T.Y.B.Com.

FINANCIAL ACCOUNTING & AUDITING

PAPER-V,

INTRODUCTION TO MANAGEMENT

ACCOUNTING & AUDITING

Dr. Sanjay Deshmukh
Vice Chancellor,
University of Mumbai

Dr. Ambuja Salgaonkar
Incharge Director,
Institute of Distance and
Open Learning, University of Mumbai

Dr. Dhaneswar Harichandan
Incharge Study Material,
Institute of Distance and
Open Learning, University of Mumbai

Course Co-ordinator : **Ms. Madhura Kulkarni**
Asst. Prof-cum-Asst. Director, IDOL,
University of Mumbai, Mumbai-400 098.

Course Writer : **Dr. Sandeep Poddar**
S.P.D.T. College of Arts, Commerce & Science
J.B. Nagar, Andheri (E), Mumbai - 400059

: **Dr. Natika Poddar**
St. Francis Institute of Management & Research
S.V. Road, Borivali (West)

: **Prof. V. H. Koppar**
Gharkul, Mumbai - Goad Road,
Shivaji Nagar, Chiplun - 415605

Edited By : **Prof. M. N. Wani**
Tikambhai Metha Commerce College,
Mangaon, Dist Raigad

October 2015, Financial Accounting & Auditing, Paper -V, Introduction to Management Accounting & Auditing

Published by : **Professor cum Director**
Institute of Distance and Open Learning ,
University of Mumbai,
Vidyanagari, Mumbai - 400 098.

DTP composed by : Ashwini Art's
Guru Krupa Chawl, M.C.Chagla Marg, Bamanwada,
Vile Parle (East), Mumbai - 400 099.

Printed by :

CONTENTS

❖❖❖❖

T.Y.B. Com.

Financial Accounting and Auditing Paper-V:

SECTION - I

Related Applied Component –

Introduction to Management Accounting

Modules at a Glance

Sr. No.	Modules	No. of Lectures
1	Introduction to Management Accounting	04
2	Analysis and Interpretation of Accounts	10
3	Ratio Analysis	12
4	Cash Flow Statement	10
5	Working Capital Concept	09
Total		**45**

Sr. No	Modules /Units
1	**Introduction to Management Accounting** Meaning - Nature - Scope and Functions of Management Accounting - Role of Management Accounting in Decision Making - Management Accounting and Financial Accounting
2	**Analysis and Interpretation of Accounts:** a) Vertical Forms of Balance Sheet and Profit and Loss Account suitable for analysis b) Trend Analysis. c) Comparative Statement. d) Common Size Statement. NOTE: Simple Problems based on the above (a) to (d)

3	**Ratio Analysis and Interpretation based on vertical Financial statements as above -** a) Balance Sheet Ratios: i) Current Ratio ii) Liquid Ratio iii) Stock Working Capital Ratio iv) Proprietary Ratio v) Debt Equity Ratio vi) Capital Gearing Ratio b) Revenue Statement Ratios: i) Gross Profit Ratio ii) Expenses Ratio iii) Operating Ratio iv) Net Profit Ratio v) Net Operating Profit Ratio vi) Stock Turnover Ratio c) Combined Ratio i) Return on Capital employed (Including Long Term Borrowings) ii) Return on proprietor's Fund (Shareholders Fund and Preference Capital) iii) Return on Equity Capital iv) Dividend Pay-out Ratio v) Debt Service Ratio vi) Debtors Turnover vii) Creditors Turnover
4	**Preparation of Cash Flow Statement with reference to Accounting Standard No .3.** (Indirect method only)
5	**Working Capital-Concept** Estimation /Projection of Working Capital Requirements in case of Trading and Manufacturing Organization.

SECTION - II

Introduction to Auditing

Modules at a Glance

Sr. No.	Modules	No. of Lectures
1	Auditing Concepts	09
2	Audit planning and procedures and Documentation	09
3	Auditing Techniques	09
4	Vouching	09
5	Verification	09
Total		**45**

Sr. No.	Modules/ Units
1	**Auditing Concepts**
1.1	Basics Financial Statements, Users of Financial Information, Definition of Auditing, Objectives of Auditing - Primary & Secondary , Expression of opinion, Detection of Frauds & Errors
1.2	Errors and Frauds Definition, Reasons & Circumstances, Types of Errors – Commission, Omission, Principle & Compensating, Types of Frauds, Risk of fraud & Error in Audit, Inherent limitations of Audit, Auditors Duties & Responsibilities in respect of fraud.
1.3	Principles of Audit Documentation, Planning, Audit Evidence, Accounting System & Internal Control, Audit Conclusions & Reporting

1.4	Auditing Concepts Materiality, Going Concern, True and Fair, Independence
2	**Audit planning and procedures and Documentation**
2.1	Audit Planning Meaning, Objectives, Factors to be considered, Sources of obtaining information, Discussions with Client, Overall Audit Plan
2.2	Audit Programme Meaning, Factors ,Advantages, Disadvantages, Overcoming Disadvantages, Methods of Work , Instruction before commencing work, Overall Audit Approach
2.3	Audit working Papers Meaning, importance, Factors determining Form & Contents, Main Functions / Importance, Features ,Contents of Permanent Audit File, Temporary Audit File , Ownership, Custody, Access of Other Parties to Audit Working Papers, Auditors Lien on Working Papers, Auditors Lien on Client's Books
2.4	Audit notebook Meaning ,Structure, Contents, General Information Current Information Importance
3	**Auditing Techniques**
3.1	Test Check Test Checking V/s Routing Checking, test Check meaning, features, factors to be considered, when Test Checks can be used, advantages ,disadvantages precautions
3.2	Audit Sampling Audit Sampling, meaning, purpose, factors in determining sample size –Sampling Risk, Tolerable Error & expected error, methods of selecting Sample Items Evaluation of Sample Results auditors Liability in conducting audit based on Sample
3.3	Internal control meaning & purpose, review of internal control, advantages, auditors duties, review of internal control, Inherent Limitations of Internal control, internal control samples for sales & debtors, purchases & creditors, wages & salaries

4	**vouching**
4.1	Audit of Income Revenue from Sales and Services, Rental Income, Interest & Dividends Income, Royalties Income
4.2	Audit of Expenditure Purchases, Salaries & Wages, Rent, Insurance Premium, Telephone expense , Advertisement
5	**Auditing Techniques :- verification**
5.1	Audit of assets Plant & Machinery, Accounts Receivable, Investments, Inventory
5.2	Audit of Liabilities Outstanding Expenses, Accounts Payable, Secured loans Unsecured Loans

❖❖❖❖

1

INTRODUCTION TO MANAGEMENT ACCOUNTING

Unit Structure

1.0 OBJECTIVES

After studying the unit the students will be able to:

- Define the term Management accounting.
- Explain the nature and functions of Management Accounting
- Discuss the role of management accountant.
- Explain the difference between Management accounting and cost and financial accounting.
- Understand the limitations of MA.

1.1 INTRODUCTION

Management accounting can be viewed as Management-oriented Accounting. Basically it is the study of managerial aspect of financial accounting, "accounting in relation to management function”. It shows how the accounting function can be re-oriented so as to fit it within the framework of management activity. The primary task of management accounting is, therefore, to redesign the entire accounting system so that it may serve the operational needs of the firm. If furnishes definite accounting information, past, present or future, which may be used as a basis for management action. The financial data are so devised and systematically development that they become a unique tool for management decision.

1.2 DEFINITIONS OF MANAGEMENT ACCOUNTING

The term "Management Accounting", observe, Broad and Carmichael, covers all those services by which the accounting department can assist the top management and other departments in the formation of policy, control of execution and appreciation of effectiveness.

The Report of the Anglo-American Council of Productivity (1950) has also given a definition of management accounting, which has been widely accepted. According to it, "Management accounting is the presentation of accounting information in such a way as to assist the management in creation of policy and the day to day operation of an undertaking". The reasoning added to this statement was, "the technique of accounting is of extreme importance because it works in the most nearly universal medium available for the expression of facts, so that facts of great diversity can be represented in the same picture. It is not the production of these pictures that is a function of management but the use of them." An analysis of the above definition shows that management needs information for better decision-making and effectiveness. The collection and presentation of such information come within the area of management accounting. Thus, accounting information should be recorded and presented in the form of reports at such frequent intervals, as the management may want. These reports present a systematic review of past events as well as an analytical survey of current economic trends. Such reports are mainly suggestive in approach and the data contained in them are quite up to date. The accounting data so supplied thus provide the informational basis of action. The quality of information so supplied depends upon its usefulness to management in decision-making.

1.3 NATURE OF MANAGEMENT ACCOUNTING

The term management accounting is composed of 'management' and 'accounting'. The word 'management' here does not signify only the top management but the entire personnel charged with the authority and responsibility of operating an enterprise. The task of management accounting involves furnishing accounting information to the management, which may base its decisions on it. It is through management accounting that the management gets the tools for an analysis of its administrative action and can lay suitable stress on the possible alternatives in terms of costs, prices and profits, etc. but it should be understood that the accounting information supplied to management is not the sole basis for managerial decisions. Along with the accounting information, management takes into consideration or weighs other factors concerning actual execution. For reaching a final decision, management has to apply its common sense, foresight, knowledge and experience of operating an enterprise, in addition to the information that is already has.

The word 'accounting' used in this phrase should not lead us to believe that it is restricted to a mere record of business transactions i.e., book keeping only.

Management accounting has no set principles such as the double entry system of bookkeeping. In place of generally accepted accounting principles, the philosophy of cost benefit analysis is the core guide of this discipline. It says that no accounting system is good or bad but is can be considered desirable so long as it brings incremental benefits in excess of its incremental costs.

1.4 FUNCTIONS OF MANAGEMENT ACCOUNTING

The basic function of management accounting is to assist the management in performing its functions effectively. The functions of the management are planning, organizing, directing and controlling. Management accounting helps in the performance of each of these functions in the following ways:

(i) **Provides data:** Management accounting serves as a vital source of data for management planning. The accounts and documents are a repository of a vast quantity of data about the past progress of the enterprise, which are a must for making forecasts for the future.

(ii) **Modifies data:** The accounting data required for managerial decisions is properly compiled and classified. For example, purchase figures for different months may be classified to know total purchases made during each period product-wise, supplier-wise and territory-wise.

(iii) **Analyses and interprets data:** The accounting data is analyzed meaningfully for effective planning and decision-making. For this purpose the data is presented in a comparative form. Ratios are calculated and likely trends are projected.

(iv) Serves as a means of communicating: Management accounting provides a means of communicating management plans upward, downward and outward through the organization. Initially, it means identifying the feasibility and consistency of the various segments of the plan. At later stages it keeps all parties informed about the plans that have been agreed upon and their roles in these plans.

(v) Facilitates control: Management accounting helps in translating given objectives and strategy into specified goals for attainment by a specified time and secures effective accomplishment of these goals in an efficient manner. All this is made possible through budgetary control and standard costing which is an integral part of management accounting.

(vi) Uses also qualitative information: Management accounting does not restrict itself to financial data for helping the management in decision making but also uses such information which may not be capable of being measured in monetary terms. Such information may be collected form special surveys, statistical compilations, engineering records, etc.

1.5 SCOPE OF MANAGEMENT ACCOUNTING

Management accounting is concerned with presentation of accounting information in the most useful way for the management. Its scope is, therefore, quite vast and includes within its fold almost all aspects of business operations. However, the following areas can rightly be identified as falling within the ambit of management accounting:

(i) Financial Accounting: Management accounting is mainly concerned with the rearrangement of the information provided by financial accounting. Hence, management cannot obtain full control and coordination of operations without a properly designed financial accounting system.

(ii) Cost Accounting: Standard costing, marginal costing, opportunity cost analysis, differential costing and other cost techniques play a useful role in operation and control of the business undertaking.

(iii) Revaluation Accounting: This is concerned with ensuring that capital is maintained intact in real terms and profit is calculated with this fact in mind.

(iv) **Budgetary Control:** This includes framing of budgets, comparison of actual performance with the budgeted performance, computation of variances, finding of their causes, etc**.**

(v) **Inventory Control:** It includes control over inventory from the time it is acquired till its final disposal.

(vi) **Statistical Methods:** Graphs, charts, pictorial presentation, index numbers and other statistical methods make the information more impressive and intelligible.

(vii) **Interim Reporting:** This includes preparation of monthly, quarterly, half-yearly income statements and the related reports, cash flow and funds flow statements, scrap reports, etc.

(viii) **Taxation:** This includes computation of income in accordance with the tax laws, filing of returns and making tax payments.

(ix) **Office Services:** This includes maintenance of proper data processing and other office management services, reporting on best use of mechanical and electronic devices.

(x) **Internal Audit:** Development of a suitable internal audit system for internal control.

1.6 ROLE OF MANAGEMENT ACCOUNTANT

Management Accounting provides significant economic and financial data to the management and the Management Accountant is the channel through which this information efficiently and effectively flows to the management. The Management Accountant has a very significant role to perform in the installation, development and functioning of an efficient and effective management information system. He designs the framework of the financial and cost control reports that provide each management level with the most useful data at the most appropriate time. He educates executives in the need for control information and ways of using it. This is because his position is unique with respect to information about the organization. Apart from top management no one in the organization perhaps knows more about the various functions of the organization than him. He is, therefore, sometimes described as the Chief Intelligence Officer of the top management. He gathers information, breaks it down, sifts it out and organizes it into meaningful categories. He separates relevant and irrelevant information and then ranks relevant information in an intelligible form to the management and sometimes also to those who are interested in the information outside the company. He also compares the actual performance with the planned one and reports and interprets the results of operations to all levels of management and to the owners of the business. Thus, in brief, management accountant or controller is the person who designs the management information system for the organization, operates it by means of interlocked budgets, computes variances and exhorts others to institute corrective measures. Mr. P.L. Tandon has explained beautifully the position of the management accountant in the following words:-

"The management accountant is exactly like the spokes in a wheel, connecting the rim of the wheel and the hub receiving the information. He processes the information and then returns the processed information back to where it came from".

Dr. Don barker sees a very bright future for the management accountants. According to him, "Management Accountants will be presented with many opportunities for innovative actions in the global economic environment. In addition to their role of providing accurate, timely and relevant information, management accountants will be expected to participate as business consultants and partners with management in the strategic planning process". Thus, there are tremendous possibilities for management accountants to shine as a professional group in the years to come. To fit in this role, it is necessary that the management accountants develop effective communication abilities, adopt a structured approach, a flexible accommodation and keep themselves aware with the latest evolving technologies in the profession.

1.7 FUNCTIONS OF MANAGEMENT ACCOUNTANT

It is the duty of the management accountant to keep all levels of management informed of their real position. He has, therefore, varied functions to perform. His important functions can be summarized as follows:

(i) **Planning:** He has to establish, coordinate and administer as an integral part of management, an adequate plan for the control of the operations. Such a plan would include profit planning, programmes of capital investment and financing, sales forecasts, expenses budgets and cost standards.

(ii) **Controlling:** He has to compare actual performance with operating plans and standards and to report and interpret the results of operations to all levels of management and the owners of the business. This id done through the compilation of appropriate accounting and statistical records and reports.

(iii) **Coordinating:** He consults all segments of management responsible for policy or action. Such consultation might concern any phase of the operation of the business having to do with attainment of objectives and the effectiveness of the organizational structures and policies.

(iv) **Other functions:**

- He administers tax policies and procedures.
- He supervises and coordinated the preparation of reports to governmental agencies.
- He ensures fiscal protection for the assets of the business through adequate internal control and proper insurance coverage.
- He carries out continuous appraisal economic and social forces and the government influences, and interprets their effect on the business.

CHECK YOUR PROGRESS

1. "The basic function of management accounting is to assist the management in performing its functions effectively". Discuss.
2. Enlist the points explaining the scope of Management Accounting.

1.8 DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

Financial accounting and management accounting are closely interrelated since management accounting is to a large extent rearrangement of the data provided by financial accounting. Moreover, all accounting is financial in the sense that all accounting systems are in monetary terms and management is responsible for the contents of the financial accounting statements. In spite of such a close relationship between the two, there are certain fundamental differences. These differences can be laid down as follows:

(i) **Objectives:** Financial accounting is designed to supply information in the form of profit and loss account and balance sheet to external parties like shareholders, creditors, banks, investors and Government. Information is supplied periodically and is usually of such type in which management is not much interested. Management Accounting is designed principally for providing accounting information for internal use of the management. Thus, financial accounting is primarily an external reporting process while management accounting is primarily an internal reporting process.

(ii) **Analyzing performance:** Financial accounting portrays the position of business as a whole. The financial statements like income statement and balance sheet report on overall performance or statues of the business. On the other hand, management accounting directs its attention to the various divisions, departments of the business and reports about the profitability, performance, etc., of each of them. Financial accounting deals with the aggregates and, therefore, cannot reveal what part of the management action is going wrong and why. Management accounting provides detailed analytical data for these purposes.

(iii) **Data used:** Financial accounting is concerned with the monetary record of past events. It is a post-mortem analysis of past activity and, therefore, out the date for management action. Management accounting is accounting for future and, therefore, it supplies data both for present and future duly analyzed in detail in the 'management language' so that it becomes a base for management action.

(iv) **Monetary measurement:** In financial accounting only such economic events find place, which can be described in money. However, the management is equally interested in non-monetary economic events, viz., technical innovations, personnel in the organization, changes in the value of money, etc. These events affect management's decision and, therefore, management accounting cannot afford to ignore them.

For example, change in the value of money may not find a place in financial accounting on account of "going concern concept". But while affecting an insurance policy on an asset or providing for replacement of an asset, the management will have to take into account this factor.

(v) **Periodicity of reporting:** The period of reporting is much longer in financial accounting as compared to management accounting. The Income Statement and the Balance Sheet are usually prepared yearly or in some cases half-yearly. Management requires information at frequent intervals and, therefore, financial accounting fails to cater to the needs of the management. In management accounting there is more emphasis on furnishing information quickly and at comparatively short intervals as per the requirements of the management.

(vi) **Precision:** There is less emphasis on precision in case of management accounting as compared to financial accounting since the information is meant for internal consumption.

(vii) Nature: Financial accounting is more objective while management accounting is more subjective. This is because management accounting is fundamentally based on judgment rather than on measurement.

(viii) Legal compulsion: Financial accounting has more or less become compulsory for every business on account of the legal provisions of one or the other Act. However, a business is free to install or not to install system of management accounting.

1.9 DIFFERENCE BETWEEN COST ACCOUNTING AND MANAGEMENT ACCOUNTING

Cost accounting is the process of accounting for costs. It embraces the accounting procedures relating to recording of all income and expenditure and the preparation of periodical statements and reports with the object of ascertaining and controlling costs. It is, thus, the formal mechanism by means of which the costs of products or services are ascertained and controlled. On the other hand, management accounting involves collecting, analyzing, interpreting and presenting all accounting information, which is useful to the management. It is closely associated with management control, which comprises planning, executing, measuring and evaluating the performance of an organization. Thus, management accounting draws heavily on cost data and other information derived from cost accounting. Today cost accounting is generally indistinguishable from the so-called management accounting or internal accounting because it serves multiple purposes. However, management accounting can be distinguished from cost accounting in one important respect. Management accounting has a wider scope as compared to cost accounting. Cost accounting deals primarily with cost data while management accounting involves the considerations of both cost and revenue. Management accounting is an all-inclusive accounting information system, which covers financial accounting, cost accounting, and all aspects of financial management. But it is not a substitute for other accounting functions. It involves a continuous process of reporting cost, financial and other relevant data in an analytical and informative way to management. We should not be very much concerned with boundaries of cost accounting and management accounting since they are complementary in nature. In the absence of a suitable system of cost accounting, management accountant will not be in a position to have detailed cost information and his function is bound to lose significance. On the other hand, the management accountant cannot effectively use the cost data unless it has been reported to him in a meaningful and informative form.

1.10 LIMITATIONS OF MANAGEMENT ACCOUNTING

Management accounting, being comparatively a new discipline, suffers from certain limitations, which limit its effectiveness. These limitations are as follows:

1. **Limitations of basic records:** Management accounting derives its information from financial accounting, cost accounting and other records. The strength and weakness of the management accounting, therefore, depends upon the strength and weakness of these basic records. In other words, their limitations are also the limitations of management accounting.

2. **Persistent efforts**. The conclusions draws by the management accountant are not executed automatically. He has to convince people at all levels. In other words, he must be an efficient salesman in selling his ideas.

3. **Management accounting is only a tool:** Management accounting cannot replace the management. Management accountant is only an adviser to the management. The decision regarding implementing his advice is to be taken by the management. There is always a temptation to take an easy course of arriving at decision by intuition rather than going by the advice of the management accountant.

4. **Wide scope:** Management accounting has a very wide scope incorporating many disciplines. It considers both monetary as well as non-monetary factors. This all brings inexactness and subjectivity in the conclusions obtained through it.

5. **Top-heavy structure:** The installation of management accounting system requires heavy costs on account of an elaborate organization and numerous rules and regulations. It can, therefore, be adopted only by big concerns.

6. **Opposition to change:** Management accounting demands a break away from traditional accounting practices. It calls for a rearrangement of the personnel and their activities, which is generally not like by the people involved.

7. **Evolutionary stage:** Management accounting is still in its initial stage. It has, therefore, the same impediments as a new discipline will have, e.g., fluidity of concepts, raw techniques and imperfect analytical tools. This all creates doubt about the very utility of management accounting.

1.11 EXERCISE

1. What do you mean by management accounting? Explain giving examples.
2. What are the functions of a management accountant? Elaborate each one of them.
3. Explain the benefits of management accounting in the business sector and service sector.
4. Distinguish management accounting from financial accounting and cost accounting.
5. Explain the limitations of management accounting.
6. Objective Type Questions:
   a. Match Group A With Group B

Group A		Group B	
a)	Financial Accounting	1.	Function of management accounting
b)	Reports of Management	2.	Mandatory
c)	Management Accounting	3.	Technique of management
d)	Collection of data	4.	Future oriented
e)	Reports of Financial Accounting	5.	Optional
f)	Budgetary Control	6.	Historical Data

Ans. a – 6 ,b –5 , c- 4 , d-1 , e – 2 , f -3

b. Fill in the Blanks with proper words / phase.
   1. Inventory control is ________ in management accounting.
   2. Financial accounting deals with ____________ data.
   3. Management accounting is _________ oriented.
   4. There is no legal format for management accounting _____________.
   5. In management accounting publication of reports is _______________.
   6. Management account is ___________in nature.

Answer: 1. Included, 2. Historical, 3. Future, 4. Reports, 5. Optional, 6. Analytical.

c. State whether following statement are True or False.
   1. Management accounting is analytical in nature.
   2. Management accounting is dynamic.
   3. Management accounting provides decisions to the management.
   4. Management accounting is future oriented.
   5. Management accounting includes Standard Costing.
   6. Financial Accounting is future oriented.

Answer: 1. True 2.True 3. False 4. True 5. True 6. False

d. Multiple Choice Questions.
   1. Financial accounting records only
      a) Actual Figures
      b) Budgeted figures
      c) Standard Figures
      d) All of the above

   2. The use of management accounting is
      a) Mandatory
      b) Optional
      c) Compulsory
      d) All of the above

   3. Management Accounting includes
      a) Financial Accounting
      b) Cost Accounting
      c) Budgetary control
      d) All of the above

   4. Management Accounting is
      a) Analytical
      b) Future oriented
      c) Dynamic
      d) All of the above

   5. Financial Accounting deals with
      a) Determination of cost
      b) Determination of profit
      c) Determination of prices
      d) None of the above

6. Management accounting relates to
   a) Recording of accounting data
   b) Recording of costing data
   c) Presentation of accounting data
   d) None of the above

Answer: 1. a, 2. b, 3.d, 4.d,5. b, 6.c

❖❖❖❖

2

ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS

Unit Structure

2.0 OBJECTIVES

After studying the unit the students will be able to:

- Understand the objectives and nature of Financial Statements.
- Know the characteristics of Financial Statements.
- Discuss about the qualities of Ideal Financial Statements.
- Interpret the financial statements.

2.1 INTRODUCTION

The joint stock companies are legally required to prepare set of financial statement to periodically assess the profit earned and to know the financial position of the company as on a specified date. Thus, as in the case of other business enterprises, a limited company prepare the income statement and the balance sheet. However, in the case of companies registered under Companies Act, the Act specifies the books of accounts to be maintained and also prescribes the format and content of financial statement. In addition, the accounts must be statutorily audited by the external person called the auditor and it is duty of the auditor to submit a report in the prescribed format to the shareholder.

Since the owner or shareholder elect a board of director to manage the company and rely on the ability and skills of these directors to conduct the business in the most profitable manner, the Companies Act tries to protect the shareholders' interest by prescribing a set of covenants according to which the financial statements are to be prepared and presented to the shareholders. The objective of the Company Act in laying down the various provisions with respect to accounts and audit is to ensure that adequate information is provided to be shareholders in order for them to judge the performance of the directors during an accounting period. The legal requirement laid down by the Companies Act therefore, assume a great importance in the preparation of the financial statements.

