Accounting :

Cost Accounting is a formal system of accounting by means of which cost of products or service, are ascertained and controlled.

Whelden defines Cost Accounting as, "Classifying, recording and appropriate allocation of expenditure for determination of costs of products or services and for thepresentation of suitably arranged data for the purpose of control and guidance of management."

Therefore, Cost Accounting is the application of costing principles, methods and techniques in the ascertainment of costs and analysis of savings or / and excesses as compared with previous experience or with standards. It provides, detailed cost information to various levels of management for efficient performance of their functions. The information supplied by Cost Accounting as a tool of management for making optimum use of scarce resources and ultimately add to the profitability of business.

13.4 OBJECTIVES OF COST ACCOUNTING

Objectives of Cost Accounting are as follows :

1) **To Ascertain the Cost :** To ascertain the cost of product or a services reveled and enable measurement of profit by proper valuation of inventory.

2) **To Analyse Costs :** To analysis costs or to classify the expenses under different heads of accounts viz. material, labour, expenses etc.

3) **To Allocate and Apportion the Costs :** To allocate or charge the direct expenses or specific costs such as Raw Material, Labour to particular product, contract or process and todistribute common expenses to each product, contract or process on a suitable basis.

4) **Cost Reporting :** Cost Reporting or presentation includes :

   a) What to report i.e. what is the nature of information to be presented?

   b) Whom to Report i.e. to whom the report is to be addressed.

   c) When to Report i.e. when the report is to be presented i.e. Daily weekly monthly yearly etc.

   d) How to Report i.e. in what format the report is to be presented.

5) **To Assist the Management :** Cost Accounting assist the management in:

   a) Indicating to the management any inefficiencies and extent of various forms of waste of Raw Material, Time, Expenses etc.

   b) Fixing of selling price.

   c) Providing information to enable management to take decision of various types.

d) Controlling Inventory of Raw Material, goods in process, finished goods, spares and consumables etc.

6) **Cost Control :** Cost Accounting assist the management in cost control. Cost control includes the following stages.

a) Setting up of targets of cast and production for each period.

b) Measuring the actual figures of performance relating to cost, production etc. for the period concerned.

c) The figures of actual performance are to be compared with the targets to find out the variation.

d) Analysing the variance, whether favourable or adverse.

e) Immediate action has to be taken in case of adverse variation.

8) **Optimum Product Mix :** Advise the management in deciding optimum product mix merits and demerits of alterative coursesof action viz. make of buy decisions, introduction or Automation mechanization, rationalization, system of production etc.

9) **Future Policies :** Advise management on future policies regarding Expansion, growth, capital investment, etc.

13.5 COST CENTRE AND COST UNITS

13.5.1 Cost Centre :

It is a location, person or item of equipment for which cost may be ascertained and used for the purpose of cost control. It is a convenient unit of the organisation for which cost may be ascertained. The main purpose of ascertainment of cost is to control the cost and fill up the responsibility of the person who is in charge of the cost centre.

- **Types of cost centers :**

I. Personal Cost Centre :

It consists of a person or group of persons.
e.g. machine operator, salesmen, etc.

II. Impersonal Cost Centre :

It consists of a location or an item of equipment or group ofthese. E.g. Factory, Machine etc.

III. Operational Cost Centre :

This consists of machines or persons carrying on similaroperations.

IV. Process Cost Centre :

This consists of a continuous sequence of operation or specific operations.

V. Production Cost Centre :

This is the centre where actual production takes place or these include, those departments that are directly engaged in manufacturing activity and contribute to the content and form of finished product.

e.g. Cutting, Assembly and Finishing Departments etc.

VI. Service Cost Centre :

This is the Centre which renders services to production centres. These contribute to the production process in an indirect manner.

e.g. Stores department, Repairs and Maintainance department,
H.R. Department, Purchase Department etc.

13.5.2 Cost unit :

It is a unit of product, service or time in terms of which cost are ascertained or expressed. It is basically, a unit of quantity of product or service in relation to which costs may be ascertained or expressed.

Few examples of cost unit are given below.