2.2 MEANING AND NATURE OF FINANCIAL STATEMENTS

2.2.1 MEANING

Every business concern wants to know the various financial aspects for effective decision making. The preparation of financial statement is required in order to achieve the objectives of the firm as a whole. The term financial statement refers to an organized collection of data on the basis of accounting principles and conventions to disclose its financial information. Financial statements are broadly grouped in to two statements:

I. Income Statements (Trading, Profit and Loss Account)
II. Balance Sheets

In addition to above financial statements supported by the following statements are prepared to meet the needs of the business concern:

(a) Statement of Retained Earnings
(b) Statement of Changes in Financial Position

The meaning and importance of the financial statements are as follows :

Income Statements: The term 'Income Statements' is also known as Trading, Profit and Loss Account. This is the first stage of preparation of final accounts in accounting cycle. The purpose of preparing Trading, Profit and Loss Accounts to ascertain the Net Profit or Net Loss of a business concern during the accounting period.

Balance Sheet: Balance Sheet may be defined as "a statement of financial position of any economic unit disclosing as at a given moment of time its assets, at cost, depreciated cost, or other indicated value, its liabilities and its ownership equities." In other words, it is a statement which indicates the financial position or soundness of a business concern at a specific period of time. Balance Sheet may also be described as a statement of source and application of funds because it represents the source where the funds for the business were obtained and how the funds were utilized in the business.

Statement of Retained Earnings: This statement is considered to be as the connecting link between the Profit and Loss Account and Balance Sheet. The accumulated excess of earning over losses and dividend is treated as Retained Earnings. The balance of retained earnings shown on the Profit and Loss Accounts and it is transferred to liability side of the balance sheet.

Statement of Changes in Financial Position: Income Statements and Balance sheet do not disclose the operational efficiency of the concern. In order to measure the operational efficiency of the concern it is essential to identify the movement of working capital or cash inflow or cash outflow of the business concern during the particular period. To highlight the changes of financial position of a particular firm, the statement is prepared may emphasize of the following aspects :

1. Fund How Statement is prepared to know the changes in the firm's working capital.
2. Cash Flow Statement is prepared to understand the changes in the firm's cash position.
3. Statement of Changes in Financial Position is used for the changes in the firm's total financial position.

2.2.2 NATURE OF FINANCIAL STATEMENTS

Financial Statements are prepared on the basis of business transactions recorded in the books of Original Entry or Subsidiary Books, Ledger, and Trial Balance. Recording the transactions in the books of primary entry supported by document proofs such as Vouchers, Invoice Note etc.

According to the American Institute of Certified Public Accountants, "Financial Statement reflects a combination of recorded facts, accounting conventions and personal judgments and conventions applied which affect them materially." It is therefore, nature and accuracy of the data included in the financial statements which are influenced by the following factors :

(1) Recorded Facts.
(2) Generally Accepted Accounting Principles.
(3) Personal Judgments.
(4) Accounting Conventions

2.2.3 OBJECTIVES OF FINANCIAL STATEMENTS

The following are the important objectives of financial statements:

(1) To provide adequate information about the source of finance and obligations of the finance firm.

(2) To provide reliable information about the financial performance and financial soundness of the concern.

(3) To provide sufficient information about results of operations of business over a period of time.

(4) To provide useful information about the financial conditions of the business and movement of resources in and out of business.

(5) To provide necessary information to enable the users to evaluate the earning performance of resources or managerial performance in forecasting the earning potentials of business.

2.2.4 LIMITATIONS OF FINANCIAL STATEMENTS

(1) Financial Statements are normally prepared on the basis of accounting principles, conventions and past experiences. Therefore, they do not communicate much about the profitability, solvency, stability, liquidity etc. of the undertakers to the users of the statements.

(2) Financial Statements emphasize to disclose only monetary facts, i.e., quantitative information and ignore qualitative information.

(3) Financial Statements disclose only the historical information. It does not consider changes in money value, fluctuations of price level etc. Thus, correct forecasting for future is not possible.

(4) Influences of personal judgments leads to opportunities for manipulation while preparing of financial statements.

(5) Information disclosed by financial statements based on accounting concepts and conventions. It is unrealistic due to difference in terms and conditions and changes in economic situations.

2.3 ANALYSIS AND INTERPRETATIONS OF FINANCIAL STATEMENTS

2.3.1 Need of interpretation

Presentation of financial statements is the important part of accounting process. Following are some points:

1. To provide more meaningful information

2. To enable the owners, investors, creditors or users of financial statements
3. To evaluate the operational efficiency of the concern during the particular period.
4. More useful information is required from the financial statements to make the purposeful decisions about the profitability and financial soundness of the concern.

   In order to fulfill the needs of the above, it is essential to consider analysis and interpretation of financial statements.

2.3.2 Meaning of Analysis and Interpretations

The term "Analysis" refers to rearrangement of the data given in the financial statements. In other words, simplification of data by methodical classification of the data given in the financial statements.

The term "interpretation" refers to "explaining the meaning and significance of the data so simplified."

Both analysis and interpretations are closely connected and inter related. They are complementary to each other. Therefore presentation of information becomes more purposeful and meaningful—both analysis and interpretations are to be considered.

Metcalf and Tigard have defined financial statement analysis and interpretations as a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm's position and performance.

The facts and figures in the financial statements can be transformed into meaningful and useful figures through a process called "Analysis and Interpretations."

In other words, financial statement analysis and interpretation refer to the process of establishing the meaningful relationship between the items of the two financial statements with the objective of identifying the financial and operational strengths and weaknesses.

2.3.3 Types of Analysis and Interpretations

The analysis and interpretation of financial statements can be classified into different categories depending upon :

I. The Materials Used

II. Modus Operandi (Methods of Operations to be followed)

I. On the Basis of Materials Used
On the basis of materials used the analysis and interpretations of financial statements may be classified into (a) External Analysis and (b) Internal Analysis.

(a)External Analysis: This analysis meant for the outsiders of the business firm. Outsiders may be investors, creditors, suppliers, government agencies, shareholders etc. These external people have to rely only on these published financial statements for important decision making. This analysis serves only a limited purpose due to non-availability of detailed information.

(b)Internal Analysis: Internal analysis performed by the persons who are internal to the organization. These internal people who have access to the books of accounts and other information's related to the business. Such analysis can be done for the purpose of assisting managerial personnel to take corrective action and appropriate decisions.

II. On the basis of Modus Operandi
On the basis of Modus operandi, the analysis and interpretation of financial statements may be classified into: (a) Horizontal Analysis and (b) Vertical Analysis.

(a)Horizontal Analysis: Horizontal analysis is also termed as Dynamic Analysis. Under this type of analysis, comparison of the trend of each item in the financial statements over the number of years are reviewed or analyzed. This type of comparison helps to identify the trend in various indicators of performance. In this type of analysis, current year figures are compared with base year for figures are presented horizontally over a number of columns.

(b)Vertical Analysis: Vertical Analysis is also termed as Static Analysis. Under this type of analysis, a number of ratios used for measuring the meaningful quantitative relationship between the items of financial statements during the particular period. This type of analysis is useful in comparing the performance, efficiency and profitability of several companies in the same group or divisions in the same company.

2.4 PREPARATION OF FINANCIAL STATEMENTS

Financial statements should be rearranged for proper analysis and interpretations of these statements. It enables to measure the performance of operational efficiency and profitability of a concern during particular period. The items of operating revenues, non-operating revenues, operating expenses and non-operating expenses are rearranged into different heads and sub-heads are given below:

I - Vertical Profit and Loss:
Profit and loss account is a statement showing the net result of business operations during the period, usually a year.

Vertical Profit and loss for the year ended__________

Particulars	**Rs.**	**Rs.**	**Rs.**
Gross Sales			
Cash Sales		Xx	
Credit Sales		Xx	
Less : Returns and allowance		(xx)	
Net Sales			**XX**
Less: Cost of Goods Sold			
Opening Stock of Raw Material	Xx		
Purchases of Raw Material	Xx		
Less : Closing Stock of Raw Material	(xx)		
Raw Material Consumed		Xx	
Direct expenses (Factory Expenses)			
Carriage inwards	Xx		
Factory power	Xx		
Wages	Xx		
Other factory expenses	Xx		
Depreciation on Machinery	Xx		
Depreciation on Factory Building	Xx		
Depreciation on Patterns and Patents	Xx	Xx	
Total		xx	
Add: Opening stock of Finished goods		Xx	
Add: Purchases of Finished Goods		Xx	
Less: Closing Stock of Finished Goods		(xx)	
Cost of Goods Sold			**(xx)**

Gross Profit / Gross Margin			**Xx**
Less: a) Administration Expenses			
Office Expenses	Xx		
Office Rent , Rates and Taxes	Xx		
Insurance, Office Electricity	Xx		
Printing and stationery, Audit Fees	Xx		
Repairs, other office expenses, Directors Fees	Xx		
Depreciation on office Assets	Xx		
Postage and telegrams	Xx		
Administrative Expenses		**Xx**	
b) Selling and Distribution Expenses			
Salaries to salesman	Xx		
Rent of shop, show room	Xx		
Exhibitions , Trade fair, Sales Discount/ Commission	Xx		
Normal Bad Debts	Xx		
Depreciation on Delivery Van	Xx		
Advertisement and publicity	Xx		
Travelling / Van Expenses	Xx		
Selling and Distribution Expenses		**Xx**	
c) Finance Charges / Expenses			
Cash Discount	Xx		
Bank Chagres	Xx		
Abnormal bad Debts	Xx		
Finance Charges / Expenses		**Xx**	
Total Operating Expenses (Except Interest)			**(xx)**

Operating Profit Before Interest			**Xx**
Less: Interest Paid			
Interest on Debentures Or Bonds		Xx	
Interest on Loans		Xx	
Interest on public deposits		Xx	
Interest on short term loans		Xx	
Interest Paid			**(xx)**
Operating Profit After Interest			**Xx**
Add: Non-operating Income			
Dividend on shares		Xx	
Interest on debentures, loans etc.		Xx	
Profit on sale of Fixed assets / investment		Xx	
Damages received		Xx	
Royalty / shares transfer fees		Xx	
Non-operating Income			**Xx**
Less: Non-operating Expenses			
Loss on sale of Fixed assets / Investment		Xx	
Damages paid / due		Xx	
Preliminary expenses written off		Xx	
Fine and penalty		Xx	
Non-Operating Expenses			**(xx)**
Net Profit Before Tax			**Xx**
Less : Income Tax			**(xx)**
Net Profit After tax			**Xx**
Add: Profit and Loss A/c (Op. Balance)			**Xx**
Less: Appropriations			

Transfer to Sinking Fund		Xx	
Dividend Paid		Xx	
Interim Dividend		Xx	
Transfer to Reserve		Xx	
Appropriation			**(xx)**
Retained Earnings / Balance Transfer to balance sheet			**Xx**

From the above rearrangement of operating statements, the following accounting equations may be given:

1. **Net Sales =** Cost of sales + operating expenses + Non-operating expenses
2. **Gross Profit =** Net sales – Cost of goods sold
3. **Net operating profit =** Gross profit – operating expenses
4. **Gross Sales :**Gross sales also called ' Turnover' is the amount of total sales of goods and services. This includes both cash and credit sales.

   Gross sales = Credit sales + cash sales
5. **Cost of Goods Sold:** This is the cost of purchases or cost of manufacturing the goods, which are sold during the year.

   Cost of Goods Sold = Opening stock + Purchases + Direct Expenses + Depreciation – less closing stock
6. **Gross Profit:**

   This is the major source of operating income of an organization. This is the amount of profit earned on purchases, manufactures and sales of goods and services.

   Gross Profit = Net Sales – Cost of goods sold
7. **Operating Expenses:**

   These are the expenses incurred in the course of normal conduct of business, which are related to the business activities. Broadly, operating expenses are classified into the following categories.

a) **Administrative Expenses:** These are the expenses pertaining to general office administrative of an organization.

b) **Selling and Distribution Expenses**: These are the expenses incurred for the purpose of increasing and maintaining the sales, distributing and delivering the goods.

c) **Finance Charges**: This includes: Cash discount, Bad debts (Abnormal), Bank charges, bank Commission.

Operating Expenses = Administrative Expenses + Selling & Distribution Expenses + Finance Expenses

8. **Operating Profit:** Excess of operating income over operating expenses is called net operating profit. This is the amount of profit earned during the normal course of business. Operating profit may be

a) **Operating Profit before Interest:**

Gross Profit - Operating expenses (Before Interest)

b) **Operating Profit After Interest :**

Operating profit (before Interest) - Interest

9. **Non-operating Income :**Income not related to the ordinary course of business i.e. Interest on investment is not an operating income to a company, which is engaged in buying and selling of goods and services of goods. But for an investment company, interest will be considered as an operating income.

10. **Non-Operating Expenses:** These are the expenses, which do not relate to day to day conduct of business operations. These expenses arise due to certain unusual events and unexpected occurrences.

11. **Net Profit :** This is the excess of total operating and non-operating income over the total operating and non-operating expenses. It is therefore, ultimate profit earned by the organization.

a) **Net Profit before Tax =** Net operating profit + Net non-operating Income

b) **Net profit After Tax =**Net profit before tax - Income tax

12. **Retained Earnings:** Net profit after tax - dividend

II - Vertical Balance Sheet: Balance sheet is a statement of assets and liabilities.

Vertical Balance sheet as on ___________________

Particulars	**Rs.**	**Rs.**	**Rs.**
I- Sources of Funds			
1. Owners funds			
A) Share capital			
Equity share capital	Xx		
Preference share capital	Xx		
Less: Unpaid calls/	(xx)		
Add: Forfeiture shares	Xx	**Xx**	
B) Reserve and Surplus			
Capital Reserve / Capital Redemption Reserve	Xx		
Share premium /General Reserve	Xx		
Other reserve / Sinking Fund	xx	**xx**	
C) Losses & Fictitious Assets			
Profit and loss A/c Debit Balance	Xx		
Miscellaneous Expenditure Not Written off	Xx		
Preliminary Expenses	Xx		
Shares Issue Expenses	Xx		
Discount on Issue of shares or Debenture	Xx	**(xx)**	
Own Funds or Net Worth (A +B-C)			**xx**
2. Loan Funds			
A) Long term Loans			
Debentures or bonds	Xx		
Loans from banks	Xx		

Loans from financial Institutions	Xx		
Public deposit	Xx	**Xx**	
B) Short Term Loans			
Other Loans		**Xx**	
Owed Fund (a +b)			**Xx**
Total Funds Available / Capital Employed			**xx**
II Application of Funds			
1. Net Fixed Assets			
A) Tangible Assets			
Land and building (Cost)	Xx		
Leaseholds, Plant and Machinery (Cost)	Xx		
Furniture and fitting, Vehicles (Cost)	Xx		
Less: PFD	(xx)	Xx	
B) Intangible Assets			
Goodwill	Xx		
Patents, Trademarks, And Designs	Xx	Xx	
Total Fixed Assets (A+B)			**Xx**
2. Long Term Investment			
Investment in Govt. Securities		Xx	
Investment immovable properties		Xx	
Investment in capital of partnership firm		Xx	
Long term loans given		Xx	Xx
3. Working Capital			
A) Quick Assets			
Cash and Bank	Xx		
Debtors xx			

Less: RDD (x)	Xx		
Bills Receivable / Trade receivable	Xx		
Current Investment	Xx		
Accrued Income	Xx		
Loans and Advance	Xx		
Inventory	Xx		
Prepaid Expenses	Xx		
Advance Tax	Xx		
Advance for goods	Xx	Xx	
Less: B) Current Liabilities			
Creditors	Xx		
Bills Payable / Trade Payable	Xx		
Advance Received	Xx		
Expenses Payable	Xx		
Accrued Interest	Xx		
Provision for taxation	Xx		
Provision for dividend	Xx		
Unclaimed Dividend	Xx		
Provision for dividend Distribution Tax	Xx		
Bank Overdraft	Xx		
Income received in advance	Xx	(Xx)	
Net current assets (A-B)			**Xx**
Total Application of Fund			**Xx**

1. Assets :

Fixed Assets :

Fixed Assets are called long-term assets. They do not flow through the cash cycle of business within one year or the normal operating cycle. They are used over several periods.

Classification of Fixed Assets:

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 equipment etc. are tangible movable assets.

b) Tangible immovable assets are the assets which can be seen and touched but can not be moved from one place to another place. Such assets included and, 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. Their existence is very important for the business. Intangible assets have several characteristics.

Fixed Assets = Tangible Assets + Intangible Assets

2. Investments:

Long term investments are "Fixed Assets".

Marketable Investments are those investments which are acquired by the company by employ in gits surplus funds or cash temporarily.

Short term investments are grouped under "Current Assets".

3. Current Assets and Quick Assets :

A - Current Assets:

Current assets represent employment of money by the company on a short-term basis.

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

B - Quick Assets:

These assets are known as ' near cash' assets. In other words, **quick assets are those which can be converted into cash quickly.** There fore, they are also known as liquid assets.

Quick Assets = Current Assets–Inventory –Prepayments

4. Proprietor's Funds:

These are the funds provided by the proprietors or the shareholders.

Proprietors fund is also called as Proprietors Equity, Owners Funds, Owners Equity, or Shareholders Funds. This is also known as the Net Worth of the business. Owners' Equity refers to the claim of the owners and it is made up of:

Contributions of proprietors by way of:
Share Capital
(May be Equity Share Capital only or Equity and Preference Share Capital)
Plus: Reserves
Plus: Profit and Loss Account (Credit) Balance (Surplus)
Less: Accumulated Losses
Less: Fictitious Assets(If any)

Share Capital :

Share capital is the amount that is raised by a company from the public at large, through the issue of shares.

There are different concepts of share capital from the legal and accounting points of view.

A. Authorised Capital :

Authorised Capital is the maximum capital a company can raise as mentioned in the Memorandum of Association under its Capital Clause. It is also called as the Registered Capital or Nominal Capital of the Company.

B. Issued and Unissued Capital :

A company usually does not need the entire registered capital. The capital may be raised as and when necessary. Only a part of the authorised capital may be issued at a time. Issued capital is that part of the authorised capital; which is actually offered to the prospective investors for subscription.

C. Subscribed Capital :

The issued capital may not be fully subscribed by the public. Subscribed capital is that part of the issued capital which has been subscribed or taken up by the public.

D. Called up Capital Uncalled Capital :

The company may not need the entire capital subscribed by the public. The company, therefore, may collect the capital in several instalments. 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.

E. 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).

5. Reserves and Surplus:

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

A. Revenue Reserves or Free Reserves :

These reserves represent amounts set aside out of divisible profits. They are appropriations of profits. Reserves may be created for a specific purpose or for a general purpose. **Reserve created for a specific purpose is called a "specific reserve" and a reserve created for a general purpose is called a "general reserve."** General reserves are free and can be utilized for :

a) Payment of Dividends.
b) Development and expansion,
c) Any other purpose the company thinks proper.

General Reserve is also called a revenue reserve or a free reserve. A free reserve is a reserve which is available for any purpose, including payments of dividend. It is not earmarked for any specific purpose.

B. Capital Reserves :

Capital reserve is created out of capital profits which do not arise in the normal course of business. The following reserves are capital reserves :

a) Profits profit to incorporation
b) Profit on redemption of preference shares,
c) Profit on redemption of debentures,
d) Securities premium,
e) Profit on forfeiture of shares,
f) Profit on sales of fixed assets,
g) Profit on revaluation of fixed assets,
h) Capital redemption of fixed assets,

6. Long-term Liabilities :

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.

A. Secured loans :

It refers to loans which are secured by a fixed or floating charge on the assets of the business. It includes :

a) Debunkers,
b) Loan and advance from banks,
c) Loan and advance from subsidiaries and
d) Other loan and advances.

B. Unsecured loans :

It refers to the loans which are not secured by assets of the business. It is not covered by any security. It includes :

a) A fixed deposits,
b) Loans and advance from subsidiaries,
c) Short-term loan and advances:
i) from banks, ii) from other,
d) Other loans and advance : loan from directors, secretaries, treasurers and managers should be shown separately.

Loan Fund = Secured loans + unsecured loans

7. 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 are as follows :

i) Sundry Creditors – when goods are purchased
ii) Bills Payable – by acceptance of bills drawn by creditor – Accounts payable
iii) Interest accrued but not due
iv) Wages and salaries payable – outstanding expenses.
vi) Unclaimed dividends.
vii) 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. They are at best estimates.The examples of provisions are as under :

a) Provision for depreciation on assets.
b) Provision for doubtful debts.
c) Provision for proposed dividends.
d) Provision for taxation.

Provisions relating to specific assets are shown as deduction from the specific assets.

C. Quick Liabilities :

These are the current liabilities which mature within a very short period of time.

Quick Liabilities = Current Liabilities – Bank Overdraft

CHECK YOUR PROGRESS

1. Give the formulas of the following:
   a. Proprietors Fund
   b. Quick Liabilities
   c. Quick Assets
   d. Net profit before tax
   e. Retained earnings
   f. Cost of goods sold
   g. Operating expenses

2. Give the examples of the following:
   a. Current Liabilities
   b. Provisions
   c. Secured loan
   d. Capital Reverses
   e. Current Assets
   f. Fictitious Assets
   g. Non-operating Income
   h. Administration expenses

2.5 SOLVED PROBLEMS

Illustration 1

Following is the trial balance of Good Luck Ltd. as on 31.3.2014

Trial Balance

Particulars	Amt.	Particulars	Amt.
Preliminary Expenses	20,000	Equity Shares Capital (Rs.100)	7,00,000
(Not yet written off)		Gross Sales	20,40,000
Administrative Expenses	4,00,000	General Reserve	3,20,000
Land And Building	8,00,000	Profit and loss A/c (Cr.)	2,00,000
Plant & Machinery	6,00,000	12.5% Debentures	4,00,000
Selling Expenses	1,00,000	Depreciation Provision	
Furniture	3,00,000	On Land & Building	2,00,000
Cost of production	9,60,000	On Plant & Machinery	1,00,000
Return Inward	40,000	On Furniture	80,000
Finished Goods	2,40,000	Trade Expenses	4,00,000
Government Bonds	2,80,000		
Advance Tax	2,00,000		
Trade Receivable	5,00,000		
	44,40,000		**44,40,000**

Other Information:

1. Closing stock of Finished goods as on 31.3.2014 was Rs.1,60,000.
2. Provide Dividend on Equity Shares at 10%.
3. Make provision for Income Tax of Rs.2,00,000.

From the following information you are required to prepare Income Statement for the year ended 31.3.2014 and balance sheet as on that date in vertical form suitable for analysis.

Solution

Income Statement for the year ended 31.3.2014

Particulars	**Amt.**	**Amt.**
Gross Sales	20,40,000	
Less: Return Inward	40,000	
Net Sales		20,00,000
Less: Cost of Production	9,60,000	
Add: Opening Finished Goods	2,40,000	
Less: Closing Finished Goods	(1,60,000)	
COGS		10,40,000
Gross Profit		9,60,000
Less: Operating Expenses		
A) Administrative Expenses	4,00,000	
B) Selling Expenses	1,00,000	
Total Operating Expenses		5,00,000
Operating Profit Interest		4,60,000
Less: Debenture Interest		50,000
Profit After Interest before Tax		4,10,000
Less: Tax		2,00,000
Profit after tax		2,10,000
Add: Profit and loss balance		2,00,000
Total Profit		4,10,000
Appropriation		
Equity Dividend		70,000
Retained Earning		**3,40,000**

Balance Sheet as on 31.3.2014

Particulars	**Amt.**	**Amt.**
Sources of Fund		
i) Share Holders Fund		
Equity Share Capital		7,00,000
Reserve and Surplus		
General Reserve	3,20,000	
Profit and loss A/c	3,40,000	
	6,60,000	
Less: Preliminary Expenses	(20,000)	6,40,000
Share Holders Fund		13,40,000
ii) Loan Fund		
12.5% Debentures		4,00,000
Total Sources of Fund		**17,40,000**
Application of Fund		
i) Fixed Assets		
Land & Building (8,00,000 – 2,00,000)	6,00,000	
Plant & Machinery (6,00,000 – 1,00,000)	5,00,000	
Furniture (3,00,000 – 80,000)	2,20,000	13,20,000
ii) Investment Government Bonds		2,80,000
iii) Working Capital		
A) Current Assets		
Trade Receivable	5,00,000	
Stock of Finish Goods	1,60,000	
Advance Tax	2,00,000	
(A)	8,60,000	
B) Current Liabilities		
Trade Payable	4,00,000	
Provision for tax	2,00,000	
Equity Dividend	70,000	
Debenture Int. outstanding	50,000	
(B)	7,20,000	
Working Capital		1,40,000
Total Application of Fund		**17,40,000**

Illustration 2

Following is the Trial balance of M/s. Anand Ltd. As on 31.3.2015.