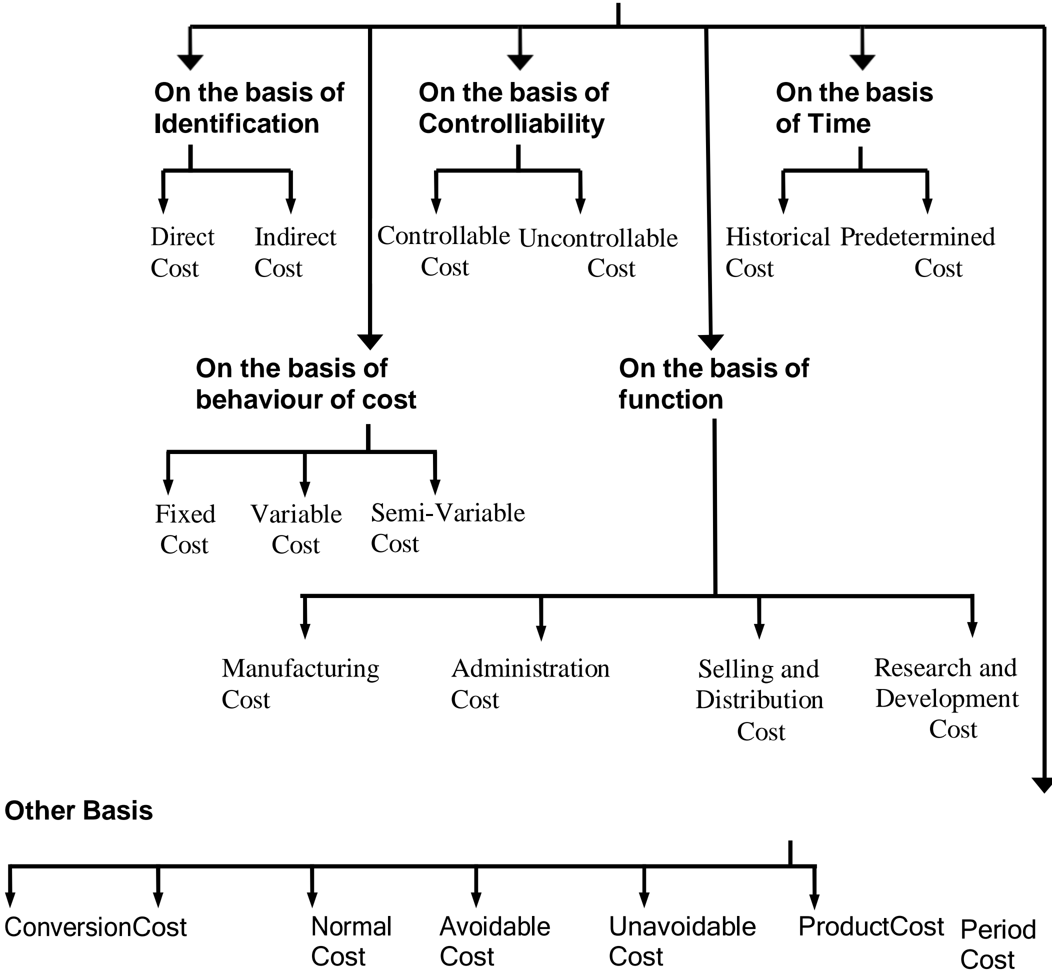
Name of Industry	**Cost unit**
Textiles	Meter, yards
Transport	Passenger km
Power	Kilowatt – hour
Paints	Litre
Iron and Steel	Tonne
Canteen	Per meal
Chemical	Litre, kilogram
Readymade Garments	Number
Petrol	Litre

13.6 CLASSIFICATION OF COST

Classification is the process of grouping costs according to their common characteristics. It is a systematic placement of like items together according to their common features. There are various ways of classifying costs, according to their common features as given below.

Chart showing classification of cost :

Classification of Cost



I On the basis of Identification :

On the basis of identification of cost with cost units or jobs orprocesses, costs are classified into –

1. **Direct Costs :** These are the costs which are incurred for and conveniently identified with a particular cost unit process or department. These are the expenditures which can be directly allocated to a particular job, product or an activity. E.g. Cost of Raw Material used, wages paid to labourers etc.

2. **Indirect Costs :** These are general costs and are incurred for the benefit of a number of cost units, processes or departments. These costs can not be conveniently identified with a particular cost unit or cost centre. Example : Depreciation of Machinery, Insurance, Lighting, Power, Rent of Building, Managerial Salaries, etc.

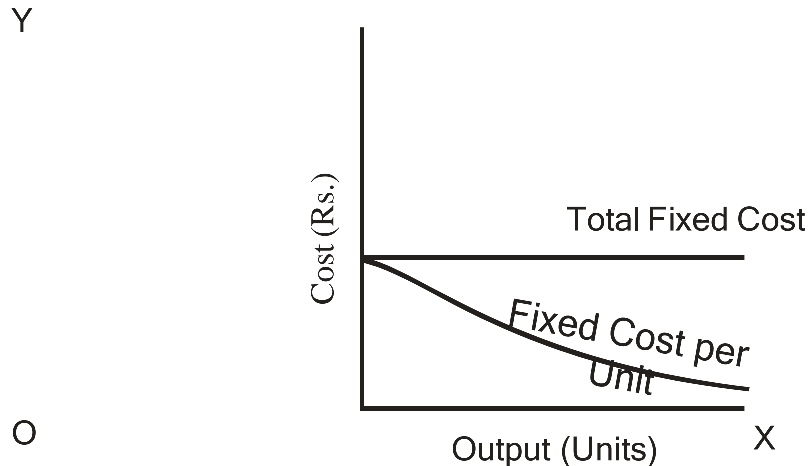
II On the basis of behaviour of Cost

Behaviour means change in cost due to change in output. Costs behave differently when the level of production rises or falls. Certain costs change in direct proportion with production level whileother costs remain unchanged. As such on the basis of behaviour of cost – costs are classified into

1) **Fixed Costs :** It is that portion of the total cost which remain constant irrespective of output upto the capacity limit. It is the cost which does not very with the change in the volume ofactivity in the short run. These costs are not affected by temporary fluctuation in the activity of an enterprise. These are also known as period costs as it is concerned with period. Rent of premises, tax and insurance, staff salaries, are the examples of fixed cost.

Characteristics of Fixed Cost are :

a. Large in value
b. Fixed amount within an output range
c. Fixed cost per unit decreases with increased output
d. Indirect Cost
e. Lesser degree of controllability
f. Influence Variable Cost and Working Capital



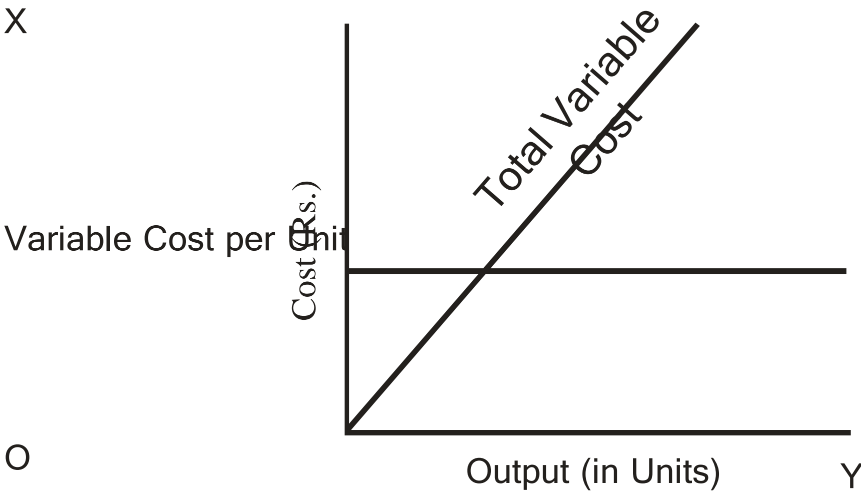
Behaviour of Fixed Cost

2) **Variable Cost :** It is that cost which directly very with the volume of activity. In other words, it is a cost which changes according to the changes in the volume of output. It tends to very in direct proportion to output. It means when the volume of output increases, total variable cost also increases when the volume of output decreases, total variable cost also decreases.