Particulars	**Amt.**	**Amt.**
Sales		20,00,000
Fixed Assets	10,00,000	
Bills Receivable & Bills Payable	2,00,000	1,50,000
Cash and Bank Balance	50,000	
Opening Stock	1,00,000	
Bank Overdraft		1,00,000
Purchases	12,50,000	
Administrative Expenses	30,000	
Legal Expenses	20,000	
Salaries	50,000	
Advertisement	40,000	
Warehouse Rent	20,000	
Depreciation On Machinery	50,000	
Interest on Bank Overdraft	10,000	
Equity Shares Capital		6,00,000
General Reserve		1,00,000
Lap Top Repairs	20,000	
Direct Expenses	20,000	
Investment	40,000	
Debtors And Creditors	1,00,000	50,000
Total	**30,00,000**	**30,00,000**

Additional Information:
1. Closing Stock on 31.3.2.15 was valued at Rs.50,000
2. Cash sales were 1/3 of credit sales.

You are required to prepare vertical Income statement for the year ended 31.3.2015 and vertical Balance sheet as on that date for financial analysis.

Solution
Income Statement for the year ended 31.3.2015

Particulars	**Amt.**	**Amt.**
Sales : Cash	5,00,000	
Credit	15,00,000	20,00,000
Less: Cost of Goods Sold		
Opening Stock	1,00,000	
Add: Purchases	12,50,000	
Add: Direct expenses	20,000	
Less: Closing Stock	50,000	
Depreciation On Machinery	50,000	13,70,000
Gross Profit		6,30,000
Less: Operating Expenses		
Administrative Expenses	30,000	
Legal Expenses	20,000	
Salaries	50,000	
Lap Top Repairs	20,000	
I)	1,20,000	
Selling & Distribution Expenses		
Advertising	40,000	
Warehouse rent	20,000	
II)	60,000	
Total (I +II)		1,80,000
Net profit Before Interest		4,50,000
Less: Interest on Bank overdraft		10,000
Net profit before Tax		**4,40,000**

Balance Sheet as on 31.3.2015

Particulars	**Amt.**	**Amt.**
Sources of Fund		
i. Share Holders Fund		
Share capital	6,00,000	
Reserve and Surplus		
General Reserve	1,00,000	
Profit and loss A/c	4,40,000	
Share Holders Fund		11,40,000
ii Loan Fund		
Bank Overdraft		1,00,000
Total Sources of Fund		**12,40,000**
Application Of Fund		
1. Fixed Assets		
Tangible Assets		10,00,000
2. Investment		40,000
3 Working Capital		
a) Current Assets		
Inventories	50,000	
Trade receivable	1,00,000	
Debtors	2,00,000	
Cash	50,000	
(A)	4,00,000	
b) Current Liabilities		
Creditors	50,000	
Bills Payable	1,50,000	
(B)	2,00,000	
Working Capital		2,00,000
Total Application of Fund		**12,40,000**

Illustration 3

Following information regarding M/s. Avinash Ltd. for the year ended 31.32015 is given.

Particulars	**Amt.**	**Particulars**	**Amt.**
Sales	20,00,000	Return Inward	50,000
Opening Stock Of Raw Mat.	1,10,000	Purchases of Raw Mat.	5,00,000
Staff Salaries	1,50,000	Commission allowed	5,000
Salesmen Salaries	25,000	Proposed Dividend	1,50,000
Bank Charges	10,000	Exhibition Expenses	35,000
Freight Inwards	40,000	Repairs of Computer	5,000
Office Rent & Insurance	45,000	Closing stock of WIP	40,000
Debenture Interest	50,000	Wages	70,000
Loss on sale of Machinery	10,000	Purchases of Finish Goods	80,000
Printing & Stationery	5,000	Int. Received on Invt.	40,000
Direct expenses	50,000	Provision for Income Tax	2,00,000
Profit &Loss A/c (Credit)	2,40,000	Closing Stock of Raw Mat.	80,000
Depreciation on patterns	10,000	Sales of scrap	20,000
Depreciation on Machinery	20,000		

You are required to rearrange the above information and prepare vertical income statement, suitable for analysis.

Solution

Income Statement for the year ended 31.3.2015

Particulars	**Amt.**	**Amt.**
Sales	20,00,000	
Less: Return Inwards	50,000	19,50,000
Less: Cost of Material		
Opening Stock	1,10,000	
Add: Purchases	5,00,000	
Add: Freight Inwards	40,000	
Less: Closing Stock	80,000	
	5,70,000	
Wages	70,000	
Direct Expenses	50,000	
Depreciation Machinery	20,000	
Depreciation Pattern	10,000	
	7,20,000	
Less: Closing stock of WIP	40,000	
	6,80,000	
Less: Sale of Scrap	20,000	
Cost of production	6,60,000	
Add: Purchases of Finish Goods	80,000	7,40,000
Gross Margin		12,10,000
Less: Operating Expenses		
a) Administrative Expenses		
Staff Salaries	1,50,000	
Office rent & Insurance	45,000	
Printing and Stationery	5,000	
Repairs and computers	5,000	

(a)	2,05,000	
b) Selling & Distribution Expenses		
Salesman Salaries	25,000	
Commission allowed	5,000	
Exhibition expenses	5,000	
(b)	65,000	
c) Finance Expenses		
Bank charges	10,000	
Total (a+b+c)		2,80,000
Net profit before Interest		9,30,000
Less: Interest on Debenture		50,000
Net profit after Interest		8,80,000
Add: Non-operating Income		
Interest on Investment		40,000
		9,20,000
Less: Non-operating Expenses		
Loss on sale of Machinery		10,000
Net profit before tax		9,10,000
Less: Provision for Tax		2,00,000
Net profit after tax		7,10,000
Add: P/L A/c bal.		2,40,000
		9,50,000
Less: Proposed Dividend		1,50,000
Net profit carried to Balance sheet		8,00,000

Illustration 4

The following balances appears in the books of M/s Ram Ltd. as on 31.3.2015. You are required to Prepare a balance sheet in the vertical form.

Particulars	**Amt.**	**Particulars**	**Amt.**
Sundry Debtors	2,00,000	Creditors	1,50,000
Trade Investment	2,50,000	Capital Reserve	1,50,000
Bank Overdraft	1,00,000	Short term Investment	50,000
Public deposit	3,00,000	Plant and Machinery	12,00,000
Bills Payable	7,90,000	Outstanding Expenses	1,20,000
General Reserve	1,00,000	Cash at Bank	7,00,000
Bills Payable	2,00,000	Profit and loss A/c (Credit)	4,00,000
Vehicles	9,00,000	Stocks	5,00,000
10% Pref. Sh. Capital	8,00,000	Land and Building	12,00,000
Commission on issue of shares(not w/off)	40,000	Preliminary Expenses (not w/off)	10,000
Provision for tax	1,00,000	Equity shares capital	16,00,000
Bank Loan	3,00,000	Debentures	5,00,000
Advance tax	3,00,000	Proposed Dividend	3,00,000
Prepaid Expenses	1,00,000	Advance to suppliers	60,000

Solution

Balance Sheet as on 31.3.2015

Particulars	**Amt.**	**Amt.**
Sources of Fund		
i. Share Holders Fund		
a) Share Capital		
Equity sh. Capital	16,00,000	
10% Pref.sh Capital	8,00,000	
(a)	24,00,000	
b) Reserve And Surplus		
Gen. Reserve	1,00,000	
P & L A/c	4,00,000	
Capital Reserve	1,50,000	
(b)	6,50,000	
Total (a+b)	30,50,000	
Less: Preliminary Expenses	10,000	
Commission on shares	40,000	30,00,000
2. Loan Fund		
Debentures	5,00,000	
Public Deposit	3,00,000	
Bank Loan	3,00,000	11,00,000
Total		41,00,000
Application of Funds		
1. Fixed Assets		
Tangible Assets		
Land and Building	12,00,000	
Plant and Machinery	12,00,000	

Vehicles	9,00,000	33,00,000
2. Investment s		
Trade Investment		2,50,000
3. Working Capital		
a) Current Assets		
Stock	5,00,000	
Sundry Debtors	2,00,000	
Bills Receivable	2,00,000	
Short Term Investment	50,000	
Cash & bank	7,00,000	
Adv. To suppliers	60,000	
Adv. Tax	3,00,000	
Prepaid Expenses	1,00,000	
Total (A)	21,10,000	
b) Less: Current Liabilities		
Creditors	1,50,000	
Outstanding Expenses	1,20,000	
Bank Overdraft	1,00,000	
Bills Payable	7,90,000	
Provision for Tax	1,00,000	
Proposed Dividend	3,00,000	
Total (B)	15,60,000	
Working Capital (A-B)		5,50,000
Total		41,00,000

2.6 EXERCISE

1. Discuss then a true of Financial Statement what are the limitation of such statement?
2. Define financial statement an alysis. Explain the need and importance of it.
3. Distinguish between horizontal and vertical an alysis of financial statement data.
4. Explain the characteristics of Financial statements.
5. Define Assets. Explain various types of Assets.
6. Objective type Questions

A. Match Group A With Group B

Group A		Group B	
a)	Source of Fund	1.	Current Assets
b)	Liquid Assets Fund	2.	Net Worth + Loan Fund
c)	Call in Arrears	3.	Current Asset - Stock
d)	Retained Earnings	4.	Deduct from subscribed capital
e)	Over subscription	5.	Profit & Loss A/c balance
f)	Loose tools	6.	Subscribed capital is more than issued capital

Answer: a – 2 ,b – 3, c- 4 , d- 5, e – 6 , f - 1

B. Fill in the Blanks with proper words / phase.
1. Trade Mark is an _______________ assets.
2. Advance tax is shown under __________________.
3. Current Liabilities = __________________ - Current Assets.
4. Fictitious Assets are __________________ .
5. Securities Premium forms part of _______________.
6. Capital Employed = Fixed Assets + ____________ capital.

Answer : 1. Intangible , 2. Loans and Advances, 3. Working Capital, 4. Intangible, 5. Reserve & Surplus 6. Working.

C. State whether following statement are True or False.
1. Balance sheet shows result of activities.
2. Goodwill will be shown under fictitious assets.
3. Arrears of preference dividend are contingent liabilities.
4. All quick liabilities are current liabilities.
5. Operating expenses are incurred to conduct the operations smoothly.
6. Public deposit is a secured loan.

Answer: 1. False 2. False 3.True 4.True 5.True 6. False

D. Multiple Choice Questions.

1. Patents and Copyrights is an
a) Intangible Assets
b) Movable assets
c) Intangible fixed assets
d) Fictitious Assets

2. Balance sheet is a
a) Statement of assets and liabilities
b) Statement of operating results
c) Statement of working capital
d) None of the above

3. Income Statement is a
a) Statement of working results
b) Statement of Sources of Fund
c) Statement of Cash Flow
d) Fund from Operation

4. Fixed assets are Rs.5, 00,000; Current Assets are Rs.3, 00,000; Current Liabilities are Rs. 1, 00,000. There is no investment, Find out capital employed.
a) 8,00,000
b) 7,00,000
c) 9,00,000
d) 6,00,000

5. Sales are Rs.5, 00,000; operating cost is Rs.2, 00,000; profit on sale of machinery is Rs.10, 000, find out operating profit.
a) 3,00,000
b) 3,10,000
c) 3,10,000
d) 3,50,000

6. Short term investments are shown under which head in the vertical balance sheet.
a) Investment
b) Current Assets
c) Current Liabilities
d) Fictitious Assets

Answer: 1. c, 2. a, 3. d, 4. b, 5.a, 6.b

❖❖❖❖

3

TOOLS OF ANALYSIS OF FINANCIAL STATEMENTS

Unit Structure

3.0 OBJECTIVES

After studying the unit the students will be able to:

- Analyses the financial statements.
- Understand the limitations of financial statements.
- Solve the practical problems of analyses.

3.1 INTRODUCTION

Financial statements are the result of the accounting process which begins with recording of transaction. Accounting process involves recording, classifying and summarizing business transaction. Financial Statement relate to the third process Viz. summarising. The financial statements are based on certain accounting conventions which cannot be said to be fool proof.

Various techniques have been developed for the analysis of financial statement the selection of appropriate analytical technique would depend upon the objective of the analysis. Usually group of technique is used for a result oriented analysis. The commonly used techniques are Comparative financial statement, Common size statement, trend analysis, ratio analysis.

3.2 ANALYSIS OF THE FINANCIAL STATEMENTS

3.2.1 Limitations of the Financial Statements

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.

As the information provided in the financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements alone. However, the information provided in the financial statements is of immense use in making decisions through analysis and interpretation of financial statements. To overcome from the limitations it becomes necessary to analyse the financial statements.

3.2.2 MEANING

Financial statement analysis is defined as the process of identifying financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account.

There are various methods or techniques that are used in analyzing financial statements, such as comparative statements, schedule of changes in working capital, common size percentages, trend analysis, and ratios analysis.

Financial statements are prepared to meet external reporting obligations and also for decision making purposes. They play a dominant role in setting the framework of managerial decisions.

3.2.3 Analytical Tools

The analytical tools generally available to an analyst for this purpose are:

1. Comparative financial Statements
2. Common-size statement
3. Trend analysis
4. Ratio analysis

3.3 COMPARATIVE FINANCIAL STATEMENT

3.3.1 Objectives of Comparative Statements

Comparative financial statement are the financial position of a business so designed as to provide time perspective to the Consideration of various element of position embodied in such statement. The balance sheet and Income Statement i.e. Profit and loss account are prepared in a Comparative from as the impact of the conduct of business is brought to bear on the Balance Sheet.

Comparative statement are made to show –

1. Absolute date (money values or rupee amount).
2. Increases and decreases in absolute data in term of money values.
3. Increases or decreases in absolute data in term of percentage.
4. Comparisons expressed in ration.
5. Percentage of total.

Comparative financial statement are very useful to the analyst as they Provide information necessary for the study of financial and operating trend over a period of years. They indicate the duration of the movement with respect of the financial position and operating results financial data become more meaningful when compared with similar data for a previous period or a number of prior periods. Such statement are very helpful in measuring the effect of the conduct of a business during the period under Consideration. The comparative profit and loss account will present a review of operating activities of the business. The comparative balance sheet shows the effect of operations on the assets and liability i.e. change in the financial position during the period under consideration.

Comparisons lose their significant and tend to become misleading if the date being compared do not reflect the consistent application of generally accepted accounting principles from date to date or period to period. The absence of the comparability of statement should be indicated in the footnotes that accompany the financial statement as well as in the accounts report In the preparation of comparative financial statement uniformity is essential care must be taken to see that all account heads or group of these like administrative expenses; fixed assets; current assets; long term fund; short term fund etc have the same connotation Otherwise; comparison will be vitiated. The comparative statements are important tool of horizontal financial analysis. Financial data become more meaningful when compared with similar data for previous period or a number of previous periods. Such analysis helps as in forming an opinion regarding the progress of the enterprise.

3.3.2 Comparative statements definition:

Foulke has defined these statement as “statement of financial position of business so designed as to provide time perspective to the consideration of various elements of financial position embodied in such statement.”

In any comparative statement columns for more than one year‘s position or working can be drawn and figures may be provided. The annual date can be compared with similar monthly or quarterly data can be compared with similar data for the same months or quarterly of previous years. In such statement the figure can be shown at the following value.

a. In absolute money value
b. Increase or decrease in absolute values
c. By the way of percentages
d. By the way of common—size statement

Two comparable units can be compared regarding profitability and financial position. The two organization may not have the identical heads of account In order to get over the difficulty, the data must first be properly set before comparison In the preparation of comparative financial statement, uniformity is essential.

3.3.3 Importance of Comparative Statement:

1. These statements are very useful in measuring the effect of the conduct of a business enterprise over the period under consideration.
2. Regardless of its financial strength at a given point of time, the enterprises must operate successfully if it hopes to continue as a going concern.
3. The income statement measures the effects of operation. But the progress of these operations may be viewed over number of periods by preparing the income statement in a comparative form.
4. Similarly the effect of operation of financial position and the progress of a business in term of financial position can be presented by means of a comparative balance sheet.
5. The accounting authorities in U. S. A. have strongly recommended and encouraged the preparation of financial statement in the comparative from recognising the

importance of comparative financial date for two years, the Indian companies Act 1956 has made this fact compulsory that in the balance sheet of a company the figure for the previous year should also be given to facilitated comparison.

6. Though the balance sheet is a useful statement, the comparative balance sheet is even more useful as it contains not only the data of a single balance sheet but also for the past years which may be useful in studying the trends.

3.3.4 Preparation of Comparative Statements:

The form of comparative balance sheet consists of two or more columns according to the number of year we prepare the balance sheet, for the date of original balance-sheet and columns for the increases or decreases in various items. Here is a proforma of comparative balance sheet for two years

Specimen of Comparative Balance Sheet for the ended 31st Dec. 2005 and 2006

(Amount in Lakhs of rupees)

	Dec. 31 2005	Dec. 31 2006	Increase (+) / Decrease (-) Amount	%
Assets :				
Current Assets :				
Cash	240	80	- 160	- 66
Debtors less reserve for doubtful debts	120	96	- 24	- 20
Merchandise Inventory	260	400	+ 140	+ 54
Prepaid Expenses	100	80	- 20	- 20
Total Current Assets	720	656	- 64	- 9
Fixed Assets :				
Land and Building less Depreciation	480	720	+ 240	+ 50
Furniture &Fixture less Depreciation	60	80	+ 20	+ 33
Plant and Machinery less Dep.	240	480	+ 240	+100
Total fixed Assets	780	1,280	+ 500	+ 64
Total Assets	**1,500**	**1,936**	**+ 436**	**+ 29**
Liabilities and Capital :				
Current Liability :				
Trend creditors	234	510	+ 276	+ 118
Accrued Expenses	400	360	- 40	- 10
Total Current liabilities	634	870	+ 236	+ 37
Equity Capital	400	500	+ 100	+ 25
Retained Earnings	466	566	+ 100	+ 21
Total Capital	866	1,066	+ 200	+ 23
Total Liabilities and Capital	**1,500**	**1,936**	**+ 436**	**+ 29**

3.3.5 Preparation of a Comparative Income Statement:

An Income Statement shows the Net Profit or Net Loss from business operation of a definite accounting period. Like a balance sheet, a comparative income statement show the operating results for a number of accounting periods so that the changes in absolute date from one period to another may be explained and analysis. The Comparative income statement contains the some columns as the comparative balance sheet and provides the same in the figures.

Specimen of a Comparative Income Statement

Comparative Income Statement for the year ended 31st Dec. 2005 and 2006

(Amount in Lakhs of Rupees)

	Dec. 31 2005	Dec. 31 2006	Increase (+) / Decrease (-) Amount	%
Net Sales	1370	1442	+ 72	+ 5.25
Less : Cost of Goods Sold	838	926	+ 88	+ 10.5
Gross Profit	532	516	- 16	- 3
Operating Expenses :				
Selling Expenses	188	182	- 6	- 3.19
General and Administration Expenses	94	92	- 2	- 2.12
Total Operating Expenses	282	274	- 8	- 2.84
Operating Profit	250	242	- 8	- 3.2
Add : Other Income Dividend	44	50	+ 6	+ 13.6
Less : Other Deduction	294	292	- 2	- 0.68
Interest Paid	44	44	Nil	Nil
Less : Income Tax	250	248	- 2	- 0.8
Net Profit after Tax	124	124	Nil	Nil
	126	124	- 2	- 1.59

3.4 COMMON SIZE STATEMENT

3.4.1 MEANING

Comparative statements that give only the vertical percentage or ration for financial data without giving rupee value are known as common size statement.

A comparison of two years figures of a concern can be easily made under the companies Act. Companies must Show in their profit and loss account and balance sheet the corresponding figures for the previous year. Sometime, however, the figures do not signify anything as the heads of items are regrouped and are in comparable; they should precisely have some meaning from one year to another.

It is better to work out the ratio of various items to sales in term of percentage and enter these also in the statement. As common size statement are most valuable in marketing Comparisons between the companies in the some industry. A common size statement shows the relation of each component to the whole. It is useful in vertical financial analysis and comparison of two business enterprises at a certain date.

Financial statements that depict financial data in the shape of vertical statement percentage are known as common size statements. Such statements provide readers with vertical analysis of the profit and loss account and balance sheet. In such statement all figure are converted to a common unit by expressing than as percentage of a key figure in the statement. The total of financial statement is recorded to 100 and each item is shown as component to the whole. For example profit and loss account, the figure of each item of the financial expressed as a percentage of sales likewise, assets and liabilities can be shown as percentage of total assets and total equities respectively in common sized balance sheet. Thus expressing each monetary item of financial statement as a percentage of some total of which that item as apart transforms a financial statement what is referred as common size statement such a statement show the relative significance of the items contend in the financial statement and facilitate comparisons. It point out efficiencies and in efficiencies that are otherwise difficult to see and of this reason is a valuable management tool a common size statement is especially useful when data for more than one year are used.

Vertical analysis is the procedure of preparing and resenting *common size statements*. **Common size statement** is one that shows the items appearing on it in percentage form as well as in dollar form.

Common size statements are particularly useful for comparing data from different companies.

Common size statements are also very helpful in pointing out efficiencies and in efficiencies that might otherwise go unnoticed.

3.5 TREND ANALYSIS

3.5.1 Meaning

Trend analysis is an important and useful technique of analysis and interpretation of financial statement. Under the technique the ration of different items for various periods are calculate for the company over a definite period of time say three to five years and then we can analysis trend highlighted by this ratio.

Trend analysis can be done in three following way.

a. Trend percentage
b. Trend ratio,
c. Graphic and diagrammatic representation.

In the statement the percentage column are more relevant than the figure.

3.5.2 Utility of Trend Analysis :

a) It is a simple technique. It does not involve tedious calculation and required trained experts

b) It is brief method to indicate the future trend

c) It reduces the chances of errors as it provides the opportunity to compare the percentage with absolute figures

Trend analysis is one of the important tools of analyzing the financial data. It computes the percentage change for different variables over a long period and then makes a comparative study of them. The trend percentage helps the analytics to study the changes that have occurred during the period. Such an analysis indicates the progress of business by showing ups and downs in it activity. The calculation of trend percentage involves the following steps.

1) Selection of base year.
2) Assigning a weight of 100 to be value of the variable of the base year and
3) Expressing the percentage change in value of variable from base year as shown below.

CHECK YOUR PROGRESS

1. "Trend analysis is one of the important tools of analyzing the financial data". Explain.
2. Define the following terms
   a. Common size statements
   b. Comparative income statements
   c. Financial statement analysis
   d. Trend analysis

3.6 SOLVED PROBLEMS

Illustration 1
Following are the balance sheet of Suman Ltd. As on 31.3.2013 and 2014.

Balance sheet as on 31st March

(Rs. In "000")

Particulars	**2013**	**2014**	**Particulars**	**2013**	**2014**
Equity Share Capital	200	200	Fixed Assets	300	400
12% Pref. Sh. Capital	100	150	Investment	30	20
General Reserve	10	15	Current Assets	75	80
10% Debentures	50	75	Preliminary Expenses	5	-
Current Liabilities	50	60			
Total	**410**	**500**	**Total**	**410**	**500**

Prepare a comparative balance sheet from the above in vertical form

Solution
Comparative Balance as on 31st March 2013 & 2014

Particulars	**2013 Rs.**	**2014 Rs.**	**Increase / Decrease**	**% Inc./ Dec.**
Sources of Fund				
1. Share holder Fund				
Equity share Capital	200	200	-	-
12% Pref. Sh. Capital	100	150	50	50
	300	350	50	16.67
Reserve &Surplus				
General Reserve	10	15	5	50
(-) Preliminary Expenses	5	-	5	-
	5	15	10	200
Shareholders Fund	305	365	60	19.67

2. Loan Fund				
12% Debentures	50	75	25	50
Total Sources of Fund	**355**	**440**	**85**	**23.94**
Application of Fund				
1. Fixed assets	300	400	100	33.33
2. Investment	30	20	-10	-33.33
3. Working Capital				
a) Current Assets	75	80	5	6.67
b) Current Liabilities	50	60	10	20
Working Capital (A-B)	25	20	-5	-20
Total Application Of Fund	**355**	**440**	**85**	**23.94**

Illustration 2

Complete the following Trend Statement in the books of swati ltd. and offer suitable comments.