But the variable cost per unit remains same. Direct material, Direct Labour, Direct Expenses are the examples of variable costs.

Characteristics of Variable Cost are :

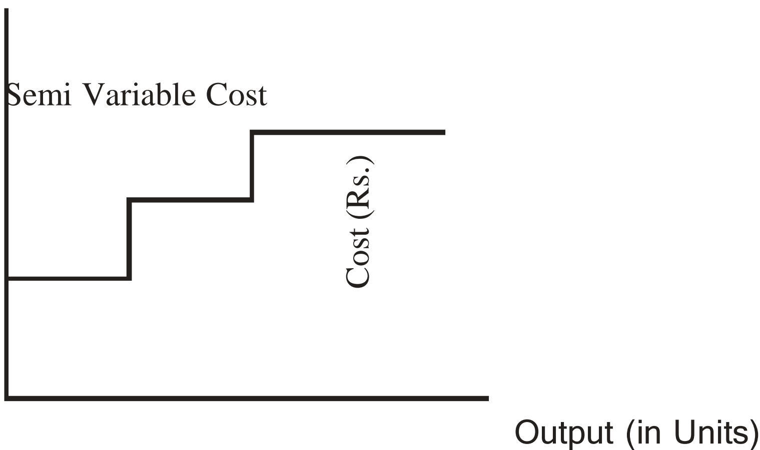
a. Total cost changes in direct proportion to the change in total output.
b. Cost per unit remains content.
c. It is quite divisible.
d. It is identifiable with the individual cost unit.
e. Such costs are controlled by functional manager.



Behaviour of Variable Cost

3) **Semi-Variable Cost :** This is also referred as semi-fixed costs. These costs include both a fixed and a variable component. i.e. These are partly fixed and partly variable. They remain constant upto a certain level and registers change afterwards. These costs vary in some degree with volume but not in director same proportion. Such costs are fixed only in relation to specified constant condition.

For example: Repairs and maintenance of machinery, telephone charges, maintainance of building, supervision, professional tax, compensation for accidents, light and power etc.



Output (in Units)

Behaviour of Semi-Variable Cost

III. On the basis of Controllability

On the basis of controllability, costs are classified into two types :

1) Controllable Cost
2) Uncontrollable Cost

1) **Controllable Cost :** These are the costs which can not be influenced or controlled by the concerned cost centre or responsibility centre. These costs may be directly regulated at a given level of management authority.

2) **Uncontrollable Cost :** These are the costs, which can not be influenced or controlled by the action of a specific member of an enterprise. For eg. it is very difficult to control costs like factory rent, managerial salaries etc.

The important points to be noted regarding this classification. First, controllable cost can not be distinguished from non- controllable costs, without specifying the level and scope of management authority. It means cost which is uncontrollable at one level of management may be controllable at another level ofmanagement. Eg. Rent and Factory Building may be beyond control for the production department but can be controlled by the administrative department by negotiations. Secondly all costs are controllable in the long run and at the some appropriate management level.

IV On the basis of Functions

An organisation performs many functions. On the basis offunctions costs can be classified as follows :

1) **Manufacturing Costs :** It is the cost of all items involved in the manufacturing of a product or service. It includes all direct costs and all indirect costs related to the production. It includes cost of direct materials, direct labour, direct expenses, and overhead expenses related to production. Overhead expenses, means all indirect costs involved in the production process. This is termed as factory overhead or manufacturing overheads. Eg. Salaries of staff for production department, technical supervision, Expenses of stores department, Depreciation of Plant and Machinery, Repairs and maintenance of Factory Building and Machineries etc.

2) **Administration Cost :** These are costs incurred for general management of an organisation. It is the cost which is incurred for formulating the policy, directing the organisation of controlling the operations. These are in the nature of indirect costs and are also termed as administrative overhead. Eg.Salaries of Administrative Stall, General Office expenses like rent, lighting, telephone, stationery, postage etc.