Particulars	**Amt.**	**Amt.**	**Amt.**	**Amt.**	**Trend %**	**Trend %**	**Trend %**	**Trend %**
	2011	**2012**	**2013**	**2014**	**2011**	**2012**	**2013**	**2014**
Sale	?	15,00,000	?	2,20,000	?	?	?	220
Cost of Sales	5,00,000	?	?	?	?	160	200	?
Gross Profit	?	?	?	?	?	?	200	?
Operating Expenses	?	4,00,000	?	6,50,000	?	?	?	260
Operating Profit	?	?	6,00,000	5,50,000	?	?	?	?
Non-Operating Income	10,000	?	?	?	?	250	500	25
Non-Operating Expenses	?	?	?	?	?	250	?	525
Profit before Tax	2,50,000	?	?	?	?	?	240	?
Tax 50%	?	?	?	?	?	?	?	?
Profit after Tax	?	?	?	?	?	?	?	?

Solution
Consider 2011 equal to 100 and find out the proportion for other year.

Particulars	Amt.	Amt.	Amt.	Amt.	Trend %	Trend %	Trend %	Trend %
	2011	2012	2013	2014	2011	2012	2013	2014
Sale	10,00,000	15,00,000	20,00,000	2,20,000	100	150	200	220
Cost of Sales	5,00,000	8,00,000	10,00,000	10,00,000	100	160	200	200
Gross Profit	5,00,000	7,00,000	10,00,000	12,00,000	100	140	200	240
Operating Expenses	2,50,000	4,00,000	4,00,000	6,50,000	100	160	160	260
Operating Profit	2,50,000	3,00,000	6,00,000	5,50,000	100	120	240	220
Non-Operating Income	10,000	25,000	50,000	2,500	100	250	500	25
Non-Operating Expenses	10,000	25,000	50,000	52,500	100	250	500	525
Profit before Tax	2,50,000	3,00,000	6,00,000	5,00,000	100	120	240	200
Tax 50%	1,25,000	1,50,000	3,00,000	2,50,000	100	120	240	200
Profit after Tax	1,25,000	1,50,000	3,00,000	2,50,000	100	120	240	200

Comments:

1. Sales of the company shows increasing trends i.e. from 150% in 2008 to 220% in 2014 considering 2011 sales as the basis. Increasing trend in sales shows increasing trading efficiency of the organisation.
2. Cost of sales also shows increasing trend 100% in 2011 to 200% in 2014. Increasing in cost of sales is attributed to increasing sales.
3. Gross profit also shows increasing trend i.e. 100% in 2011 to 240% in 2014. Increasing trend in gross profit shows increasing profitability.
4. Net profit before tax increased from 100% in 2011 to 200% in 2014> net Profit after tax also shows increasing trend from 00% in 2011 to 120% in 2012, 240% in 2013 and reduced to 200% in 2014. Increasing trend shows increasing profitability. However , there is a decrease in the profitability 2014 as compared to 2013. It shows that management is efficient in controlling cost.

Illustration 3
Trend analysis

Years	Sales	Percentage (+) Increase or (-) Decrease
2000	20,000	100 (Base year)
2001	35,000	175
2002	28,000	140
2003	30,000	150
2004	35,000	175
2005	14,000	70
1986	22,000	110

A trend for single financial item is seldom very informative. A comparison of trend for relative items often help to analysis in perfect understanding of the business fact as is clear from the below mentioned balance sheet.

Solution
Balance Sheet

Assets	2000 Rs.	2001 Rs.	2002 Rs.	Trend Percentage (base year – 2000)		
				2000	2001	2002
A) Current Assets						
Inventory	20,000	30,000	25,000	100	150	125
Debtor	30,000	50,000	60,000	100	167	200
Cash balance	20,000	35,000	30,000	100	175	150
Total (A)	**70,000**	**1,15,000**	**1,15,000**	**100**	**164**	**164**
B) Fixed Assets						
Building	250,000	3,00,000	3,00,000	100	120	120
Plant	1,25,000	150,000	1,60,000	100	120	128
Investment	80,000	1,00,000	1,20,000	100	125	150
Total (B)	**4,55,000**	**5,50,000**	**5,80,000**	**100**	**121**	**127**
Total Assets (A + B)	**5,25,000**	**6,65,000**	**6,95,000**	**100**	**127**	**132**

Illustration 4
Calculate trend percentage from the following figures of X Ltd, taking 2001 as the base and interpret.

Year	Sales	Stock	Profit before tax
2001	1,881	709	321
2002	2,340	781	435
2003	2,655	816	458
2004	3,021	944	527
2005	3,768	1544	672

Solution:
Trend percentage

Years before	Sales (Rs. in Lakhs)	Stock (Rs. in Lakhs)	Profit before Tax (Rs. in Lakhs)	Sales	Stock	Profit Tax
2001	1,881	709	321	100	100	100
2002	2,340	781	435	124	110	136
2003	2,655	816	458	141	115	143
2004	3,021	944	527	161	133	164
2005	3,768	1,154	672	200	162	209

Interpretation :
The study of the above given statement of Trend percentage reveals that –

(i) The sales of the farm as continuously increased over a period of a five year commencing from 2001. However there has been a substantial increase in the amount of sales in the 2005 when it increased by 39%.

(ii) The trend of Stock is also upward although the increase in this item has been constant yet in 2004 the increased has been exceptionally.

(iii)The Profit of the firm has increased at much higher rat in comparison to increase in Sale and Stock during the period. The overall analysis of the financial items indicated that the firm is doing well, and therefore, its financial position it bound to be good.

Illustration 5
Complete the following Income Statement Trend analysis for three Years of Host Ltd.

Income Statement Trend Analysis for 31st March

Particulars	Years Rs.			Trend %		
	2011	2012	2013	2011	2012	2013
Sales	?	5,50,000	6,50,000	100	?	130
Cost of Goods Sold	?	2,50,000	?	100	125	?
Gross margin	?	?	?	100	?	120
Office Expenses	60,000	?	?	100	115	125
Selling Expenses	?	50,000	?	100	125	150
Finance Expenses	?	31,000	?	100	?	?
Total Operating Exps.	?	?	?	100	?	?
Profit Before Tax	?	?	1,80,000	100	100	100
Income Tax	60,000	?	?	100	?	120
Profit after Tax	?	75,000	?	100	?	120

Solution
Consider 2011 equal to 100 and find out the proportion for other year

Income Statement Trend Analysis for 31st March

Particulars	Years Rs.			Trend %		
	2011	2012	2013	2011	2012	2013
Sales	5,00,00	5,50,000	6,50,000	100	110	130
Cost of Goods Sold	2,00,000	2,50,000	2,90,000	100	125	145
Gross margin	3,00,000	3,00,000	3,60,000	100	100	120
Office Expenses	60,000	69,000	75,000	100	115	125
Selling Expenses	40,000	50,000	60,000	100	125	150
Finance Expenses	50,000	31,000	45,000	100	62	90

Total Operating Expenses	1,50,000	1,50,000	1,80,000	100	100	120
Profit Before Tax	1,50,000	1,50,000	1,80,000	100	100	120
Income Tax	60,000	75,000	72,000	100	125	120
Profit after Tax	90,000	75,000	1,08,000	100	83	120

Illustration 6

The balance sheet of Shah Ltd are given for the year 2007 and 2008 convert them into common size balance size balance sheet and interpret the changes.

Solution

Liabilities	**2007 Rs**	**2008 Rs.**	**Assets**	**2007 Rs.**	**2008 Rs.**
Equity share Capital reserve Revenue reserve &	1,46,800 50,000 20,000	1,91,000 70,000 30,000	Buildings Plant and machinery Furniture Freehold property	1,80,000 40,000 10,000 20,000	2,00,000 55,000 20,000 12,000
Trade creditors Bills payable Bank overdraft Provisions	30,000 80,000 90,000 30,000	40,000 60,000 80,000 20,000	Goodwill Cash balance Sunday debtors Inventories Bills Receivable Investment (temporary)	25,000 25,000 30,000 70,000 10,300 36,500	30,000 20,000 35,000 57,000 20,000 42,000
	4,46,800	**4,91,000**		**4,46,800**	**4,91,000**

Common size Balance Sheet

Assets	2007		2008	
	Amt. (Rs.)	Percentage	Amt. (Rs.)	Percentage
A. Current Assets				
Sundry Debtor	30,000	6.71	35,000	7.13
Cash balance	25,000	5.59	20,000	4.07
Inventories	70,000	15.71	57,000	11.60
Investment (Temporary)	36,500	8.17	42,000	8.55
Bill Receivable	10,300	2.30	20,000	4.08
Total (A)	**1,71,800**	**38.44**	**1,74,000**	**35.43**
B. Fixed Assets				
Building	1,80,000	40.29	2,00,000	40.75
Plant and Machinery	40,000	8.95	55,000	11.20
Furniture	10,000	2.24	20,000	4.07
Freehold Property	20,000	4.48	12,000	2.44
Goodwill	25,000	5.60	30,000	6.11
	2,75,000	**61.5**	**3,17,000**	**64.57**
Total (B)	**4,46,800**	**100.00**	**4,91,000**	**100.00**
Total Assets (A+B)				
Liabilities				
C. Current Liabilities				
Trade Creditors	30,000	6.17	40,000	8.15
Bill Payable	80,000	17.91	60,000	12.22
Bank Overdraft	90,000	20.14	80,000	16.29
Provision	30,000	6.71	20,000	4.07
Total (C)				
	2,30,000	**51.47**	**200,000**	**40.73**
D. Long-term Liabilities				
Equity Share Capital				
Reserve Revenue	1,46,800	32.86	1,91,000	38.90
Reserve and Surplus	50,000	11.19	70,000	14.26
Total (D)	20,000	4.48	30,000	6.11
Total Liabilities (C+D)				
	2,16,800	**48.53**	**2,91,000**	**59.27**
	4,46,800	**100.00**	**4,91,000**	**100.00**

Interpretation:

1. The study of common size balance show that 61.56 per cent total asset in 2007 were fixed This percentage increased 64.57 per cent 2008 if concern requires considerable investment in fixed assets these percentage might be

acceptable if the company needs be acceptable if the company need liquid assets the interested parties might have cause to be concerned about the decreasing trend liquidity.

2. There was a wide shift from the use of creditor provided fund to the use of owner equity fund in 1986 external equity (current liability) and owner equity (long term liability) accounted from 51.47 per cent and 48.73 per cent for external equities and 59.27 per cent for owner equity These changes indicate that the concern has started to use internal sources more frequently than external sources more frequently than external sources in the generation of fund for this business.

3. The concern has not only succeeded in getting its current liability down from 51.47 per cent in 2007 to 40.73 per cent in 2008 of their respective of the total equity In but it has also increased the percentage of its revenue and surplus from 4.48 per cent in 1986 to 6.11per cent in 1987 of other respective total equities.

Illustration 7 :
Following the Balance Sheet of X Co. Ltd and Y Co. Ltd as on 31.3.2014.

(Rs. In lakhs)

Particulars	X Co. Ltd	Y Co. Ltd
Assets		
Sundry Debtors	27	72
Stock	220	226
Prepaid Expenses	100	174
Other Current Assets	11	21
	10	21
Total Current Assets	368	514
Fixed Assets (Net)	635	513
Total	**1,003**	**1,027**
Liabilities		
Sundry Creditors	42	154
Other	78	62
Total Current Liabilities	120	216
Fixed Liabilities	225	318
Total Liabilities	345	534
Capital	658	493
Total	**1,003**	**1,027**

Solution:

Common Size Balance Sheet as on 31.3.2014

	X Co. Ltd Amount (Rs. in Lakhs) percentage		Y Co. Ltd Amount (Rs. in Lakhs) percentage	
Assets :				
A) Current Assets				
Cash	27	2.69	72	7.01
Sundry Debtor	220	21.93	226	22.01
Stock	100	9.97	174	16.94
Prepaid Expenses	11	1.10	21	2.04
Other	10	1.00	21	2.04
Total (A)	368	36.69	514	50.04
B) Fixed Assets	635	63.61	513	49.96
Total (B)	635	63.31	513	49.96
Total Assets (A+B)	**1003**	**100.00**	**1027**	**100.00**
Liabilities :				
C) Current	42	4.19	154	14.99
Liabilities	78	7.78	62	6.04
Sundry Debtor	120	11.97	216	21.03
Others				
Total (C)				
D) Long Term	225	22.43	318	30.97
Liabilities	658	65.60	493	48.00
Fixed Liabilities	883	88.03	811	78.97
Capital				
Total (D)				
Total liabilities (C+D)	**1003**	**100.00**	**1027**	**100.00**

Comments :

1. The study of common size balance sheet show that 63.31 per cent of total assets of the X. company L t d were fixed whereas the some percentage for Y Co was 49.96.

2. The current liability of X Co L td were 11.97 per cent of total liability and for Y Co L td this percentage was 21.03 both the companies have used more equity capital.

Illustration 8

From the income statement give below you are required to prepare common – sized income statement.

Particulars	**2006 Rs.**	**2007 Rs.**
Sales	1,40,000	1,65,000
Less : Cost of Goods Sold	85,000	1,05,000
Gross Profit	55,000	60,000
Operating Expenses		
Selling and Distribution Expenses	12,000	16,000
Administrative Expenses	10,000	11,000
Total Operating Expenses	22,000	27,000
Net Income before Tax	33,000	33,000
Income Tax (40%) Net	13,000	13,200
Income	19,800	19,800

Solution:

Common size income statement
For the year ending 2006 and 2007

Particulars	**2006**		**2007**	
	Amt. (Rs.)	**Percentage**	**Amt. (Rs.)**	**Percentage**
Sales	1,40,000	100.00	1,65,000	100.0
Less : Cost of Sales	85,000	60.72	1,05,000	0
Gross Profit				63.63
Selling &	55,000	39.28	60,000	36.37
Distribution	12,000	8.57	16,000	9.70
Expenses	12,000	7.14	11,000	6.67
Administrative Exp.				
Total operating Exp.	22,000	15.71	27,000	16.67
Net Income before	33,000	23.57	33,000	20.00
Tax Income Tax	13,000	9.42	13,200	8.00
(40%)				
Net Income after	19,800	14.15	19,800	12.00
Tax				

Interpretation :

1. Out of every rupee of sales 60.72 per cent in 2006 and 63.63 per cent in 2007 account for cost of goods sold.
2. The percentage ratio of gross profit to sales was 39.28 per cent in 2006 which was reduced 36.37% in 2007.

3. The operating expenses increased from 15.71 per cent of sales in 2006 to 16.37 per cent in 2007 All this reduced the percentage ratio of net income after taxi to sales from 14.15 per cent in 2006 to 12.00 per cent in 2007.
4. The operating expenses increased from 15.71 per cent of sales in 2006 to 16.37 per cent in 2007 All this reduced to percentage ratio of net income after tax to sales from 14.15 per cent in 2007.

In the ultimate analysis it can be said that the operating efficiency of the concern has not been satisfactory during the period under study.

Illustration 9

You given the following common size percentage of AB Company Ltd for 2007 and 2008.

	2007	2008
Inventory	5.20	5.83
Debtors	10.39	?
Cash	?	7.35
Machinery	49.35	45.35
Building	27.27	29.59
Creditors	20.78	?
Overdraft	?	10.81
Total Current Liabilities	31.17	?
Capital	51.95	49.67
Long-term loan	16.88	17.91
Total Liabilities	3,85,000	4,63,000

From the above information, compute the missing common size percentage. Also calculate the value of all assets and liabilities.

Solution

Common Size Balance Sheet
as on 31 December 2007 and 2008

Assets	2007		2008	
	Amt. (Rs.)	Percentage	Amt. (Rs.)	Percentage
Assets :				
A. Current Assets				
Inventory	20,000	5.20	27,000	5.83
Debtors	40,000	10.39	55,000	11.88
Cash	30,000	7.79	34,000	7.35
Total (A)	**90,000**	**23.38**	**1,16,000**	**25.06**
B. Fixed Assets				
Machinery	1,90,000	49.35	2,10,000	45.35
Building	10,05,000	27.27	1,37,000	29.59
Total (B)	**2,95,000**	**76.62**	**3,47,000**	**74.94**
Total Assets (A+B)	**3,85,000**	**100.00**	**4,63,000**	**100.00**
Liabilities :				
C. Current Liabilities	80,000	20.78	1,00,000	21.59
Creditors	40,000	10.39	50,000	10.81
Overdraft				
Total (C)	**1,20,000**	**31.17**	**1,50,000**	**32.40**
D. Long-term Liabilities	2,00,000	51.95	2,30,000	49.67
Capital Loan	65,000	16.88	83,000	17.91
Total (D)	**2,65,000**	**68.83**	**3,13,000**	**67.55**
Total Liabilities (C+D)	**3,85,000**	**100.00**	**4,63,000**	**100.00**

Note : Calculation have been made to the nearest rupee.

(i) Calculation of percentage of Cash for 2007

Cash = 23.38* – 15.59*=7.79

* Current = Total Assets – Fixed Assets

= 100 – 76.62 = 23.38

** Inventory + debtor = 5.20 + 10.39 = 15.59

(ii) Calculation of Percentage of overdraft for 2007

Total Current Liability – Creditor = 31.17 – 20.78 = 10.39

(iii) Calculation of percentage of Debtors for 2008
Debtor = 25.06* – 13.18 = 11.88

* Current Assets = Total Assets – Fixed Assets
= 100 – 74.94 = 25.06

Illustration 10

Complete the following Common Size Statement of Alok Ltd. By ascertaining the missing figures / percentage.

Common Size Income Statement as on 31.3.2014

Particulars	**Rs.**	**Rs.**	Common Size %	Common Size %
Net Sales		20,00,000		?
Less : Cost of Goods Sold				
Opening Stock	?		20	
Purchases	?		60	
Wages	2,50,000		?	
Factory Overheads	?		12.5	
Total	?		105	
Less: Closing Stock	6,00,000	?	30	75
Gross Profit		5,00,000		25
Less: Operating Expenses				
a) Administrative Expenses	?		7	
b) Selling Expenses	50,000		2.5	
c) Finance Expenses	?	2,10,000	?	10.5
Operating Profit		?		?
Add: Non-operating Income		50,000		2.5
Less: Non-Operating Expenses		?		1
Net Profit Before Tax		3,20,000		?

Solution

Assume Sale be 100 and find out percentage of each item.

Common Size Income Statement as on 31.3.2014

Particulars	**Rs.**	**Rs.**	Common Size %	Common Size %
Net Sales		20,00,000		100
Less : Cost of Goods Sold				
Opening Stock	4,00,000		20	
Purchases	12,00,000		60	
Wages	2,50,000		12.5	
Factory Overheads	2,50,000		12.5	
Total	21,00,000		105	
Less: Closing Stock	6,00,000	15,00,000	30	75
Gross Profit		5,00,000		25
Less: Operating Expenses				
a) Administrative Expenses	1,40,000		7	
b) Selling Expenses	50,000		2.5	
c) Finance Expenses	20,000	2,10,000	1	10.5
Operating Profit		2,90,000		14.5
Add: Non-operating Income		50,000		2.5
Less: Non-Operating Expenses		20,000		1
Net Profit Before Tax		3,20,000		16

3.7 EXERCISE

1. Define common size financial statement and explain their usefulness during financial statement analysis.
2. What are the steps involved in the financial statement analysis?
3. Discuss various techniques of financial statement.
4. Write short note on
   a. Comparative financial statement
   b. Trend analysis
   c. Common size statement
5. What do you understanding by comparative financial statement?
6. What information is required to prepare a comparative balance sheet?
7. Explain the procedure of preparing common size balance sheet.
8. Critically examine the various tools available to the financial analysis. What are the limitations of such tool?
9. Objective type questions

A. Match Group A With Group B

Group A		Group B	
a)	% Increase / Decrease	1.	Basis of common size Balance Sheet
b)	Trend Analysis	2.	Shows comparative performance
c)	Comparative Statement	3.	Method of preparing comparative statement
d)	Capital Employed = 100	4.	Earlier year as base year
e)	Sales = 100	5.	Investment
f)	5% Govt. Securities	6.	Basis of common size income statement

Answer: a –3 , b – 4, c- 2 , d-1 , e –6 , f -5

B. Fill in the Blanks with proper words / phase.

1. Comparative statement is a part of ___________ analysis.
2. Common size statement is a ___________________ analysis.
3. __________ analysis show trend in performance.
4. In ____________________ statement sales is considered equal to 100.
5. In trend Analysis earliest year is considered as ________________year.
6. Analysis is must for ________________.

Answer: 1. Horizontal , 2. Vertical, 3. Trend, 4. Common Size, 5. Base 6. Interpretation.

C. State whether following statement are True or False.

1. Comparative statement includes comparative income statement and balance sheet.
2. Common size income statement shows performance in term of 100.
3. Common size statement is a horizontal analysis.
4. Trend analysis shows the trend in financial performance of an organization.
5. In common size income statement capital employed is considered equal to 100.
6. Analysis is must for interpretation.

Answer: 1. True, 2.True 3.False 4.True 5.False 6. True

D. Multiple Choice Questions.

1. Common size statement is a tool of
   a) Vertical Analysis
   b) Horizontal analysis
   c) Technical analysis
   d) Fundamental Analysis

2. Comparative statement shows
   a) One year performance
   b) Comparative performance
   c) Financial performance
   d) Profitability performance

3. Trend analysis is a technique to analysis.
   a) Growth in performance
   b) Change in performance
   c) Trend in performance
   d) Common size statement

4. Earliest year has to be considered as base year, the values of which is taken as 100.
   a) Balance sheet
   b) Income statement
   c) Trend analysis
   d) Comparative statement

5. Inter firm comparison become misleading when two different firm follows
   a) Same policies
   b) Different Policies
   c) Same account system
   d) Same procedures

6. Trend Shows
   a) Direction of the change
   b) Composition of the change
   c) Upward change
   d) Downward change

Answer: 1.a, 2. b , 3. c, 4. c , 5. b, 6. a

❖❖❖❖

4

RATIO ANALYSIS

Unit Structure

4.1 INTRODUCTION

During the half of the 19th century, the bankers have started using accounting ratios for analyzing credit standing of prospective buyer (debtors). But the ratios analysis of bankers was very much restricted to the study of current ratios only.

In 1919, Alexander was has criticized such restrictions and narrow analysis and pointed out the possible dangers of such analysis. He expressed in his view that in order is get clear picture of financial health of the business enterprise, one has to take into account various other relationships other than current ratios. Then the ratio analysis is considered as strong and efficient tools of analyzing the financial statement.

Ratio analysis is the method or process of expressing relationship between items or group of items in the financial statement are computed, determined and presented. It is an attempt to draw quantitative measures or guides concerning the financial health and profitability of an enterprise. It can be used in trend and static analysis.

It is the process of comparison of one figure or item or group of items with another, which make a ratio, and the appraisal of the ratios to make proper analysis of the strengths and weakness of the operations of an enterprise.

4.2 MEANING OF RATIOS

4.2.1 Meaning

A ratio is one figure expressed in terms of another figure. It is mathematical yardstick of measuring relationship of two figures or items or group of items, which are related, is each other and mutually inter-dependent. It is simply the quotient of two numbers. It can be expressed in fraction or in decimal point or in pure number.

Accounting ratio is an expression relating to two figures or two accounts or two set accounting heads or group of items stated in financial statement.

4.2.2 Objectives of Ratio Analyses

The accounting ratios are very useful in assessing the performance of business enterprise i.e. financial position and profitability. This is possible to achiever by comparison of ratios of the year or with the previous year. The ratios are worked out to analyze the following aspect or areas of business organization.

1) Solvency: -
    a) Long-term solvency
    b) Short-term solvency
    c) Immediate solvency
2) Stability
3) Profitability
4) Operational efficiency
5) Credit standing
6) Structural analysis.
7) Utilization of resources and
8) Leverage or external financing.

4.2.3 Modes of Expressing an Accounting Ratio

An accounting ratio may be expressed in different ways as under:

I) Simple or pure ratio:- It is merely a quotient arrived by simple division of one number by another.

Example : When current assets of the business enterprise are Rs. 1,00,000 and current liabilities are Rs.25,000. The ratio between current assets and current liabilities will be expressed

as $\frac{1,00,000}{25,000}$ 04 OR it expressed as 4 : 1.

II) Percentages :- It is expressed as percentage relationship when simple or pure ratio is multiplied by 100.

Example : The current ratio in above example is expressed in percentage by multiplying 4 by 100.
i.e. 100 x 4 = 400%

III) Rate :- The ratio is expressed as rates which refer to the ratio over a period of time.

Example : Stock has turned over 8 times a year.

IV) Number of days or week or month:- Certain items of the financial statements are expressed better in the form of days or weeks or months.

Example: Debtors' collection period, credit payment period, movement of stock, etc. are expressed in days or weeks or months in a year.

If stock turnover ratio is 8 times, the movement of stock is expressed as under :

$$\frac{360}{8}\ 45 \text{ days}, \frac{52}{8}\ 6.5 \text{ weeks or } \frac{12}{8}\ 1.5 \text{ months}$$

V) Rupees :- In this case numerator is divided by denominator and figure of result is expressed in rupees.

Example : Earnings per share, dividend per share etc are expressed in rupees.

It net profit after tax is Rs. 12,500 and number of shares of a company are 1250.

$$\text{Earnings per share} = \frac{\text{NPAT}}{\text{No. of shares}}\ \frac{12500}{1{,}250} = \text{Rs.}10 \text{ per share}$$

4.2.4 Usefulness of the Ratio Analyses

The ratios are useful for the following parties.

1. Investors, both present as well as potential investors.
2. Financial analysist.
3. Stock broker and stock exchange authorities.
4. Government.
5. Tax Department.
6. Competitors

7. Research analysist and students.
8. Creditors and supplier.
9. Banks and financial institutions.
10. Company's management.
11. Finance managers
12. Mutual funds.
13. Other interested parties like credit rating agencies.

4.3 CLASSIFICATION OF RATIOS

The ratios are used for different purposes, for different users and for different analysis.

The ratios can be classified as under:

a) Traditional classification

b) Functional classification

c) Classification from user's point of view

A. Traditional classification :

As per this classification, the ratios readily suggest through their names, their respective resources. From this point of view, the ratios are classified as follows.

a) **Balance Sheet Ratio :-** This ratio is also known as financial ratios. The ratios which express relationships between two items or group of items mentioned in the balance sheet at the end of the year.

Example : Current ratio, Liquid ratio, Stock to Working Capital ratio, Capital Gearing ratio, Proprietary ratio, etc.

b) **Revenue Statement Ratio :-** This ratio is also known as income statement ratio which expresses the relationship between two items or two groups of items which are found in the income statement of the year.

Example : Gross Profit ratio, Operating ratio, Expenses Ratio, Net Profit ratio, Stock Turnover ratio, Operating Profit ratio.

c) **Combined Ratio:-** These ratios shows the relationship between two items or two groups of items, of which one is from balance sheet and another from income statement (Trading A/c and Profit & Loss A/c and Balance Sheet).

Example : Return on Capital Employed, Return on Proprietors' Fund ratio, Return on Equity Capital ratio, Earning per Share ratio, Debtors' Turnover ratio, Creditors Turnover ratio.

B. Functional Classification of Ratios :

The accounting ratios can also be classified according their functions as follows.

a) Liquidity Ratios :- These ratios show relationship between current assets and current liabilities of the business enterprise.

Example : Current Ratio, Liquid Ratio.

b) Leverage Ratios :- These ratios show relationship between proprietor's fund and debts used in financing the assets of the business organization. This ratio measures the relationship between proprietors fund and borrowed funds.

Example : Capital gearing ratio, debt-equity ratio, and proprietary ratio.

c) Activity Ratio :- This ratio is also known as turnover ratio or productivity ratio or efficiency and performance ratio. These ratios show relationship between the sales and the assets. These are designed to indicate the effectiveness of the firm in using funds, degree of efficiency, and its standard of performance of the organization.

Example : Stock Turnover Ratio, Debtors' Turnover Ratio, Turnover Assets Ratio, Stock working capital Ratio, working capital Turnover Ratio, Fixed Assets Turnover Ratio.

d) Profitability Ratio:- These ratios show relationship between profits and sales and profit & investments. It reflects overall efficiency of the organizations, its ability to earn reasonable return on capital employed and effectiveness of investment policies.

Example : i) Profits and Sales : Operating Ratio, Gross Profit Ratio, Operating Net Profit Ratio, Expenses Ratio etc.

ii) Profits and Investments : Return on Investments, Return on Equity Capital etc.

e) Coverage Ratios :- These ratios show relationship between profit in hand and claims of outsiders to be paid out of profits.

Example : Dividend Payout Ratio, Debt Service Ratio and Debt Service Coverage Ratio.

C. Classification from the view point of user :

Ratio from the users' point of view are classified as follows:

a) **Shareholders' point of view:-** These ratios serve the purposes of shareholders. Shareholders, generally expect the reasonable return on their capital. They are interested in the safety of shareholders investments and interest on it.

Example : Return on proprietor's funds, Return on capital, Earning per share.

b) **Long term creditors:-** Normally leverage ratios provide useful information to the long term creditors which include debenture holders, vendors of fixed assets, etc. The creditors interested to know the ability of repayment of principal sum and periodical interest payments as and when they become due.
Example : Debt equity ratio, return on capital employed, proprietary ratio.

c) **Short term creditors :-** The short-term creditors of the company are basically interested to know the ability of repayment of short-term liabilities as and when they become due. Therefore, the creditors has important place on the liquidity aspects of the company's assets.

Example : a) Liquidity Ratios - Current Ratio, Liquid Ratio.

b) Debtors Turnover Ratio.

c) Stock working capital Ratio.

d) **Management:-** Management is interested to use borrowed funds to improve the earnings.
Example : Return on capital employed, Turnover Ratio, Operating Ratio, Expenses Ratio.

4.4 BALANCE SHEET RATIOS

1. Current Ratio:

This ratio is also known as working capital ratio. This expresses the relationship between current assets and current liabilities. This ratio is calculated by dividing current assets by current liabilities. It is expressed as pure ratio standard current ratio is 2:1.Means current assets should be double the current liabilities.

Current Ratio= Current Assets / Current Liabilities

a) **Current assets** includes I) Inventories of raw materials, finished goods, work-in-progress, stores & spare, loose tools, II) Sundry debtors, III) Short-term loan, deposits, advance, IV) Cash on hand and bank, V) Prepaid expenses, accrued income, VI) Bills receivables, VII) Marketable investments, short term securities.

b) **Current liabilities** includes sundry creditors, bills payables, outstanding expenses, unclaimed dividends, interest accrued but not due on secured and unsecured loans, advances received, income received in advance, provision for tax, purposed dividend loan installment of secured and unsecured loan payable within 12 months.

c) **Significance :** This ratio tests the credit strength and solvency of an organization. It shows strength of working capital, it indicates ability to discharge short term liabilities.

2. Liquid ratio:

This ratio expresses the relationship between liquid assets and liquid liabilities. This ratio is also known as quick ratio or acid test ratio. This ratio is calculated by dividing liquid assets by liquid liabilities. Standard quick ratio is 1:1.

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets / Quick Assets}}{\text{Quick or Current Liabilities}}$$

a) **Liquid assets** = Current assets less (Stock, prepaid expenses and advance tax etc)

b) **Liquid liabilities** = Current liabilities less (Bank overdraft and cash credit etc.)

c) **Significance :-**

1) Indicate immediate solvency of enterprise.
2) Unlike CR it is more qualitative concept
3) As it eliminates inventories, it is rigorous test of liquidity.
4) More important for financial institutions.

3. Proprietary ratio :

Proprietary ratio is a test of the financial and credit strength of the business. It establishes relationship between proprietors to total assets. This ratio determines the long term solvency of the company.

Alternatively this ratio is also known as Worth Debt Ratio. Net worth to Total Assets Ratio, Equity Ratio, Net worth Ratio or Assets Backing Ratio, Proprietor's funds to Total Assets Ratio or Shareholders Funds to Total Assets Ratio.

This ratio is expressed in percentage.

a) Formula :-

$$\text{Proprietary Ratio} = \frac{\text{Proprietors' or Shareholders' Fund}}{\text{Total Assets}} 100$$

b) Components :-

1) Proprietors Funds = Paid up equity + Reserves and surplus less accumulated loss + paid up preference capital.

2) Total assets = Fixed assets + investment + current assets.

c) Purpose: - This ratio is exercised to indicate the long term solvency of the business.

d) Significance: -

This ratio shows general financial strength of the business.

1) It determines the extent of trade on equity.
2) It indicates long term solvency of business.
3) It tests credit strength of business.
4) It can be used to compare proprietary ratio with others firms or industry.

4. Stock-working capital ratio :

This ratio establishes relationship between stock and working capital. Alternatively it is known as "Inventory-working capital ratio".

a) Formula :-

$$\text{Stock - Working Capital Ratio} = \frac{\text{Stock}}{\text{Working Capital}}$$

b) Components :-

1) Stock (closing stock)

2) Working capital i.e. current assets less current liabilities.

It can be expressed in percentage also by multiplying this ratio by 100.

c) Purpose :- This ratio shows the extent to which the working capital is blocked in inventories.

d) Significance :-

1) This ratio highlights the predominance of stocks in current financial position of organization.
2) A higher ratio indicates week working capital.
3) This ratio is the indicator of the adequacy of working capital.

e) Standard Ratio :- Standard stock working capital ratio is 1:1.

5. Capital Gearing Ratio :

This ratio brings out the relationship between capital carrying fixed rate of interest or fixed dividend and capital that doesn't carry fixed rate of interest or fixed dividend. This ratio indicates degree to which capital has been geared in the capital structure of the company.

Alternatively this ratio is also known as "Leverage ratio" or "Financial leverage ratio" or " Capital structure ratio".

a) Formula :-

$$\text{Capital gearing Ratio} = \frac{\text{Capital bearing Fixed Interest or dividend}}{\text{Capital not bearing Fixed Interest or dividend}}$$

b) Components :-

1) Capital bearing fixed interest or dividend comprises of debentures, secured and unsecured loans, and preference share capital.
2) Capital not bearing fixed interest or dividend is equity share capital and reserve & surplus.

This ratio also can be expressed in % by multiplying this ratio by 100.

c) Purpose :- This ratio is used to understand the effective capital structure of the company.

d) Significance :-

1) It is mechanism to ascertain the extent to which the company is practicing trade or equity.
2) It brings one balanced capital structure.

6. Debt Equity Ratio :

This ratio express the relationship between external equities and external equities i.e. owners' capital and borrowed capital.

a) Formula :-

$$\text{Debt equity ratio} = \frac{\text{Debt}}{\text{Equit}} \text{ OR } \frac{\text{Long Term Debts}}{\text{Shareholders Fund}} \text{ OR}$$

$$\frac{\text{Long Term Debts}}{\text{Shareholders Funds} + \text{Long Term Debts}}$$

b) Components :-

1) Debts include all liabilities including short term & long term i.e. mortgage loan and debentures.
2) Shareholders' funds consist of Preference share capital, Equity share capital, Capital and Revenue Reserves, Surplus, etc.

c) Significance :-

1) It shares favorable or non-favorable capital structure of the company.
2) It shows long term capital structure.
3) It reveals high margin of safety to creditors.
4) It makes us understand the dependence on long terms debts.

d) Standard :- Standard debt- equity ratio is 2:1. It means debts should be double the shareholders' funds.

CHECK YOUR PROGRESS

1. Give the standard ratios of the following
   a. Acid Test Ratio
   b. Current Ratio
   c. Debt Equity Ratio
   d. Stock Working Capital Ratio
2. Write the alternative names of the following
   a. Quick Ratio
   b. Leverage ratio
   c. Capital structure ratio
   d. Equity Ratio
   e. Net worth Ratio
   f. Assets Backing Ratio

4.5 REVENUE STATEMENT RATIOS

Revenue statement ratios are the ratios which highlights the relation between two items from revenue statements i.e. Trading Account and Profit and Loss Account.

1. Gross profit ratio :

Gross profit ratios express the relationship between gross profit and net sales. This ratio is also known as "Turnover ratio" OR "Margin ratio" OR "Gross margin ratio" OR "Rate of gross profit". This ratio is expressed in percentage of net sales. This ratio says about %age gross profit to net sales.

a) Formula :-

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

b) Components of this ratio are:-

1) Net sales = Total sales less sales return
2) Gross profit = Sales - Cost of sales
3) Cost of sales = (opening stock + purchases + direct labour + other direct charge) - closing stock

c) Significance :-

1) This ratio analyse the basic profitability of business.
2) It shows the degree to which the selling price per unit may decline without resulting in loss from operations.
3) Yearly comparisons of gross profit ratio reveal the trend of trading results.

2. Operating Ratio :

This ratio studies the relationship between cost of activities and net sales i.e. cost of goods sold and net sales. This ratio shows the percentage of cost of goods sold with net sales. This ratio is expressed in percentage.

a) Formula :-

$$\text{Operating Ratio} = \frac{\text{Operating Cost}}{\text{Net Sales}} \times 100$$

b) Components :- Operating cost is equal to cost of goods sold and other operating expenses like administrative expenses, selling & distribution expenses etc. excluding finance expenses, income taxes, loss on sale of assets, etc.

c) Purpose :- Purpose of operating ratio is to ascertain the efficiency of the management regarding operation of business concern.

d) Significance :-

1) It is used to test operational efficiency of business.
2) This ratio is the yardstick which measures the efficiency of all operational activities of business i.e. production, management, administration, sales, etc.

e) Limitation of operating ratio :-

1) It cannot test profitability of business without considering extra - ordinary items.
2) The utility of operating ratio is limited owing to its vulnerability to changes in management decisions.

3. Expenses Ratio :

This ratio explains relationship of items or group of expense to net sales. Such ratios are collectively known as expanses ratio. This is calculated and expressed in percentage. This ratio expresses the percentage of items of expenses with net sales.

a) Formula:-

$$\text{Expenses Ratio} = \frac{\text{Item or Group of Expenses}}{\text{Net Sales}} 100$$

b) Various expenses ratio are as follows:-

1) $$\text{Administrative expenses ratio} = \frac{\text{Administrative expenses}}{\text{Net Sales}} \times 100$$

2) $$\text{Selling \& Dist. expenses ratio} = \frac{\text{Selling \& Dist. expenses}}{\text{Net Sales}} \times 100$$

3) $$\text{Cost of material consumed ratio} = \frac{\text{Cost of Material consumed}}{\text{Net sales}} \times 100$$

4) $$\text{Manufacturing expenses ratio} = \frac{\text{Manufacturing expenses}}{\text{Sales}} \times 100$$

5) $$\text{Non operating expenses ratio} = \frac{\text{Non operating expenses}}{\text{Net sales}} \times 100$$

c) Purpose and significance :-

1) This ratio helps us to know the cause behind overall changes in operating ratio
2) Purpose of this ratio is to take corrective action.
3) It indicates the efficiency of management in controlling expenses and improving profitability.
4) This ratio enables the income tax department to judge the correctness and reliability of income disclosed in income tax returns.
5) Analytical study of this ratio can be judged by trend of expenses.
6) Comparative study of year to year expenses can be possible.

4. Net profit ratio :-

Net profit ratio indicates the relationship between net profit and net sales. Net profit can be either operating net profit or net profit after tax or net profit before tax. Alternatively this ratio is also known as "Margin on sales ratio". Normally this ratio is calculated & expressed in percentage.

a) Formula :- $\text{Net profit ratio} = \frac{\text{Net profit}}{\text{Net sales}} 100 \text{ OR } \frac{\text{NPAT}}{\text{Net Sales}} 100$

$$\text{OR } \frac{\text{NPDT}}{\text{Net sales}} \times 100 \text{ OR } \frac{\text{ONP}}{\text{Net Sale}} \times 100$$

b) Significance :-

1) It measures overall profitability of business.
2) It is very useful in judging return on investments.
3) It provides useful inferences as to the efficiency and profitability of business.
4) It indicates the portion of net sales is available for proprietors.
5) It is clear index of cost control, managerial efficiency, sales promotion, etc.

5. Net operating profit ratio :

Operating profit ratio indicates the relationship between operating profit and net sales. This ratio is expressed in percentage.

a) Formula :-

$$\text{Net operating profit ratio} = \frac{\text{Net operating profit}}{\text{Net sales}} \times 100$$

b) Components :-

1) Net operating profit is equal to gross profit minus all operating expenses or sales minus cost of goods sold and operating expenses.
2) Net sales are equal to sales minus sales returns.

c) Significance :-

1) It signifies higher operating efficiency of management and control over operating cost.
2) It indicates profitability of various operations of the organization i.e. buy, manufacture, sales, etc.
3) It shows ability of organization to generate operating profit out of its daily operations.

6. Stock Turnover Ratio :

Stock turnover ratio shows relationship between costs of goods sold and average stock. This ratio is also known as "Inventory Ratio" or "Inventory Turnover Ratio" or "Stock Turn Ratio" or "Stock Velocity Ratio" or "Velocity of Stock Ratio".

This ratio measures the number of times of stock turns or flows or rotates in an accounting period compared to the sales affected during that period. This ratio indicated the frequency of inventory replacement. This ratio is expressed as rate.

a) Formula :-

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

b) Components :-

1) Cost of goods sold = Sales – Gross Profit

2) $$\text{Average Stock} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

* If opening stock is not given, the closing stock is treated as average stock.

c) Alternative method of stock turnover ratio:- This ratio can be calculated by using average stock at selling price at as the denominator. Under this method, average stock at selling price is related to net sales.

$$\text{Stock Turnover Ratio} = \frac{\text{Net Sales}}{\text{Average inventory at selling price}}$$

d) Purpose :- Purpose of stock turnover ratio is to

1) Calculate the speed at which the stock is being turned over into sales.
2) Calculate the stock velocity to indicate the period takes by average stock to be sold out.
3) Judge how efficiently the stock are managed and utilized to generate sales.

CHECK YOUR PROGRESS

1. Give the alternative names of the following
   a. Stock Velocity Ratio
   b. Margin on sales ratio
   c. Turnover ratio
   d. Margin ratio
   e. Rate of Gross profit ratio
   f. Margin on sales ratio
2. Write the components of the following ratios
   a. Stock Turnover ratio
   b. Gross profit Ratio
   c. Net profit ratio
   d. Expenses Ratio
   e. Net operating profit ratio

4.6 COMBINE RATIO / COMPOSITE RATIOS :-

Combined or composite ratios relate two items or group of items of which one is from balance sheet and another from revenue statements of an enterprise.

1. Return on capital employed :

This ratio explains the relationship between total profit earned by business and total investment made or total assets employed. It is expressed in percentage. This ratio is also known as "Return on Investment", or "Return on Total Resources".

a) Formula :-

$$\text{Return on capital employed} = \frac{\text{Profit before Tax Interest}}{\text{Capital Employed}} 100$$

b) Components:

1) Net profit before tax, interest & dividends (PBIT)
2) Capital Employed
   a. Equity Share Capital
   b. Add. Preference Share Capital reserve & surplus
   c. Add. Long term borrowings (Term Loan + Debentures)

d. Less: Fictitious assets like miscellaneous expenses not written off.
e. Less profit & loss A/c Dr. Balance (loss)

c) Purpose:-

1) Purpose of this ratio is to measure overall profitability from the total funds made available by owners and leaders.
2) Purpose of this ratio is to judge how efficient the business concern is in managing the funds at its disposal.

d) Significance: -

1) This ratio is effective tools to measure overall managerial efficiency of business.
2) Comparison of this ratio with other company and this information can be obtained for determining future course of action.
3) This ratio indicates the productivity of capital employed and measures the operating efficiency of the business.

2. Return on Proprietors Funds :

This ratio measures the relationship between net profit after tax & interest and proprietors fund. This ratio is alternatively known as "Return on proprietors' equity" or "Return on shareholders' investment" or "Investors' ratio". This ratio is expressed in percentage.

a) Formula:-

$$\text{Return on Proprietor's Fund} = \frac{\text{Net profit after tax \& Interest (NPATI)}}{\text{Proprietors' Fund}} \times 100$$

b) Components :-

1) Net profit after tax and interest
2) Proprietors' funds

c) Purpose: -

1) Purpose of this ratio is to measure the rate of return on the total fund made available by the owners.
2) This ratio helps to judge how efficient the concern is in managing owners' funds at its disposal.

d) Significance: -

1) This ratio is very significant to prospective investors and shareholders.
2) With the help of this ratio company can decide to rise finance from external sources even from public deposit it ratio is satisfactory.
3) Shareholders can expect to capitalize its reserves and issue bonus shares when ratio is higher for reasonable period of time.

3. Return on equity share capital :

This ratio explains relationship between net profit (after tax and interest and dividend on preference share) and equity share holders' funds. This ratio is expressed in percentage.

a) Formula :-

$$\text{Return on Equity Capital} = \frac{\text{Net profit after tax less preference dividend}}{\text{Equity Share Capital}} \times 100$$

Alternatively this ratio may be calculate by using following formula for calculating the return per equity shares.

$$\text{Return on Equity Shares} = \frac{\text{Net profit after tax less preference dividend}}{\text{Number of Equity Share}}$$

b) Components :-

1) Net profit after tax & interest and preference dividend.
2) Equity share capital by adding reserves or deducting miscellaneous expenditures.

c) Purpose :-

Purpose of this ratio is to calculate amount of profit available to take care of equity dividend, transfer to reserves, etc.

d) Significance :-

1) It is useful to the investors while deciding whether to purchase or sale of shares.
2) This ratio helps to make comparative study of equity capital with other company and it will be appreciate if there is high return.

4. Earnings per share :

Earnings per share is calculated to find out overall profitability of the organization.

It represents earnings of the company whether or not dividends are declared.

Earnings per share is determined by dividing net profit by the number of equity shares.

a) Formula :-

$$\text{Earning per shares (EPS)} = \frac{\text{Net profit after tax - preference dividend}}{\text{Number of Equity Share}}$$

b) Components :-

1) Net profit after tax & interest - less preference dividend.
2) No. of equity shares.

c) Purpose :-

Purpose of this ratio is to calculate the amount of profits available on each equity share to take care of equity dividend, transfer to reserves, etc.

d) Significance :-

1) This ratio helps the investors or shareholders to take decision while purchasing or selling shares.
2) This ratio shows the possibilities of issue of bonus shares.
3) Higher ratio indicates overall profitability.

5. Dividend payout ratio :

This ratio shows relationship between dividends paid to equity shareholders out of profit available to the equity share holders.

a) Formula: -

This ratio is calculated as follows.

$$\text{Dividend payout ratio} = \frac{\text{Dividend per equity shares}}{\text{Earning per shares}}$$

b) Components: -

1) Dividend per equity shares means total dividend paid to equity shareholder dividend by number of equity shares.
2) Earning per shares as per Para 3.8.4.

c) Purpose: -

Purpose of this ratio is to measure the dividend paying capacity of the company.

d) Significance: -

1) Higher ratio signifies that the company has utilized the larger portion of its earning for payment of dividend to equity shareholders.
2) It says lesser amount of earning has been retained.

6. Price earnings ratio (P/E Ratio) :

This ratio measures relationship between market price of equity shares and earnings per share. It is usually expressed as a fraction.

a) Formula: -

$$\text{Price Earing Ratio} = \frac{\text{Market price per Equity shares}}{\text{Earning per Equity Shares}}$$

b) Components: -

1) Market price per equity share = quoted price of a listed equity share.
2) Earnings per equity share = as worked out in Para 3.8.4.

c) Purpose: -

1) Purpose of this ratio is to show the effect of the earning on the market price of the share.
2) It helps the investors while deciding whether to purchase, keep or sell the equity shares.
3) It helps to ascertain the value of equity share.

7. Debt service Ratio :

Debt service ratio shows relationship between net profit and interest payable on loans. This ratio is also called as Interest Coverage Ratio. This ratio is expressed as a pure number.

a) Formula :-

$$\text{Debt Service Ratio} = \frac{\text{Net profit before interest \& tax}}{\text{Interest Charges}}$$

b) Components :-

1) Profit before interest & tax means net profit before payment of interest on loan and tax.
2) Interest means interest on long term loans.

c) Purpose:-

1) Purpose of this ratio is to measure the interest paying capacity the company.
2) The purpose of this ratio is to find out the number of times the fixed financial charges are covered by income before interest and tax.

d) Significance :-

1) It is important from the lenders' point of view.
2) It indicated whether the company will earn sufficient profits to pay periodical interest charges.
3) It shows that the company will be able is pay interest regularly.

8. Debt service coverage ratio :

Debt service coverage ratio shows the relationship between net profit and interest plus loan installments payable. This ratio is expressed in pure number.

a) Formula:-

$$\text{Debt service coverage Ratio} = \frac{\text{Cash profit available for debt servicing}}{\text{Interest} + \text{Installment due on loan}}$$

b) Components :-

1) Net profit + non-cash debit to P & L A/c (depreciation + goodwill written off, deferred revenue expenditure written off, loss on sale of fixed assets) = cash profit for debit servicing.
2) Interest means interest on long term loan.
3) Installments means installments due on long term loan during the year.

c) Purpose :-

Purpose of this ratio is to measure the debt servicing capacity of the company.

9. Creditors Turnover Ratio :

This ratio shows relationship between the net credit purchases and the average creditors. This ratio is express as a rate.

a) Formula:-

$$\text{Creditors' Turnover Ratio} = \frac{\text{Net Credit Purchases}}{\text{Average Creditors}} \text{ OR } \frac{\text{Credit Purchases}}{\text{Creditors} + \text{Bills Payable}}$$

$$\text{Credit payment period OR(Creditors Velocity)} = \frac{\text{365 day or 12 months}}{\text{Creditors turnover ratio}} \text{ OR}$$

$$= \frac{\text{Creditors + Bills payable}}{\text{Daily Credit Purchases}}$$

b) Components: -

1) Credit purchases means gross credit purchases minus purchases returns.
2) Average creditors mean average of opening and closing amount of creditors. If details are not given then only closing creditors may be considered as average creditors.
3) Amount of bills payable.

c) Purpose: -

1) Calculate the speed with which creditors are paid off on an average during the year.
2) Calculate the creditors' velocity to indicate the period taken by the average creditors to be paid off.
3) Judge how efficiently the creditors are managed.