3) **Selling and Distribution Costs :** Selling costs are the indirect costs relating to selling of products or services. They include all indirect cost in sales management for the organisation. Selling costs include all expenses relating to regular sales and sales promotion activities. Examples of expenses which are included in selling costs are :

    1) Salaries, Commission and traveling expenses for sales personnel
    2) Advertisement cost
    3) Legal Expenses for debt realization
    4) Market research cost
    5) Show room expenses
    6) Discount allowed
    7) Sample and free gifts
    8) Rent on Sales room
    9) After sale services

Distribution costs are the costs incurred in handling a product from the time it is completed in the works until it reachesthe ultimate consumer. Distribution expenses include all these expenses which are incurred in connection with making the goods available to customers. These expenses include the following.

1) Packing charges
2) Loading charges

3) Carriage on Sales
4) Rent of warehouse
5) Insurance and lighting of warehouse
6) Transportation costs
7) Salaries of godown keeper, driver, packing staff etc.

4) Research and Development Cost : Research and development costs are incurred to discover new ideas, processes, products by experiment. It includes the cost of the process which begins with the implementation of the decision to produce or improved product.

V On the basis of Time

On the basis of time of computation, costs are classified intohistorical costs and predetermined costs.

1) **Historical Costs :** These are the costs which are ascertained after these have been incurred. Historical costs are then nothing but actual costs. They represent the costs of actual operational performance. These costs are not available until after the completion of manufacturing operations.

2) **Pre determined Costs :** These are the future costs which are ascertained in advance of production on the basis of a specification of all the factors affecting cost and cost data. Predetermined costs are future costs determined in advance on the basis of standards or estimates. These costs are extensively used for the purpose of planning and control.

VI Other Basis

1) **Normal Cost :** Normal cost may be defined as a cost which is normally incurred on expected lines at a given level of output, in the condition in which that level of output in normally attained. This cost is a part of production.

2) **Abnormal Cost :** Abnormal cost is that cost which is not normally incurred at a given level of output, in the condition in which that level of output is normally attained. Such cost is overand above the normal cost and is not treated as a part of the cost of production.

3) **Avoidable Cost :** The cost which can be avoided under the present conditions is an avoidable cost. These are the costs which under given conditions of performance efficiency should not have been incurred. They are logically associated withsome activity and situation and are ascertained by the

difference of actual cost with the happening of the situation and the normal cost. Eg. when spoilage occurs in manufacturing in excess of normal limit, the resulting cost of spoilage is avoidablecost.

4) **Unavoidable Cost :** The cost which can not be avoidable under the present condition is an unavoidable cost. They are inescapable costs which are essentially to be incurred within the limits or norms provided for. It is the cost that must be incurred under a programme of business restriction.

CHECK YOUR PROGRESS

- Draw the chart showing Classification of Cost.
- Define the following terms:
    1. Costing
    2. Cost Accounting
    3. Impersonal cost center
    4. Service Cost center
    5. Direct Cost
    6. Uncontrollable cost
    7. Predetermined cost
- Give Examples:
    1. Fixed cost
    2. Variable cost
    3. Semi variable cost
    4. Manufacturing cost
    5. Administration cost
    6. Selling cost
    7. Distribution Cost