10. Debtors' Turnover Ratio :

This ratio shows relationship between credit sales and average trade debtors. Alternatively this ratio is known as "accounts receivable turnover ratio" or "turnover of debtors' ratio". This ratio is expressed as a rate.

a) Formula :-

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Debtors}} \text{ OR } \frac{\text{Credit Sales}}{\text{Accounts Receivable}}$$

$$\text{OR } \frac{\text{Credit Sales}}{\text{Debtors + Bills Receivable}}$$

$$\text{Average Collections Period} = \frac{\text{Debtors + Bills Receivable}}{\text{Daily Credit Sales}} \text{ OR}$$

$$\frac{\text{365 days or 12 months}}{\text{Debtors turnover ratio}} \text{ OR } \frac{\text{365 days}}{\text{Credit Sales}} \text{ Average debtors}$$

b) Components :-

1) Sundry debtors
2) Accounts receivables i.e. bills receivables.
3) Average daily sales.

c) Purpose :-

1) Calculate the speed with which debtors get settled on an average during the year.

2) Calculate debtors' velocity to indicate the period of credit allowed to average debtors.

3) Judge how efficiently the debtors are managed.

CHECK YOUR PROGRESS

1. Give the formulas of the following ratios:
   a. Returns on Capital Employed
   b. Returns on Proprietors funds
   c. Debtors' Turnover ratio
   d. Creditors' Turnover ratio
   e. Debt service ratio
   f. Debt service coverage ratio

2. Give the alternative names of the following
   a. Returns on Capital Employed
   b. Returns on Proprietors funds
   c. Debtors' Turnover ratio
   d. Debt service ratio

4.7 LIMITATION OF RATIOS

1. Ratios are mainly based on financial statements therefore weaknesses of financial statements are carried forward in the ratios.
2. Ratios calculated between two unrelated items or groups would be useless. e.g. ratio between cost of goods sold and preliminary expenses.
3. Ratios are just indicators. Just calculation of ratios cannot improve the financial position. Corrective and preventive steps should be taken to improve financial position and profitability of business.
4. Standard ratios changes from industry to industry. Maintenance of ratios is not only the objective but improving the financial stability and solvency and profit maximization should be the objective.
5. Increase or decrease in the ratio may be due to change in the economic factors of the country or due is inflation. Such increase or decrease not due to efficiency or inefficiency of the management of the business organization.
6. It is very difficult make correct inter-comparison of the firm because two firms are not similar in age, size and in system of following accounting policies.

7. Financial statements are prepared at ending the year. It might be subject to window dressing for covering bad financial position and ratios are not reliable which are based on manipulated financial statement.

4.8 SOLVED PROBLEMS

Illustration 1

Following is the trading and profit and loss account for the year ended 31st march 2014 and balance sheet as on that date of Sun. ltd.

Trading and profit and loss account
for the year ended 31st march 2014.

Particulars	Amt.	Particulars	Amt.
To Opening Stock	2,50,000	By Sales (Credit)	37,00,000
To Purchases	26,00,000	By Closing Stock	5,00,000
To Gross Profit c/d	13,50,000		
Total	**42,00,000**	**Total**	**42,00,000**
To Administration Exps.	2,70,000	By Gross Profit	13,50,000
To Interest	72,000	By Profit on sale of Assets	50,000
To Rent	60,000		
To Selling Exps	1,00,000		
To Depreciation	1,20,000		
To Provision for I.Tax	2,78,000		
To Proposed Dividend	1,00,000		
To Net Profit	4,00,000		
Total	**14,00,000**		**14,00,000**

Balance sheet as on 31.3.2014

Liabilities	Amt.	Assets	Amt.
Equity Share Capital (Rs.10)	5,00,000	Fixed Assets (at cost)	12,40,000
11% Preference Sh. Capital	3,00,000	Short Term Capital	1,00,000
General Reserve	4,00,000	Trade Receivable	9,50,000
12% Debenture	6,00,000	(Last Year Rs. 9,00,000)	
Trade Payable	3,00,000	Inventories	5,00,000
Proposed Dividend	1,00,000	Cash and Bank	1,50,000
Bank Overdraft	2,00,000	Discount on Issue of Shares	60,000
Provision For Depreciation	4,00,000		
Provision for Tax	2,00,000		
	30,00,000		**30,00,000**

From the above information calculate following ratios and comment on current ratio.

1. Current ratio
2. Inventory Turnover Ratio
3. Return on Proprietors Fund
4. Operating Ratio
5. Debtors Turnover Ratio
6. Capital Gearing Ratio
7. Dividend Payout Ratio

Assume 360 days in a year.

Note: Drafting of Vertical Financial Statement is not expected.

Solution:

S. No.	Ratio	Formula	Calculation	Ans.
1.	Current Ratio	$\frac{CA}{CL}$	$\frac{1,700}{800}$	2.13:1
2.	Inventory Turnover Ratio	$\frac{\text{COGS}}{\text{Avg.Stock}}$	$\frac{2,350}{375}$	6.27 Times
3.	Return On Proprietors Fund	$\frac{\text{NPAT}}{\text{Prop. Fund}} \times 100$	$\frac{500}{1140} \times 100$	43.86%
4.	Operating Ratio	$\frac{\text{COGS} + \text{Op.Exps} + \text{Int.}}{\text{Net Sales}} \times 100$	$\frac{2,350 + 550 + 72}{3,700} \times 100$	80.32%
5.	Debtors Turnover Ratio	$\frac{\text{Credit Sales}}{\text{Avg.A / c Receivable}}$ $\frac{\text{No.Days}}{\text{DTR}}$	$\frac{3,700}{925}$ $\frac{360}{4}$	4 Times 90 Days
6.	Capital Gearing Ratio	$\frac{\text{Pref.Cap} + \text{LTC}}{\text{Equity Sh. Holder Fund}}$	$\frac{300 + 600}{840}$	1.07
7.	Dividend Payout Ratio	$\frac{\text{Eq.Dividend}}{\text{Profit Available for Eq.Sh.Ho.}}$	$\frac{1,00,000}{5,00,000 - 33,000}$	21.41%

Current Ratio is more than standard Current Ratio is more than standard current Ratio 2:1.

This shows favorable short term financial position.

Illustration 2

Following is The Balance Sheet of Bliss Happiness Ltd. as at 31st March 2013.

Balance Sheet as at 31-03-2013

Liabilities	Amt.	Assets	Amt.
Equity Share Capital	1,00,000	Machinery	2,96,000
General Reserve	70,000	Investment	1,12,000
10% Preference Capital	1,80,000	Stock in Trade	1,01,000
15% Debenture	1,20,000	Bills Receivable	20,000
Trade Payable	1,22,000	Trade Receivable	49,000
Bank Overdraft	20,000	Cash and Bank	38,000
Provision for Tax	18,000	Profit and Loss A/c	14,000
	6,30,000		6,30,000

Sales for the year Rs.7,00,000; Gross profit Rate 25% and Opening Stock is Rs.1,09,000. Profit before Tax for the year ending 31.03.13 is Rs.2,10,000.

You are required to compute the following rations and comment on current ratio.

1. Current Ratio
2. Acid Test Ratio
3. Stock Turnover Ratio
4. Capital Gearing Ratio.
5. Proprietary Ratio
6. Debt Equity Ratio (Debt / Net Worth)
7. Return on Capital Employed.

Redrafting the given Balance Sheet in vertical format is not expected.

Solution.

Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	$\frac{1,01,000 + 20,000 + 49,000 + 38,000}{1,22,000 + 20,000 + 18,000}$	1.3
Acid Test Ratio	$\frac{\text{Liquid Assets}}{\text{Quick Liabilities}}$	$\frac{20,000 + 49,000 + 38,000}{1,22,000 + 18,000}$	.76
Stock Turnover	$\frac{\text{Cost of goods sold}}{\text{Op. + Cl.Stock / 2}}$	$\frac{7,00,000 - 175,000}{(1,09,000 + 1,01,000) / 2}$	5Time
Capital Gearing Ratio	$\frac{\text{Fixed Int.Bearing Securities}}{\text{Eq.Sh Cap. + Res \& Surplus - Loss}}$	$\frac{1,80,000 + 1,20,000}{1,00,000 + 70,000 - 14,000}$	1.92
Proprietary Ratio	$\frac{\text{Proprietor's Fund}}{\text{Total Assets}} \times 100$	$\frac{1,00,000 + 1,80,000 + 70,000 - 14,000}{2,96,000 + 1,12,000 + 2,08,000} \times 100$	54.44%
Debt Equity	$\frac{\text{Debt}}{\text{Net Worth}}$	$\frac{1,20,000}{1,00,000 + 1,80,000 + 70,000 - 14,000}$	.36
Return on Capital Employed	$\frac{\text{NPBIT}}{\text{Capital Employed}} \times 100$	$\frac{2,10,000 + 18000}{1,20,000 + 3,36,000} \times 100$	50%

Current ratio is 1:3. It is lower than the standard of 2:1. The current assets for every rupee of current liabilities. Current assets are not sufficient to pay current liabilities short tern solvency position of the company is not satisfactory.

Illustration 3

M/s Sumit Ltd. Presents the following Trading and Profit & Loss A/c for the year ended 31.3.2014 and balance sheet as on that date.

Trading and profit and loss account
for the year ended 31.03.2014.

Particulars	Amt.	Particulars	Amt.
To Opening Stock	2,00,000	By Sales	12,00,000
To Purchases	5,00,000	By Closing Stock	4,00,000
To Wages	3,00,000		
To Gross Profit c/d	6,00,000		
	16,00,000		**16,00,000**
To Salaries	1,50,000	By Gross Profit b/d	6,00,000
To Rent	60,000	By Profit on sale of Investment	5,000
To Commission	12,000	By Interest	15,000
To Advertising Expenses	20,000		
To Interest	83,000		
To Depreciation	30,000		
To Provision For tax	50,000		
To Net Profit c/d	2,15,000		
	6,20,000		**6,20,000**
To Proposed Dividend	80,000	By balance b/f	1,85,000
To Preference Dividend	16,000	By Net profit b/d	2,15,000
To Balance c/d	3,04,000		
	4,00,000		**4,00,000**

Balance sheet as on 31.3.2014

Liabilities	Amt.	Assets	Amt.
Equity share capital (Rs.100)	8,00,000	Land and Building	6,00,000
8% Pref. Sh. Capital	2,00,000	Plant and Machinery	5,50,000
Reserve and surplus	3,04,000	Furniture	4,00,000
7% Debentures	5,00,000	Investment	2,70,000
Loan from IDBI	6,00,000	Stock	4,00,000
Creditors	1,50,000	Debtors	2,00,000
Bills Payable	50,000	Bills Receivable	1,60,000
Provision for tax	50,000	Advance tax	30,000
Dividend Payable	96,000	Prepaid expenses	40,000
		Cash in Hand	20,000
		Bank Balance	60,000
		Dis. On Issue of Debentures	20,000
	27,50,000		**27,50,000**

Additional Information:

1) The Market Price of equity shares as on 31.3.2014 was Rs.90.
2) Out of total sales, 30% are cash sales and out of total Purchases, 50% are credit purchases. You are required to calculate the following Ratios:
   a) Return on capital employed
   b) Price Earnings ratio
   c) Debt Service Ratio
   d) Creditors Turnover Ratio
   e) Return on Equity capital

Solution:

Return on Capital Employed	$\frac{\text{NOPBIT}}{\text{Capital Employed}} \times 100$	$\frac{2,15,000 + 50,000 + 83,000 - 5000}{(8,00,000 + 2,00,000 + 304,000 - 20,000) + (5,00,000 + 6,00,000)} \times 100$	14.39%
Creditors Turnover Payment Period	$\frac{\text{Credit Purchases}}{\text{Av. Creditors + Bills payable}}$ $\frac{365}{\text{CTR}}$	$\frac{2,50,000}{2,00,000}$ $\frac{365}{1.25}$	1.25 Time 292 days
Price Earnings ratio EPS	$\frac{\text{MP}}{\text{EPS}}$	$\frac{90}{24.88}$ $\frac{2,15,000 - 16,000}{8,000}$	3.62 24.88
Return on Equity Capital	$\frac{\text{NPAT - Pref.Div.}}{\text{Eq.Sh Cap.}}$	$\frac{2,15,000 - 16,000}{8,00,000} \times 100$	24.875%
Debt Equity Ratio	$\frac{\text{NPBIT}}{\text{Interest}}$	$\frac{2,15,000 + 50,000 + 83,000}{83,000}$	4.19 times

Illustration 4

The following is the summarized profit and loss A/c of M/s Hema Ltd. For the year ended 31.32014.

Particulars	Amt.	Particulars	Amt.
To Opening Stock	5,00,000	By Sales	50,00,000
To Purchases	25,00,000	By profit on sale of assets	50,000
To Wages	25,000	By Interest	25,000
To Freight and Octroi	80,000	By Dividend	10,000
To Direct Expenses	75,000	By Closing Stock	7,50,000
To Office Insurance	80,000		
To Office Staff Salaries	2,00,000		
To Gen. Manager Salary	50,000		
To Staff Welfare Expenses	40,000		

To Printing and Stationery	5,000		
To Interest	50,000		
To Audit Fees	15,000		
To Office Rent	2,00,000		
To Computer Repairs	75,000		
To Advertising	2,50,000		
To Bad Debts	5,000		
To Traveling	20,000		
To Commission	75,000		
To Dep. On Furniture	30,000		
To Dep. On Building	40,000		
To Dep. on Vehicles	20,000		
To Interim Dividend	50,000		
To Loss on sale of Assets	1,00,000		
To Income Tax	50,000		
To Net Profit	13,00,000		
	58,35,000		**58,35,000**

Calculate the following Ratio;

1) Gross Profit Ratio
2) Operating Profit Ratio
3) Office Expense Ratio

Vertical statement is not expected.

Solution

Gross profit ratio	$\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$	$\frac{50,00,000 + 7,50,000 - 5,00,000 - 25,00,000 - 25,000 - 80,000 - 75,000}{50,00,000} \times 100$	51.4%
Operating Ratio	$\frac{\text{Operating Cost}}{\text{Net Sale}} \times 100$ COGS + Operating Exps = Operating Cost	$\frac{24,30,000 + 11,55,000}{50,00,000} \times 100$	71.7%
Office Expense Ratio	$\frac{\text{Office Expenses}}{\text{Net Sales}} \times 100$	$\frac{7,55,000}{50,00,000} \times 100$	15.1%

Illustration 5

The following is the balance sheet of M/s Shyam Ltd. Ason 31.3.2014

Balance sheet as on 31.3.2014

Liabilities	Amt.	Assets	Amt.
Equity share capital (Rs.10)	4,00,000	Goodwill	1,25,000
9% Pref. Sh. Cap. (Rs.10)	2,00,000	Furniture & Fitting	3,00,000
General Reserve	1,00,000	Land and Building	4,00,000
Profit and Loss A/c	1,00,000	Stock	1,00,000
10% Mortgage Loan	2,00,000	Debtors	2,00,000
Accounts Payable	1,00,000	Cash and Bank	60,000
Adv. From Customer	50,000	Prepaid Expenses	40,000
Prov. For Tax.	60,000	Preliminary Expenses	15,000
Proposed Dividend	40,000	Dis. on Issue of Deb.	10,000
	12,50,000		12,50,000

The following further information is also given for the year;

Total sales Rs.10,00,000 net profit rate 15%. Out of total sales 20% are cash sales. Purchases Rs.5,00,000 . No. of days in a year 360. Calculate the following Ratio:

a) Proprietory Ratio
b) Acid Test Ratio
c) Creditors Turnover Ratio
d) Debt Equity Shares
e) Stock Working Capital Ratio
f) Capital Gearing Ratio
g) Operating Ratio

Solution

Operating Ratio	$\frac{\text{Operating Cost}}{\text{Sales}} \times 100$	10,00,000 – (15% x 10,00,000)	
Acid Test Ratio	$\frac{\text{Liquid Assets}}{\text{Quick Liabilities}}$	$\frac{2,00,000 + 60,000}{1,00,000 + 60,000 + 40,000}$	1.3:1
Creditors Turnover Ratio	$\frac{\text{Credit Purchases}}{\text{Creditors}}$	$\frac{5,00,000}{1,00,000}$	5Times
Capital Gearing Ratio	$\frac{\text{Fixed Int. Bearing Securities}}{\text{Eq.Sh Cap.} + \text{Res \& Surplus} - \text{Loss}}$	$\frac{2,00,000 + 2,00,000}{4,00,000 + 1,00,000 + 1,00,000 - 15,000 - 10,000}$	0.07:1
Proprietory Ratio	$\frac{\text{Proprietor's Fund}}{\text{Total Assets}} \times 100$	$\frac{4,00,000 + 2,00,000 + 1,00,000 + 1,00,000 - 15,000 - 10,000}{12,50,000 - 15,000 - 1,000} \times 100$	63.27:1
Debt Equity Ratio	$\frac{\text{Debt}}{\text{Net Worth}}$	$\frac{2,00,000}{7,75,000}$	0.26:1
Stock Working Capital Ratio	$\frac{\text{Closing Stock}}{\text{Working Capital}}$	$\frac{1,00,000}{(2,00,000 + 60,000 + 1,00,000 + 40,000) - (1,00,000 + 60,000 + 40,000 + 50,000)}$	0.67:1

Illustration 6
Following is the Revenue Statement of Promod Ltd.

Trading , Profit & Loss account for the year ended 31.3.2014

Particulars	Amt.	Particulars	Amt.
To Opening Stock	27,150	By Sales	2,55,000
To Purchases	1,63,575	By Closing Stock	42,000
To Carriage Inward	4,275	By Interest received on Invt.	2,700
To Office Expenses	45,000		
To Sales Expenses	13,500		
To Loss on sale of Fixed asset	1,200		
To Net Profit c/d	45,000		
	2,99,700		**2,99,700**

Calculate the following ratio:

a) Gross Profit Ratio
b) Stock Turnover Ratio
c) Net Profit before tax ratio
d) Operating Ratio
e) Office Expense Ratio

Solution

Gross profit ratio	$\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$	$\frac{1,02,000}{2,55,000} \times 100$	40%
Operating Ratio	$\frac{\text{Operating Cost}}{\text{Net Sale}} \times 100$ COGS + Operating Exps = Operating Cost	$\frac{1,53,000 + 58,500}{2,55,000} \times 100$	82.94%
Office Expense Ratio	$\frac{\text{Office Expenses}}{\text{Net Sales}} \times 100$	$\frac{45,000}{2,55,000} \times 100$	17.65%
Stock Turnover Ratio	$\frac{\text{COGS}}{\text{Avg.Stock}}$	$\frac{1,53,000}{34,575}$	4.43 times
Net Profit before tax Ratio	$\frac{\text{NPBT}}{\text{Net Sales}} \times 100$	$\frac{45,000}{2,55,000} \times 100$	17.65%

Illustration 7

The summarized balance sheet of Bad Luck ltd. As on 31.3.2014 is as follow.

Balance sheet as on 31.3.2014 **(In lakh)**

Liabilities	Amt.	Assets	Amt.
Equity Share Capital (Rs.100)	150	Fixed Assets (at cost) 420	
9% Pref. Sh. Cap. (Rs.10)	80	Less: Depreciation 50	370
Reserve and Surplus	90	Stock	50
Profit and Loss A/c	40	Debtors	60
10% Debentures	50	Cash at bank	30
Provision for Taxation	20		
Sundry Creditors	80		
	510		**510**

The following particulars are also given for the year.

	Rs. In Lakhs
Net Sales (Credit)	240
Profit before interest and	65
Net profit after tax	40

Market Price per equity shares is Rs.150

Calculate the following ratio:

a) Acid test Ratio
b) Debtors turnover Ratio (360 days in a year)
c) Capital Gearing Ratio
d) Debt service Ratio
e) Return on Proprietor's Fund

Solution

(Rs. In Lakh)

Debtors Turnover Ratio	$\frac{\text{Net Credit Sales}}{\text{Debtors + B.R}}$	$\frac{240}{60}$	4 Times
Acid Test Ratio	$\frac{\text{Liquid Assets}}{\text{Quick Liabilities}}$	$\frac{60+30}{20+80}$	0.9:1
Capital Gearing Ratio	$\frac{\text{Fixed Int.Bearing Securities}}{\text{Eq.Sh Cap. + Res \& Surplus - Loss}}$	$\frac{80+50}{150+90+40}$	0.46:1
Debt Service Ratio	$\frac{\text{Net profit before Int. \& Tax}}{\text{Interest}}$	$\frac{65}{5}$	13 Times
Return on Proprietor's Fund	$\frac{\text{NPAT}}{\text{Proprietor's Fund}} \times 100$	$\frac{40,00,000}{3,60,00,000} \times 100$	11.11%

Illustration 8
Following is the balance sheet of M/s Moon Ltd.

Balance sheet as on 31.3.2014

Liabilities	Amt.	Assets	Amt.
Equity share capital	5,00,000	Fixed Assets	13,00,000
General Reserve	3,00,000	Investment	4,00,000
Securities Premium	25,000	Stock	8,50,000
10% Debenture	7,50,000	Sundry Debtors	5,00,000
Profit & Loss A/c	7,40,000	Prepaid Expenses	40,000
Sundry Creditors	2,30,000	Adv. Income tax	78,000
Bank Overdraft	3,95,000	Cash and Bank Bal.	62,000
Prov. For Taxation	1,80,000	Share Issue Expenses	10,000
Prop. Equity Dividend	1,50,000	Preliminary Expenses	30,000
	32,70,000		**32,70,000**

You are required to compute the following ratio and give your comments on each ratio with reference to standard ratio.

a) Current Ratio
b) Liquid Ratio
c) proprietary Ratio
d) Stock working capital Ratio

Solution:

Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	$\frac{15,30,000}{9,55,000}$	1.6:1
Acid Test Ratio	$\frac{\text{Liquid Assets}}{\text{Quick Liabilities}}$	$\frac{5,62,000}{5,60,000}$	1:1
Stock Working Ratio	$\frac{\text{Stock}}{\text{Working Capital}}$	$\frac{8,50,000}{5,75,000}$	1.48:1
Proprietory Ratio	$\frac{\text{Net Worth}}{\text{Total Assets}} \times 100$	$\frac{15,25,000}{32,30,000} \times 100$	47.21%

Comments:

1. Short term solvency of the company is satisfactory. In industry current ratio of 1.50 is considered satisfactory Rs.1 current liabilities are supported by Rs.1.60 current assets.
2. Immediate solvency of the company is quite satisfactory as the company has sufficient quick assets to pay off its quick liabilities. The company can meet its urgent liabilities.
3. Long term solvency of the company is not satisfactory. Only 47.12% of its total assets are financed by own fund. Margin of safety for the lenders of the company is not satisfactory. The company should improve this ratio by increasing shareholders fund to bring it to 65% or above. The company does not have financial stability.
4. Company stock is 147.83% of its working capital. Company is carrying excess stock. Company inventory management is not satisfactory. Stock may contain defective or slow moving items. Ideally stock should not exceed working capital. Working capital position of the company is unsatisfactory. There is excessive incidence of inventory in working capital management.

Illustration 9

a) The current ratio of a company is 4:1 and its current liabilities are Rs.50,000. The quick ratio is 2:1. Calculate the value of stock.

b) A trader carries an average stock (valued at cost) of Rs.50,000 and turns this over five times a year at a G.P. ratio of 20%. His administrative and selling and distribution overheads amount to Rs.20,000 in the year. Find the net profit.

Solution

a)

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\frac{4}{1} = \frac{\text{Current Assets}}{50{,}000}$$

$$\text{Current Assets} = 2,00,000$$

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilities}}$$

$$\text{Quick Ratio} = \frac{\text{Current Assets - Stock}}{\text{Current Liabilities}}$$

$$\frac{2}{1} = \frac{2,00,000 \text{ - Stock}}{50,000}$$

$$\text{Stock} = 1,00,000$$

b)

$$\text{Stock Turnover} = 5 \text{ Times}$$

$$\text{Stock Turnover} = \frac{\text{COGS}}{\text{Avg. Stock}}$$

$$5 = \frac{\text{COGS}}{50,000}$$

$$\text{COGS} = 2,50,000$$

$$\text{Gross Profit} = 20\% \text{ on Sales}$$

$$\text{i.e. } 25\% \text{ on COGS}$$

$$\text{G.P} = 62,500$$

Net Profit

Gross Profit	62, 500
Less : Selling Exps -	20, 000
Net Profit	42, 500

Illustration 10

Following are the ratio relating to the activities of Indo ltd.

Debtors' velocity 3 months; Stock velocity 8 months; Creditors velocity 2 months; gross profit 25%. G.P. for the year amounting to Rs.4,00,000; Closing stock is Rs.10,000 above opening stock. Bills receivable Rs.25,000; Bills Payable Rs.10,000.

Find out : a) Sales b) Debtors c) Closing stock d) Creditors.

Solution:

a)

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

$$\frac{25}{100} = \frac{4,00,000}{\text{Net Sales}}$$

$$\text{Net Sales} = 16,00,000$$

$$\text{COGS} = \text{Sales - G.P.}$$

$$= 16,00,000 - 4,00,000$$

$$= 12,00,000$$

b)

$$\text{Debtors Velocity} = \frac{\text{Debtors + Bills Receivable}}{\text{Net Credit Sales}} \times 12$$

$$= \frac{\text{Debtors} + 25,000}{16,00,000} \times 12$$

$$\text{Debtors} \quad = 3,75,000$$

$$\text{Stock Velocity} = \frac{\text{Avg. Stock}}{\text{COGS}} \times 12$$

$$8 = \frac{\text{Avg. Stock}}{12,00,000} \times 12$$

$$\text{Avg. Stock} = 8,00,000$$

$$\text{Avg. Stock} = \frac{\text{Op. Stock + Cl.Stock}}{2}$$

$$8,00,000 = \frac{x + x + 10,000}{2}$$

$$X = 7,95,000$$

$$= \text{Opening Stock}$$

c)

$$\text{Closing Stock} = X + 1,00,000$$

$$= 7,95,000 + 10,000$$

$$= 8,05,000$$

$$\text{Purchases} = \text{COGS - op. stock + cl.stock}$$

$$= 12,00,000 - 7,95,000 + 8,05,000$$

$$= 12,10,000$$

d)

$$\text{Creditors Velocity} = \frac{\text{Creditors} + 1,00,000}{\text{Net Credit Purchases}} \times 12$$

$$2 \quad = \frac{\text{Creditors} + 1,00,000}{12,10,000} \times 12$$

$$\text{Creditor} = 1,91,666$$

Illustration 11

a) Current Ratio is 2.5, Liquid Ratio is 1.5, Working capital is Rs.50,000. Ascertain current Assets and inventory.

b) Turnover is fixed assets ratio is 1:1.5: value of goods sold is Rs5,00,000. Compute the value of Fixed assets.

Solution

a)

1.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{2.5}{1}$$

So Current Assets = 2.5 Current Liabilities

So

Working Capital = Assets - Current Liabilities.

$50,000 = 2.5\,CL - CL$

$50,000 - 1.5\,CL$

$CL = 33,333$

$CA = WC + CL$

$Ca = 50,000 + 33,333$

$CA = 8.,333$

2.

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilities}}$$

$$1.5 = \frac{\text{CA - Stock}}{\text{CL}}$$

$$1.5 = \frac{83,333 - \text{Stock}}{33,333}$$

Stock = 33, 333

b)

$$\text{Turnover to Fixed Assets} = \frac{\text{Turnover}}{\text{Fixed Assets}}$$

$$\frac{1}{1.5} = \frac{5,00,000}{\text{Fixed Assets}}$$

Fixed Assets = 7, 50, 000

Illustration 12

a) Gross profit on sales is 25%; cost of goods sold Rs.4,00,000. Find out sales.

b) Average stock of a firm is Rs.1,00,000 and its opening stock is Rs.10,000 less than closing

Calculate its opening and closing stock.

Solution

a)

Sales - COGS = GP

100 - 75 = 25

4,00,000

$$\text{Gross Profit} = 4,00,000 \times \frac{25}{75}$$

$$= 1,33,333$$

b)

$$\text{Avg.Stock} = 1,00,000$$

$$\frac{\text{Op. Stk} + \text{Cl. Stk}}{2}$$

Hence assume opening Stock as x

So Closing Stock = x + 10,000

$$x + x + 10,000$$

4.9 EXERCISE

THEORY QUESTIONS:

1. What are the limitations of Ratio Analysis?
2. Discuss the benefit of Ratios.
3. How are the ratio classified from the point of view of users?
4. What is the significance of gross profit ratio?
5. Write short notes on
    a. Quick Ratio
    b. Creditors Turnover Ratio
    c. Debtors Turnover Ratio
    d. Distinguish between over trading and under trading.
    e. Trading on Equity
6. Explain in detail importance of Balance Sheet Ratio.
7. Define Current Ratio. Give its purpose.
8. Objective Type Questions

A. Match Group A With Group B

Group A		Group B	
a)	Ratio	1.	Current Ratio
b)	Liquid Ratio	2.	Interest Coverage ratio
c)	Short term solvency	3.	3% of expenses to sales
d)	Coverage Ratio	4.	Liquidity position
e)	Expenses Ratio	5.	Proportion between two figures
f)	ROI	6.	Overall profitability

Answer a – 5 , b –4 , c-1 , d-2 , e –3, f -6

B. Fill in the Blanks with proper words / phase.

1. Working capital is excess of current assets are ________________.
2. Margin of safety is ____________ to net current assets to get working capital..
3. Management of ___________ capital is the task of a finance manager.
4. Debt/Equity shows proportion between __________ and ______.
5. Standard Current ratio is ______________.
6. Net profit ratio is an indicator of _______________.

Answer: 1.Current Liabilities, 2. Added, 3.Working capital, 4. Long term Debt, Equity 5. 1:1 6. Profitability.

C. State whether following statement are True or False.

1. Current ratio and acid test ratio are the same.
2. Higher stock turnover means higher cost of goods sold.
3. Higher Gross profit ratio shows higher trading efficiency of an organization.
4. Debt collection period indicates time taken by debtors to settle the account.
5. Bank overdraft is a liquid liability.
6. EPS show managerial efficiency in use of resources.

Answer: 1.False 2.False 3.True 4.True 5.False 6.True

D. Multiple Choice Questions.

1. Proprietary ratio shows
   a) Long term financial position
   b) Short term financial position
   c) Liquidity position
   d) All of the above

2. A low inventory turnover ratio indicates
   a) Investment tied up in stock
   b) Absolute goods on hand
   c) Adverse liquidity
   d) All of the above

3. Higher Gross profit ratio may be due to
   a) Higher rate of profitability
   b) Strict control over cost of goods sold
   c) Higher trading efficiency
   d) All of the above

4. Inventory turnover is increased by
   a) Higher sales
   b) Higher cost of goods sold
   c) Lower average inventory
   d) B & C

5. P/E Ratio is a proportion between
   a) EPS and MP
   b) NP and MP
   c) EPS and GP
   d) None of the above

6. Net sales Rs.1,40,000; Gross profit Rs.10,000; Net profit Rs.6,000; Bills Receivable Rs.2,000; Debtors Rs.8,800; stock Rs.10,000; Cash Rs.6,000, Creditors Rs.12,000; Bills payable Rs.8,800; current ratio will be
   a) 1.35
   b) 1.29
   c) 1.30
   d) 1.48

Answer 1. a , 2. d , 3. d, 4. d , 5. a, 6. b

❖❖❖❖

5

WORKING CAPITAL

Unit Structure

5.0 OBJECTIVES

After studying the unit the students will be able to:

- Understand the meaning, concept, structure, and classification of Working Capital
- Explain the determinants of W/C
- Discuss about how to measure the amount of W/C
- Explain the advantages of adequate W/C
- Understand the disadvantages of adequate or excess W/C
- Decide the amount of W/C from the given figures

5.1 INTRODUCTION:

The uses of funds of a concern can be divided into two parts namely long-term funds and short-term funds. The long – term investment may be termed as ‘fixed investment.’ A major part of the long-term funds is invested in the fixed assets. These fixed assets are retained in the business to earn profits during the life of the fixed assets. To run the business operations short–term assets are also required.

The term working capital is commonly used for the capital required for day-to-day working in a business concern, such as for purchasing raw material, for meeting day-to-day expenditure on salaries, wages, rents rates, advertising etc. But there are much disagreement among various financial authorities (Financiers, accountants, businessmen and economists) as to the exact meaning of the term working capital.

5.2 MEANING AND DEFINITION OF WORKING CAPITAL

5.2.1 MEANING AND DEFINITION

Working capital refers to the circulating capital required to meet the day to day operations of a business firm. Working capital may be defined by various authors as follows:

According to Weston & Brigham - "Working capital refers to a firm's investment in short
term assets, such as cash amounts receivables, inventories etc.

"Working capital means current assets". —**Mead, Bker and Malott**

"The sum of the current assets is the working capital of the business" —**J.S.Mill**

Working capital is defined as "the excess of current assets over current liabilities and provisions". But as per accounting terminology, it is difference between the inflow and outflow of funds. In the Annual Survey of Industries (1961), working capital is defined to include "Stocks of materials, fuels, semi-finished goods including work-in-progress and finished goods and by-products; cash in hand and bank and the algebraic sum of sundry creditors as represented by

(a) outstanding factory payments e.g. rent, wages, interest and dividend;

(b) purchase of goods and services;

(c) short-term loans and advances and sundry debtors comprising amounts due to the factory on account of sale of goods and services and advances towards tax payments".

The term "working capital" is often referred to "circulating capital" which is frequently used to denote those assets which are changed with relative speed from one form to another i.e., starting from cash, changing to raw materials, converting into work-in-progress and finished products, sale of finished products and ending with realization of cash from debtors.

Working capital has been described as the “life blood of any business which is apt because it constitutes a cyclically flowing stream through the business”.

5.2.2 Concepts of Working Capital

There are two concepts of working capital viz. quantitative and qualitative. Some people also define the two concepts as gross concept and net concept.

According to **quantitative concept**, the amount of working capital refers to ‘total of current assets’. Current assets are considered to be gross working capital in this concept.

The **qualitative concept** gives an idea regarding source of financing capital. According to qualitative concept the amount of working capital refers to “excess of current assets over current liabilities.”

L.J. Guthmann defined working capital as “the portion of a firm’s current assets which are financed from long–term funds.”

The excess of current assets over current liabilities is termed as ‘Net working capital’. In this concept “Net working capital” represents the amount of current assets which would remain if all current liabilities were paid. Both the concepts of working capital have their own points of importance. “If the objectives is to measure the size and extent to which current assets are being used, ‘Gross concept’ is useful; whereas in evaluating the liquidity position of an undertaking ‘Net concept’ becomes pertinent and preferable.

It is necessary to understand the meaning of current assets and current liabilities for learning the meaning of working capital, which is explained below.

Current assets – It is rightly observed that “Current assets have a short life span. These types of assets are engaged in current operation of a business and normally used for short– term operations of the firm during an accounting period i.e. within twelve months. The two important characteristics of such assets are,

(i) Short life span, and

(ii) Swift transformation into other form of assets.

Cash balance may be held idle for a week or two, account receivable may have a life span of 30 to 60 days, and inventories may be held for 30 to 100 days.”

Fitzgerald defined current assets as, “cash and other assets which are expected to be converted in to cash in the ordinary course of business within one year or within such longer period as constitutes the normal operating cycle of a business.”

Current liabilities – The firm creates a Current Liability towards creditors (sellers) from whom it has purchased raw materials on credit. This liability is also known as accounts payable and shown in the balance sheet till the payment has been made to the creditors.

The claims or obligations which are normally expected to mature for payment within an accounting cycle are known as current liabilities. These can be defined as "those liabilities where liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current assets, or the creation of other current liabilities."

Circulating capital – working capital is also known as 'circulating capital or current capital.' "The use of the term circulating capital instead of working capital indicates that its flow is circular in nature."

5.2.3 Structure of Working Capital

The different elements or components of current assets and current liabilities constitute the structure of working capital which can be illustrated in the shape of a chart as follows:

STRUCTURE OF CURRENT ASSETS AND CURRENT LIABILITIES

Current Liabilities	**Current Assets**
Bank Overdraft	Cash and Bank Balance
Creditors	Inventories: Raw-Materials Work-in-progress Finished Goods
Outstanding Expenses	Spare Parts
Bills Payable	Accounts Receivables
Short-term Loans	Bills Receivables
Proposed Dividends	Accrued Income
Provision for Taxation, etc.	Prepaid Expenses Short-term Investments

5.3 CLASSIFICATION OF WORKING CAPITAL

At one given time both the current assets and current liabilities exist in the business. The current assets and current liabilities are flowing round in a business like an electric current. However, "The working capital plays the same role in the business as the role of heart in human body. Working capital funds are generated and these funds are circulated in the business. As and when this circulation stops, the business becomes lifeless. It is because of this reason that he working capital is known as the circulating capital as it circulates in the business just like blood in the human body."

- **Working Capital may be classified in following ways (Kinds of Working Capital)**

a) Concept based working capital
b) Time based working capital
c) Classification on the basis of financial reports.

A. CONCEPT BASED WORKING CAPITAL

1. Gross Working Capital
2. Net Working Capital
3. Negative Working Capital

1. **Gross Working Capital**: It refers to the firm's investment in total current or circulating assets.
2. **Net Working Capital**: The term "Net Working Capital" has been defined in two different ways:

i. It is the excess of current assets over current liabilities. This is, as a matter of fact, the most commonly accepted definition. Some people define it as only the difference between current assets and current liabilities. The former seems to be a better definition as compared to the latter.

ii. It is that portion of a firm's current assets which is financed by long-term funds.

3. **Negative Working Capital:** This situation occurs when the current liabilities exceed the current assets. It is an indication of crisis to the firm.

B. TIME BASED WORKING CAPITAL

1. Permanent or Fixed Working Capital
(a) Regular Working Capital
(b) Reserve Working Capital
2. Temporary or Variable Working Capital
(a) Seasonal Working Capital
(b) Special Working Capital

1. Permanent Working Capital:

This refers to that minimum amount of investment in all current assets which is required at all times to carry out minimum level of business activities. In other words, it represents the current assets required on a continuing basis over the entire year. Tandon Committee has referred to this type of working capital as “Core current assets”.

The following are the characteristics of this type of working capital:

a. Amount of permanent working capital remains in the business in one form or another. This is particularly important from the point of view of financing. The suppliers of such working capital should not expect its return during the life-time of the firm.

b. It also grows with the size of the business. In other words, greater the size of the business, greater is the amount of such working capital and vice versa Permanent working capital is permanently needed for the business and therefore it should be financed out of long-term funds.

2. Temporary Working Capital:

The amount of such working capital keeps on fluctuating from time to time on the basis of business activities. In other words, it represents additional current assets required at different times during the operating year. For example, extra inventory has to be maintained to support sales during peak sales period. Similarly, receivable also increase and must be financed during period of high sales. On the other hand investment in inventories, receivables, etc., will decrease in periods of depression.

Suppliers of temporary working capital can expect its return during off season when it is not required by the firm. Hence, temporary working capital is generally financed from short- term sources of finance such as bank credit.

C. CLASSIFICATION ON THE BASIS OF FINANCIAL REPORTS

The information of working capital can be collected from Balance Sheet or Profit and Loss Account; as such the working capital may be classified as follows:

1. Cash Working Capital –

This is calculated from the information contained in profit and loss account. This concept of working capital has assumed a great significance in recent years as it shows the adequacy of cash flow in business. It is based on ‘Operating Cycle Concept’.

2. Balance Sheet Working Capital –

The data for Balance Sheet Working Capital is collected from the balance sheet. On this basis the Working Capital can also be divided in three more types, viz., gross Working Capital, net Working Capital and Working Capital deficit.

CHECK YOUR PROGRESS

1. Define the following terms:
   a. Working Capital
   b. Cash working capital
   c. Temporary Working Capital
   d. Permanent Working Capital
   e. Negative W/C
   f. Net W/C
2. Give the structure of W/C

5.4 NEED OF W.C AND DETERMINANTS OF WORKING CAPITAL:

5.4.1 Need of W. C.

For smooth running an enterprise, adequate amount of working capital is very essential. Efficiency in this area can help, to utilize fixed assets gainfully, to assure the firm's long- term success and to achieve the overall goal of maximization of the shareholders, fund. Shortage or bad management of cash may result in loss of cash discount and loss of reputation due to non-payment of obligation on due dates. Insufficient inventories may be the main cause of production held up and it may compel the enterprises to purchase raw materials at unfavourable rates.

Like-wise facility of credit sale is also very essential for sales promotions. It is rightly observed that "many a times business failure takes place due to lack of working capital." Adequate working capital provides a cushion for bad days, as a concern can pass its period of depression without much difficulty.

O' Donnel correctly explained the significance of adequate working capital and mentioned that "to avoid interruption in the production schedule and maintain sales, a concern requires funds to finance inventories and receivables."

The adequacy of cash and current assets together with their efficient handling virtually determines the survival or demise of a concern. An enterprise should maintain adequate working capital for its smooth functioning. Both, excessive working capital and inadequate working capital will impair the profitability and general health of a concern.

Therefore working capital is needed till a firm gets cash on sale of finished products. It depends on following two factors:

i. **Manufacturing cycle** i.e. time required for converting the raw material into finished product; and

ii. **Credit policy** i.e. credit period given to Customers and credit period allowed by creditors. Thus, the sum total of these times is called an "Operating cycle" and it consists of the following six steps:

a. Conversion of cash into raw materials.
b. Conversion of raw materials into work-in-process.
c. Conversion of work-in-process into finished products.
d. Time for sale of finished goods—cash sales and credit sales.
e. Time for realization from debtors and Bills receivables into cash.
f. Credit period allowed by creditors for credit purchase of raw materials, inventory and creditors for wages and overheads.

5.4.2 Determinants of Working Capital

The factors influencing the working capital decisions of a firm may be classified as two groups, such as internal factors and external factors. The internal factors includes, nature of business size of business, firm's product policy, credit policy, dividend policy, and access to money and capital markets, growth and expansion of business etc. The external factors include business fluctuations, changes in the technology, infrastructural facilities, import policy and the taxation policy etc. These factors are discussed in brief in the following lines.

A. Internal Factors

1. Nature and size of the business

The working capital requirements of a firm are basically influenced by the nature and size of the business. Size may be measured in terms of the scale of operations. A firm with larger scale of operations will need more working capital than a small firm. Similarly, the nature of the business - influence the working capital decisions. Trading and financial firms have less investment in fixed assets. But require a large sum of money to be invested in working capital. Retail stores, business units require larger amount of working capital, whereas, public utilities need less working capital and more funds to invest in fixed assets.

2. Firm's production policy

The firm's production policy (manufacturing cycle) is an important factor to decide the working capital requirement of a firm. The production cycle starts with the purchase and use of raw material and completes with the production of finished goods. On the other hand production policy is uniform production policy or seasonal production policy etc., also influences the working capital decisions. Larger the manufacturing cycle and uniform production policy – larger will be the requirement of working capital. The working capital requirement will be higher with varying production schedules in accordance with the changing demand.

3. Firm's credit policy

The credit policy of a firm influences credit policy of working capital. A firm following liberal credit policy to all customers requires funds. On the other hand, the firm adopting strict credit policy and grant credit facilities to few potential customers will require less amount of working capital.

4. Availability of credit

The working capital requirements of a firm are also affected by credit terms granted by its suppliers – i.e. creditors. A firm will need less working capital if liberal credit terms are available to it. Similarly, the availability of credit from banks also influences the working capital needs of the firm. A firm, which can get bank credit easily on favourable conditions, will be operated with less working capital than a firm without such a facility.

5. Growth and expansion of business

Working capital requirement of a business firm tend to increase in correspondence with growth in sales volume and fixed assets. A growing firm may need funds to invest in fixed assets in order to sustain its growing production and sales. This will, in turn, increase investment in current assets to support increased scale of operations. Thus, a growing firm needs additional funds continuously.

6. Profit margin and dividend policy

The magnitude of working capital in a firm is dependent upon its profit margin and dividend policy. A high net profit margin contributes towards the working capital pool. To the extent the net profit has been earned in cash, it becomes a source of working capital. This depends upon the dividend policy of the firm. Distribution of high proportion of profits in the form of cash dividends results in a drain on cash resources and thus reduces company's working capital to that extent. The working capital position of the firm is strengthened if the management follows conservative dividend policy and vice versa.

7. Operating efficiency of the firm

Operating efficiency means the optimum utilisation of a firm's resources at minimum cost. If a firm successfully controls operating cost, it will be able to improve net profit margin which, will, in turn, release greater funds for working capital purposes.

8. Co-ordinating activities in firm

The working capital requirements of a firm are depend upon the co-ordination between production and distribution activities. The greater and effective the co-ordinations, the pressure on the working capital will be minimized. In the absence of co-ordination, demand for working capital is reduced.

B. External Factors

1. Business fluctuations

Most firms experience fluctuations in demand for their products and services. These business variations affect the working capital requirements. When there is an upward swing in the economy, sales will increase, correspondingly, the firm's investment in inventories and book debts will also increase. Under boom, additional investment in fixed assets may be made by some firms to increase their productive capacity. This act of the firm will require additional funds. On the other hand when, there is a decline in economy, sales will come down and consequently the conditions, the firm try to reduce their short-term borrowings. Similarly the seasonal fluctuations may also affect the requirement of working capital of a firm.

2. Changes in the technology

The technological changes and developments in the area of production can have immediate effects on the need for working capital. If the firm wish to install a new machine in the place of old system, the new system can utilise less expensive raw materials, the inventory needs may be reduced there by working capital needs.

3. Import policy

Import policy of the Government may also effect the levels of working capital of a firm since they have to arrange funds for importing goods at specified times.

4. Infrastructural facilities

The firms may require additional funds to maintain the levels of inventory and other current assets, when there is a good infrastructural facility in the company like transportation and communications.

5. Taxation policy

The tax policies of the Government will influence the working capital decisions. If the Government follows regressive taxation policy, i.e. imposing heavy tax burdens on business firms, they are left with very little profits for distribution and retention purpose. Consequently the firm has to borrow additional funds to meet their increased working capital needs. When there is a liberalized tax policy, the pressure on working capital requirement is minimized.

Thus the working capital requirements of a firm are influenced by the internal and external factors.

5.5 MEASUREMENT OF WORKING CAPITAL:

There are 3 methods for assessing the working capital requirement as explained below:

a) Percentage of Sales Method

Based on the past experience, some percentage of sale may be taken for determining the quantum of working capital

b) Regression Analysis Method

The relationship between sales and working capital and its various components may be plotted on Scatter diagram and the average percentage of past 5 years may be ascertained. This average percentage of sales may be taken as working capital. Similar exercise may be carried out at the beginning of the year for assessing the working capital requirement. This method is suitable for simple as well as complex situations.

c) Operating Cycle Method

As a first step, we have to compute the operating cycle as follows:

i) **Inventory period**: Number of days consumption in stock = I ÷ M/36
   Where I – Average inventory during the year
   M = Materials consumed during the year
ii) **Work-in-process**: Number of days of work-in-process = W ÷ K/365
   Where W = Average work-in-process during the year
   K = Cost of work-in-process i.e., Material + Labour + Factory overheads.
iii) **Finished products inventory period** = G ÷F/365
   Where G = Average finished products inventory during the year
   F= Cost of finished goods sold during the year
iv) **Average collection period of Debtors** = D ÷S/365
   Where D = Average Debtors balances during the year
   S = Credit sales during the year
v) **Credit period allowed by Suppliers** = C ÷P/365
   Where C = Average creditors' balances during the year
   P = credit purchases during the year
vi) **Minimum cash balance to be kept daily**.
   Formula: O.C. = M + W + F + D – C

Note : It is also known as working capital cycle. Operating cycle is the total time gap between the purchase of raw material and the receipt from Debtors.

The calculation of net working capital may also be shown as follows ;

Working Capital = Current Assets – Current Liabilities

= [(Raw Materials Stock + Work-in-progress Stock + Finished Goods Stock + Debtors + Cash Balance) – (Creditors +Outstanding Wages + Outstanding Overheads)].

Where,

Raw Materials = Cost (Average) of Materials in Stock

Work-in-progress Stock = Cost of Materials + Wages +Overhead of Work-in-progress.

Finished Goods Stock = Cost of Materials + Wages +Overhead of Finished Goods.

Creditors for Material = Cost of Average Outstanding Creditors.

Creditors for Wages = Averages Wages Outstanding.

Creditors for Overhead = Average Overheads Outstanding.

Thus,

Working Capital = Cost of Materials in Stores, in Work-in-progress, in Finished Goods and in Debtors. Less : Creditors for Materials

Plus : Wages in Work-in-progress, in Finished Goods and in Debtors.

Less :Creditors for Wages

Plus : Overheads in Work-in-progress, in Finished Goods and in Debtors.

Less : Creditors for Overheads.