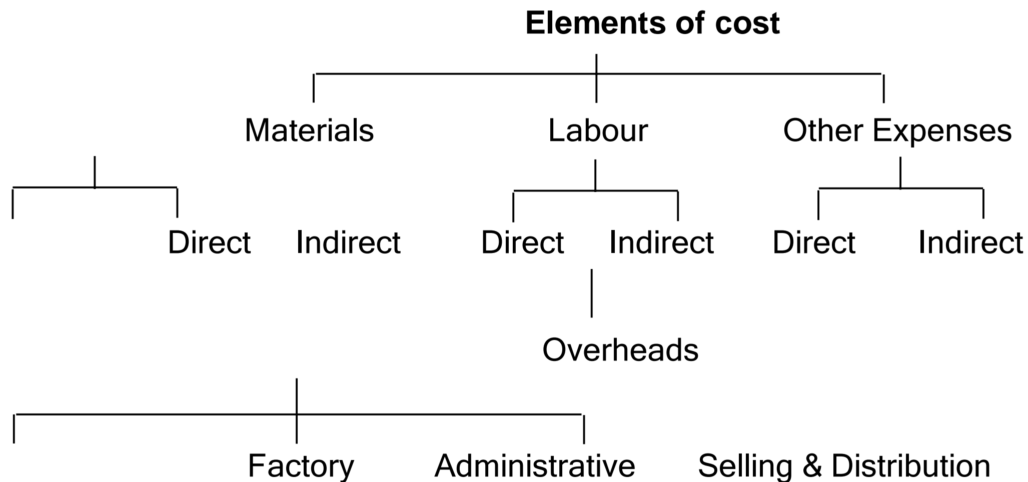
13.7 ELEMENTS OF COST

A manufacturing organisation converts raw materials into finished products. For that it employs labour and provides other facilities. While compiling production cost, amount spent on all these are to be ascertained. For this purpose, cost are primarily classified into various elements. This classification is required for accounting and control.

The elements of cost are (i) Direct material (ii) Direct labour
(iii) Direct expenses and (iv) Overhead expenses.

The following chart depicts the broad headings of costs andthis acts as the basis for preparing a Cost sheet.

Elements of cost



13.7.1 Material Cost

It is the cost of material of any nature used for the purpose of production of a product or a service. Materials may be DirectMaterial or Indirect Material.

- **Direct material :** It is the cost of basic raw material used for manufacturing a product. Direct materials generally became a part of the finished product. No finished product can be manufactured without basic raw material. This cost is easily identifiable and chargeable to the product. For e.g. Leather in leather products, Steel in steel furniture, Cotton in textile etc. Direct material includes the following.

Examples-

i) Material specially purchased for a specific job or process.
ii) Materials passing from one process to another.
iii) Consumption of materials or components manufactured in the same factory.
iv) Primary packing materials.
v) Freight, insurance and other transport costs, import duty, octroi duty, carriage inward, cost of storage and handling are treated as direct costs of the materials consumed.

In certain cases direct materials are used in small quantities and it will not be feasible to ascertain their costs and allocate them directly. For instance, nails used in the manufacture of chairs and tables, glue used in the manufacture of toys, thread used in stitching garments etc. In such cases cost of the total quantity consumed for the period will be treated as Indirect costs.

- **Indirect material :** It is the cost of material other than direct material which cannot be charged to the product directly. It can not be treated as part of the product. These are minor in importance. It is also known as expenses materials. It is the

material which cannot be allocated to the product but can beapportioned to the cost units.

Examples : Lubricants, Cotton waste, Grease, Oil, Small tools, Minor items like thread in dress making, nails in furniture (nuts,bolts in furniture) etc.

Therefore, indirect materials can not be easily identified with specific job. They may not vary directly with the output. It isconsidered as a part of overheads.

13.7.2 Labour Cost

This is the cost of remuneration in the form of wages, Salaries, Commissions, Bonuses etc. paid to the workers and employees of an organisation.

- **Direct Labour Cost :** Direct Labour Cost is the amount ofwages paid to those workers who are engaged on themanufacturing line. It consists of wages paid to workers engaged in converting of raw materials into finished products. The amount of wages can be conveniently identified with a particular line, product, job or process. These workers directly handle machines on the production line. Direct wages include payment made to the following group of workers.

1) Labour engaged on the actual production of the product
2) Labour engaged in aiding the operation viz. supervisor, foremen, shop Clerks and worker on internal transport.
3) Inspectors, Analysts, needed for such production.

Example : Carpenter in furniture making unit, tailor in readymade wear unit, Labour in construction work etc.

- **Indirect Labour Cost :** It is the amount of wages paid to those workers who are not engaged on the manufacturing line. It is of general character and can not be directly identified with a particular cost unit. This indirect labour is not directly engaged in the production operations but such labour assist or help in production operations. It can not be easily identified with specific job, contract of work order. It may not vary directly with the output. It is treated as part of overheads.

Example : Labour in Human Resource department, Labour in payroll department, Labour in stores, Labour in Securities Department, Labour in power house department etc.

13.7.3 Expenses

All costs other than material and labour are termed as expenses. It is defined as the cost of services provided to an undertaking and the notional cost of the use of owned assets.

- **Direct Expenses :** It is the amount of expenses which is directly chargeable to product manufactured or which may be allocated to product directly. It can be easily identified with the product. These are the expenses which are specifically incurred in connection with a particular job or cost unit. They are also called as chargeable expenses.

Example : Hire of special plant for a particular job, Travelling expenses in securing a particular contract, Carriage paid for materials purchased for specific job, Royalty paid in mining or production etc.

- **Indirect Expenses (Overheads):** All indirect costs other than indirect materials and indirect labour costs, are termed as indirect expenses. It is the amount of expenses which can not be charged to the product directly. These can not be directly identified with particular job, process or work order and arecommon to cost units' or cost centers.

  - Indirect expenses / Overheads can be sub-divided into following main groups.

1. **Factory or Works Overheads:** Also known as manufacturing or production overheads it consists of all costs of indirect materials, indirect labour and other indirect expenses which are incurred in the factory.

Examples :
Factory rent and insurance. Depreciation of Factory building and machinery.

2. **Office or Administration overheads:** All indirect costs incurred by the office for administration and management of an enterprise.

Examples:
Rent, rates, taxes and insurance of office buildings, audit fees, directors fees.

3. **Selling and Distribution overheads:** These are indirect costs in relation to marketing and sale.

Examples :
Advertising, Salary and Commission of sales agents, Travelling expenses of salesmen.

13.8 SUMMARY

Cost Accounting is the process of accounting for costs from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost center and cost units. Cost accounting profession got recognition in 1939 in India. It has been made compulsory for specified manufacturing companies. Cost Accounting has the objectives of determining Product costs, facilitate planning and control of regular business activities and supply information for taking short term and long-term decisions. Cost Accounting is useful in different areas such as materials, labour, overheads, stock valuation etc.

13.9 EXERCISE

1. What is cost Accounting? What are its objectives?
2. What are the various elements of costs?
3. What is meant by Cost Accounting? Explain in brief different ways of Cost Classification.
4. Write short notes on:
   a. Cost centers
   b. Cost units
   c. Elements of costs

5. Choose the correct alternative

   1. Cost accounting is an important system developed for

      i) shareholders ii) government
      iii) **management** iv) financial institutions

   2. The costing which determines cost after it has been actually incurred is

      i) **historical** ii) standard
      iii) estimated iv) marginal

   3. A cost center is a

      i) **location for which cost is incurred** ii) an organisation
      iii) a unit of cost iv) profit center

   4. A cost center which is engaged in production activity is called

      i) **production cost center** ii) process cost center
      iii) impersonal cost centre iv) production unit

6. Variable cost per unit remains_______.

i) **constant**
ii) flexible
iii) (i) & (ii)
iv) none of the above

7. Cost which is related to capacity is called :

i) Fixed cost
ii) Capacity cost
iii) Plant cost
iv) **none of the above**

8. Cost which is unaffected by the change in output is called as :

i) **Fixed cost**
ii) Variable cost
iii) Period cost
iv) None of the above

9. Cost which is relevant for decision-making is

i) Relevant cost
ii) **Past cost**
iii) Opportunity cost
iv) Imputed cost

10. The cost which remains constant irrespective of output upto capacity limit is

i) **Fixed cost**
ii) Product cost
iv) Variable cost
iv) Sunk cost

11. Variable cost is also known as

i) Product cost
ii) Period cost
iii) **Direct cost**
iv) Semi fixed cost

12. The cost which is directly chargeable to the product is

i) Indirect cost
ii) **Direct cost**
iii) Overheads
iv) Period cost