The work sheet for estimation of working capital requirements under the operating cycle method may be presented as follows:

ESTIMATION OF WORKING CAPITAL REQUIREMENTS

I Current Assets:	Amount	Amount	Amount
Minimum Cash Balance		****	
Inventories :			
Raw Materials	****		
Work-in-progress	****		
Finished Goods	****	****	
Receivables :			
Debtors	****		
Bills	****	****	
Gross Working Capital (CA)		****	****

II Current Liabilities :

Creditors for Purchases	****	
Creditors for Wages	****	
Creditors for Overheads	****	****
Total Current Liabilities (CL)	****	****
Excess of CA over CL		****
+ Safety Margin		****
Net Working Capital		****

The following points are also worth noting while estimating the working capital requirement:

1. Depreciation: An important point worth noting while estimating the working capital requirement is the depreciation on fixed assets. The depreciation on the fixed assets, which are used in the production process or other activities, is not considered in working capital estimation. The depreciation is a non-cash expense and there is no funds locked up in depreciation as such and therefore, it is ignored. Depreciation is neither included in valuation of work-in-progress nor in finished goods. The working capital calculated by ignoring depreciation is known as cash basis working capital. In case, depreciation is included in working capital calculations, such estimate is known as total basis working capital.

2. Safety Margin: Sometimes, a firm may also like to have a safety margin of working capital in order to meet any contingency. The safety margin may be expressed as a % of total current assets or total current liabilities or net working capital. The safety margin, if required, is incorporated in the working capital estimates to find out the net working capital required for the firm. There is no hard and fast rule about the quantum of safety margin and depends upon the nature and characteristics of the firm as well as of its current assets and current liabilities

5.6 WORKING CAPITAL CYCLE

Working Capital Cycle is also known as Operating cycle. Operating cycle is the total time gap between the purchase of raw material and the receipt from Debtors. The working capital estimation as per the method of operating cycle, is the most systematic and logical approach. In this case, the working capital estimation is made on the basis of analysis of each and every component of the working capital individually. As already discussed the working capital, required to sustain the level of planned operations, is determined by calculating all the individual components of current assets and current liabilities.

Working capital is needed till a firm gets cash on sale of finished products. It depends on two factors:

i. Manufacturing cycle i.e. time required for converting the raw material into finished product; and

ii. Credit policy i.e. credit period given to Customers and credit period allowed by creditors. Thus, the sum total of these times is called an "Operating cycle" and it consists of the following six steps:

i. Conversion of cash into raw materials.

ii. Conversion of raw materials into work-in-process.

iii. Conversion of work-in-process into finished products.

iv. Time for sale of finished goods—cash sales and credit sales.

v. Time for realization from debtors and Bills receivables into cash.

vi. Credit period allowed by creditors for credit purchase of raw materials, inventory and creditors for wages and overheads.

5.7 IMPORTANCE OR ADVANTAGES OF ADEQUATE WORKING CAPITAL

Working capital is the life blood and nerve centre of a business. Just as circulation of blood is essential in the human body for maintaining life, working capital is very essential to maintain the smooth running of a business. No business can run successfully without an adequate amount of working capital. The main advantages of maintaining adequate amount of working capital are as follows:

1. Solvency of the business: Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.
2. Goodwill: Sufficient working capital enables a business concern to make prompt payments and hence helps in creating and maintaining goodwill.
3. Easy loans: A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and other on easy and favourable terms.
4. Cash discounts: Adequate working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.

5. Regular supply of raw materials: Sufficient working capital ensures regular supply of raw materials and continuous production.
6. Regular payment of salaries, wages and other day-to-day commitments: A company which has ample working capital can make regular payment of salaries, wages and other day-to- day commitments which raises the morale of its employees, increases their efficiency, reduces wastages and costs and enhances production and profits.
7. Exploitation of favourable market conditions: Only concerns with adequate working capital can exploit favourable market conditions such as purchasing its requirements in bulk when the prices are lower and by holding its inventories for higher prices.
8. Ability to face crisis: Adequate working capital enables a concern to face business crisis in emergencies such as depression because during such periods, generally, there is much pressure on working capital.
9. Quick and regular return on investments: Every Investor wants a quick and regular return on his investments. Sufficiency of working capital enables a concern to pay quick and regular dividends to its investors as there may not be much pressure to plough back profits. This gains the confidence of its investors and creates a favorable market to raise additional funds i.e., the future.
10. High morale: Adequacy of working capital creates an environment of security, confidence, and high morale and creates overall efficiency in a business.

5.8 DISADVANTAGES OF REDUNDANT OR EXCESSIVE WORKING CAPITAL

Every business concern should have adequate working capital to run its business operations. It should have neither redundant or excess working capital nor inadequate nor shortage of working capital. Both excess as well as short working capital positions are bad for any business. However, out of the two, it is the inadequacy of working capital which is more dangerous from the point of view of the firm.

1. Excessive Working Capital means ideal funds which earn no profits for the business and hence the business cannot earn a proper rate of return on its investments.
2. When there is a redundant working capital, it may lead to unnecessary purchasing and accumulation of inventories causing more chances of theft, waste and losses.

3. Excessive working capital implies excessive debtors and defective credit policy which may cause higher incidence of bad debts.
4. It may result into overall inefficiency in the organization.
5. When there is excessive working capital, relations with banks and other financial institutions may not be maintained.
6. Due to low rate of return on investments, the value of shares may also fall.
7. The redundant working capital gives rise to speculative transactions.

5.9 DISADVANTAGES OR DANGERS OF INADEQUATE WORKING CAPITAL

1. A concern which has inadequate working capital cannot pay its short-term liabilities in time.

   Thus, it will lose its reputation and shall not be able to get good credit facilities.
2. It cannot buy its requirements in bulk and cannot avail of discounts, etc.
3. It becomes difficult for the firm to exploit favorable market conditions and undertake profitable projects due to lack of working capital.
4. The firm cannot pay day-to-day expenses of its operations and its creates inefficiencies, increases costs and reduces the profits of the business.
5. It becomes impossible to utilize efficiently the fixed assets due to non-availability of liquid funds.
6. The rate of return on investments also falls with the shortage of working capital.

CHECK YOUR PROGRESS

1. Enlist the factors determining the amount of W/C
2. Fill in the blanks:
   a. Working Capital Cycle is also known as ------- cycle.
   b. The points worth noting while estimating the working capital requirement are ---------and -----------.
   c. Operating cycle is the total time gap between the ---------- and the ---------------------.

3. "Just as circulation of blood is essential in the human body for maintaining life, working capital is very essential to maintain the smooth running of a business". Discuss.
4. Draw the chart showing the estimation of W/C.

5.10 SOLVED PROBLEMS

Illustration 1

Hi-tech Ltd. plans to sell 30,000 units next year. The expected cost of goods sold is as follows:

	Rs. (Per Unit)
Raw material	100
Manufacturing expenses	30
Selling, administration and financial expenses	20
Selling price	200

The duration at various stages of the operating cycle is expected to be as follows : Raw material stage 2 months, Work-in-progress stage 1 month, Finished goods stage 1/2 month, Debtors stage 1 month.

Assuming the monthly sales level of 2,500 units, estimate the gross working capital requirement. Desired cash balance is 5% of the gross working capital requirement, and working-progress in 25% complete with respect to manufacturing expenses.

Solution:

Statement of Working Capital Requirement

1. **Current Assets**:	Amt. (Rs.	Amt. (Rs.)
Stock of Raw Material (2,500×2×100)		5,00,000
Work-in-progress:		
Raw Materials (2,500×100)	2,50,000	
Manufacturing Expenses 25% of (2,500×30)	18,750	2,68,750
Finished Goods:		
Raw Materials (2,500×½×100)	1,25,000	
Manufacturing Expenses (2,500×½×30) Debtors (2500x 150)	37,500	1,62,500 3,75,000
		13,06,250
Cash Balance (13,06,250×5/95)		68,750
Working Capital Requirement		13,75,000

Note: Selling, administration and financial expenses have not been included in valuation of closing stock.

Illustration 2

Calculate the amount of working capital requirement for SRCC Ltd. from the following information:

	(Per Unit)
Raw materials	160
Direct labour	60
Overheads	120
Total cost	340
Profit	60
Selling price	400

Raw materials are held in stock on an average for one month. Materials are in process on an average for half-a-month. Finished goods are in stock on an average for one month. Credit allowed by suppliers is one month and credit allowed to debtors is two months. Time lag in payment of wages is 1½ weeks. Time lag in payment of overhead expenses is one month. One fourth of the sales are made on cash basis.

Cash in hand and at the bank is expected to be Rs. 50,000; and expected level of production

Cash in hand and at the bank is expected to be Rs. 50,000; and expected level of production amounts to 1,04,000 units for a year of 52 weeks.

You may assume that production is carried on evenly throughout the year and a time period of four weeks is equivalent to a month.

Solution:

Statement of Working Capital Requirement

1. Current Assets :	Amt. (Rs.)	Amt. (Rs.)
Cash Balance		50,000
Stock of Raw Materials (2,000×160×4)		12,80,000
Work-in-progress :		
Raw Materials (2,000×160×2)	6,40,000	
Labour and Overheads (2,000×180×2)×50%	3,60,000	10,00,000
Finished Goods (2,000×340×4)		27,20,000

Debtors (2,000×75%×340×8)	40,80,000
Total Current Assets	91,30,000

2. Current Liabilities :

Creditors (2,000×Rs. 160×4)	12,80,000
Creditors for Wages (2,000×Rs. 60×1½)	1,80,000
Creditors for Overheads (2,000×Rs. 120×4)	9,60,000
Total Current Liabilities	24,20,000
Net Working Capital (CA–CL)	67,10,000

Illustration 3

JBC Ltd. sells goods on a gross profit of 25%. Depreciation is considered as a part of cost of production. The following are the annual figures given to you:

	Rs.
Sales (2 months credit)	18,00,000
Materials consumed (1 months credit)	4,50,000
Wages paid (1 month lag in payment)	3,60,000
Cash manufacturing expenses (1 month lag in payment)	4,80,000
Administrative expenses (1 month lag in payment)	1,20,000
Sales promotion expenses (paid quarterly in advance)	60,000

The company keeps one month's stock each of raw materials and finished goods. It also keeps Rs.1,00,000 in cash. You are required to estimate the working capital requirements of the company on cash cost basis, assuming 15% safety margin.

Solution

Statement of Working Capital Requirement

1. **Current Assets** :	Amt. (Rs.)
Cash-in-hand	1,00,000
Debtors (cost of sales i.e. 14,70,000×2/12)	2,45,000
Prepaid Sales Promotion expenses	15,000
Inventories :	
Raw Materials (4,50,000/12)	37,500
Finished goods (12,90,000/12)	1,07,500
Total current assets	5,05,000

2. Current Liabilities :

Sundry creditors (4,50,000/12)	37,500
Outstanding Manufacturing exp. (4,80,000/12)	40,000
Outstanding Administrative exp. (1,20,000/12)	10,000
Outstanding Wages (3,60,000/12)	30,000
Total current liabilities	1,17,500
Excess of CA and CL	3,87,500
+ 15% for contingencies	58,125
Working capital required	**4,45,625**

Working Notes :

1. **Cost Structure**

Sales		18,00,000
– Gross profit 25% on sales		4,50,000
Cost of production		13,50,000
– Cost of materials	Rs. 4,50,000	
– Wages	3,60,000	8,10,000
Manufacturing expenses (Total)		5,40,000
– Cash Manufacturing expenses		4,80,000
Therefore, Depreciation		60,000

2. **Total cash cost :**

Cost of production	13,50,000
– Depreciation	60,000
+ Administrative expenses	1,20,000
+ Sales promotion expenses	60,000
Total Cash Cost	**14,70,000**

Illustration 4

The cost sheet of POR Ltd. provides the following data:

	Rs. Per unit
Cost per unit Raw materials	50
Direct Labor	20
Overheads (including depreciation of Rs. 10)	40
Total cost	110
Profits	20
Selling price	130

Average raw material in stock is for one month. An average material in work-in-progress is for half month. Credit allowed by suppliers; one month; credit allowed to debtors; one month. Average time lag in payment of wages; 10 days; average time lag in payment of overheads 30 days.

25% of the sales are on cash basis. Cash balance expected to be Rs. 1,00,000. Finished goods lie in the warehouse for one month. You are required to prepare a statement of the working capital needed to finance a level of the activity of 54,000 units of output. Production is carried on evenly throughout the year and wages and overheads accrue similarly. State your assumptions, if any, clearly.

Solution:

As the annual level of activity is given at 54,000 units, it means that the monthly turnover would be 54,000/12=4,500 units. The working capital requirement for this monthly turnover can now be estimated as follows:

Estimation of Working Capital Requirements

I Current Assets :	Amount (Rs.)	Amount (Rs.)
Minimum Cash Balance	1,00,000	
Inventories :		
Raw Materials (4,500×Rs. 50)	2,25,000	
Work-in-progress :		
Materials (4,500×Rs. 50)/2	1,12,500	
Wages 50% of (4,500×Rs. 20)/2	22,500	
Overheads 50% of (4,500×Rs. 30)/2	33,750	
Finished Goods (4,500×Rs. 100)	4,50,000	
Debtors (4,500×Rs. 100×75%)	3,37,500	
Gross Working Capital		12,81,250
II Current Liabilities :		
Creditors for Materials (4,500×Rs. 50)	2,25,000	
Creditors for Wages (4,500×Rs. 20)/3	30,000	
Creditors for Overheads (4,500×Rs. 30)	1,35,000	
Total Current Liabilities	3,90,000	3,90,000
Net Working Capital		8,91,250

Working Notes:

1. The Overheads of Rs. 40 per unit include a depreciation of Rs. 10 per unit, which is a non- cash item. This depreciation cost has been ignored for valuation of work-in-progress, finished goods and debtors. The overhead cost, therefore, has been taken only at Rs. 30 per unit.

2. In the valuation of work-in-progress, the raw materials have been taken at full requirements for 15 days; but the wages and overheads have been taken only at 50% on the assumption that on an average all units in work-in-progress are 50% complete.

3. Since, the wages are paid with a time lag of 10 days; the working capital provided by wages has been taken by dividing the monthly wages by 3 (assuming a month to consist of 30 days).

Illustration 5

The management of Royal Industries has called for a statement showing the working capital to finance a level of activity of 1,80,000 units of output for the year. The cost structure for the company's product for the above mentioned activity level is detailed below:

	Rs. Per unit
Cost per unit Raw material	20
Direct labour	5
Overheads (including depreciation of Rs. 5 per unit)	15
	40
Profit	10
Selling price	50

Additional information:

(a) Minimum desired cash balance is Rs. 20,000

(b) Raw materials are held in stock, on an average, for two months.

(c) Work-in-progress (assume 50% completion stage) will approximate to half-a-month's Production.

(d) Finished goods remain in warehouse, on an average, for a month.

(e) Suppliers of materials extend a month's credit and debtors are provided two month's credit; cash sales are 25% of total sale.

(f) There is a time-lag in payment of wages of a month; and half-a-month in the case of overheads. From the above facts, you are required to prepare a statement showing working capital requirements.

Solution:

Statement of Total Cost	**Rs.**
Raw material (1,80,000×Rs. 20)	36,00,000
Direct labour (1,80,000×Rs. 5)	9,00,000
Overheads (excluding depreciation) (1,80,000×Rs. 10)	18,00,000
Total Cost	63,00,000

Statement of Working Capital Requirement

1. Current Assets:

Amt. (Rs.) Cash balance	20,000
Raw materials (1/6 of Rs. 36,00,000)	6,00,000
Work-in-progress (Total cost/24×50%)	1,31,250
Finished goods (Total cost/12)	5,25,000
Debtors (75%×Rs. 63,00,000)×1/6	7,87,500
Total current assets	20,63,750

2. Current liabilities:

Creditors (Rs. 36,00,000)×1/12	3,00,000
Direct labour (Rs. 9,00,000)×1/12	75,000
Overheads (Rs. 18, 00,000)×1/24 (excluding dep.)	75,000
Total current liabilities	4,50,000
Net working capital requirement	16,13,750

Note: Depreciation is a non-cash item; therefore, it has been excluded from total cost as well as working capital provided by overheads. Work-in-progress has been assumed to be 50% complete in respect of materials as well as labour and overheads expenses.

Illustration 6

Amar Ltd. produced and sold 60,000 cellular phone s in the year 2013-14 and their cost structure as under:

Particulars	Rs. (per unit)
Raw Material	120
Labour	90
Manufacturing Overheads	80
Administration and selling Overheads	30
Profit	20% of selling price

In the year 2014-15 they plan to produce and sale 72,000 cellular phones and they estimated that :

1. Raw Material cost per unit remain unchanged
2. Selling price remain unchanged
3. It is further informed that :

a) Raw material will be in stock on an average equal to one month's consumption.

b) Processing time required is ¼ month.

c) Finished goods in stock ½ month's requirement.

d) Credit allowed by suppliers one month

e) Credit allowed to customers ½ month.

f) Time lag in payment of wages and both the overheads are one month.

g) Cash balance required for smooth operation is expected to be Rs.75,000.

h) Production and sales are carried on evenly throughout the year.

i) Provide margin of safety of 10%.

j) Debtors are to be calculated at selling price

k) 40% of purchases and 60% of sales are against cash.

You are required to prepare a statement showing working capital requirement for the year 2014-15.

Solution

Statement showing working capital requirement for the year 2014-15

Particulars	**Working**	**Rs.**	**Rs.**
A – Current Assets			
Stock			
Raw Material	6000x100x1		6,00,000
WIP			
Raw material	6,00,000 x ¼	1,50,000	
Labour	5,40,000 x ¼ x ½	67,500	
Overheads	5,28,000 x ¼ x ½	66,000	2,83,500
Finish Goods	6,000 x 278 x ½		8,34,000
Debtors	6,000 x 400 x 1/2 x 40%		4,80,000

Cash Balance			75,000
Total Current Assets			22,72,500
Less: Current Liabilities			
Creditors	6000 x 100x 1x 60%	3,60,000	
Outstanding Wages	6,000 x 90 x1	5,40,000	
Outstanding Mfg. Overheads	6,000 x 88 x 1	5,28,000	
Outstanding Administratio OHs	6,000 x 33x 1	1,98,000	16,26,000
Net working Capital			6,46,500
Add: Margin of Safety			64,650
Estimated working Capital			7,11,150

Working Note
Level of activity per year 72,000 units
Level of Activity per month 6,000 units

Particulars	OLD	NEW	Per Month
Raw Material	120	100	6,00,000
Labour	90	90	5,40,000
Manufacturing Overheads	80	88	5,28,000
Administrative and Selling Ohs	30	33	1,98,000
Total Cost	320	311	18,66,000
Profit	80	89	5,34,000
Selling Expenses	400	400	24,00,000

Illustration 7
Raj Company gives the following details. Estimated level of activity 26,000 units of production for the year 2013-14.

Particulars	Rs.
Raw Material	20
Wages	8
Overheads	16
Selling Expenses	50

Further Information:

1. Raw Material in stock average 4 weeks consumption.
2. Work in progress 2 weeks.
3. Finished goods in stock 2 weeks.
4. Credit allowed by suppliers 2 weeks.
5. Credit allowed to debtors 3 weeks.
6. Lag in payments of wages and overheads 1 week.
7. Cash at bank for smooth operation is expected to be Rs.24,000.
8. Production is carried on evenly throughout the year.
9. Provide a margin of safety at 10%.
10. Debtors are to calculated at selling price.
11. 25% purchases and 20% sales are against cash.

You are required to prepare statement showing working capital requirement for the year 2013-14.

Solution

Statement showing working capital requirement

For the year 2013-14

Particulars	Working	Rs.	Rs.
A – Current Assets			
Stock			
Raw Material	10,000 x 4		40,000
WIP			
Raw material	10,000 x 2	20,000	
Labour	4,000 x 2 x ½	4,000	
Overheads	8,000 x 2 x ½	8,000	32,000
Finish Goods	22,000 x2		44,000
Debtors	25,000 x 3x 80%		60,000
Cash Balance			24,000
Total Current Assets			2,00,000
Less: Current Liabilities			
Creditors	10,000 x 2 x 75%	15,000	
Outstanding Wages	4,000 x 1	4,000	
Outstanding Overheads	8,000 x 1	8,000	
Total current liabilities			27,000
Net working Capital			1,73,000
Add: Margin of Safety			17,300
Estimated working Capital			1,90,300

$$\frac{26,000}{52} = 500 \text{ units produced per week}$$

Particulars		Rs.
Raw Material	500 x20	10,000
Wages	500 x 8	4,000
Overheads	500 x 16	8,000
Total	500 x 44	22,000
Profit	500 x 6	3,000
Sales	500 x 50	25,000

Illustration 8

Esha Ltd. Is a famous manufacturer and exporter of garments to the European countries. You are required to prepare working capital requirement for next year 2014 -15, after considering the following information:

1. Production during the year was 1,50,000 units. The same level of activity is intended to be maintained during the next year 2014-15.
2. The expected ratios of cost to selling price are :

   Raw Material 40%

   Direct Wages 20%

   Overheads 20%
3. The material ordinarily remain in store for 3 months before production.
4. Every unit of production remain in the process for 2 months.
5. Finished goods remain in warehouse for 3 months.
6. Credit allowed by the creditors is 4 months from that date of delivery of raw material.
7. The estimated balance of cash to be held Rs.1,50,000.
8. Credit given to debtors is 3 months from the date of dispatch.
9. Time lag in payment of wages and overheads is ½ month.
10. Selling price would be Rs.10 per unit for the year 2014-15.
11. There is regular purchases, production and sale cycle.
12. You are required to make provision of 10% for contingency.
13. During the processing labour and overheads accrue evenly.

Solution:
Statement showing working capital requirement
For the year 20143-15

Particulars	Working	Rs.	Rs.
Current Assets			
Stock of Raw Material	50,000 x 3		1,50,000
Stock Of WIP			
Raw Material	50,000 x 2	1,00,000	
Wages	25,000 x 2 x ½	25,000	
Overheads	25,000 x 2 x ½	25,000	1,50,000
Stock of Finished Goods	1,00,000 x 3		3,00,000
Debtors	1,25,000 x 3		3,75,000
Cash			1,50,000
Total Current assets			11,25,000
Less: Current Liabilities			
Creditors	50,000 x 4	2,00,000	
Outstanding Wages	25,000 x ½	12,500	
Outstanding Overheads	25,000 x ½	12,500	
Total Current Liabilities			2,25,000
Working Capital			9,00,000
Add : Safety Margin			90,000
Net working Capital			9,90,000

Illustration 9

The following are the particulars of Vinod Ltd. for the Year 2012-13. Calculate the working capital estimate for an annual sales of 78,000 units.

1. Cost sheet

Particulars	Rs. (Per Unit)
Raw Material	40
Wages	20
Overheads	30
Profit	30

2. Production and sales take place evenly throughout the year.
3. Raw Material is on eight weeks credit.
4. Raw material remains in stock for eight weeks.

5. Processing period is of two weeks, wherein Raw material, wages and overheads accrue evenly.
6. Finished goods remain in stock for ten weeks.
7. Customers are given in stock for ten weeks.
8. Time lag in payment of wages is four weeks
9. Time lag in payment of wages is four weeks.
10. Cash and Bank balance is maintained at Rs.1,05,000.
11. Calculate debtors on sales.

Solution:

Sale 78,000 units
Weekly Sales: 78,000 / 52 = 1,500 units.

Statement showing working capital requirement
For the year 31.32013

Particulars	Working	Rs.	Rs.
Current Assets			
Stock of Raw Material	1,500 x 40 x8		4,80,000
Stock Of WIP			
Raw Material	1,500 x 40 x2	1,20,000	
Wages	1,500 x 20 x2 x 1/2	30,000	
Overheads	1,500 x 30 x2 x ½	45,000	1,95,000
Stock of Finished Goods	1,500 x 90 x 10		13,50,000
Debtors			16,20,000
Cash			1,05,000
Total Current assets			37,50,000
Less: Current Liabilities			
Creditors	1,500 x 40 x 8	4,80,000	
Outstanding Wages	1,500 x 20 x 4	1,20,000	
Outstanding Overheads	1,500 x 30 x 2	90,000	
Total Current Liabilities			6,90,000
Working Capital			30,60,000

Illustration 10

From the following information given by M/s Quick Ltd. Prepare an estimate of working capital for the year ended 31.3.2014.

1. Estimated level of activity - 1, 04,000 units for the year 52 weeks.
2. Cost of Raw Material per unit - Rs.5.
3. Cost of labour per unit – 50% of the labour cost.
4. Profit per unit is 200% of overheads.
5. Cost of overheads per unit – 50% of the labour cost.
6. Stock of Raw material – 4 weeks.
7. Processing period – 4weeks
8. Stock of finished goods – 4 weeks.
9. Credit to the debtors – 6 weeks.
10. Credit to the debtors – 4 weeks.
11. Time lag in payment of wages – 4 weeks.
12. Time lag in payment of overheads – 2 weeks.
13. Cash and bank balance required – Rs. 40,000
14. Debtors are calculated on sales basis.
15. Purchases against cash -20%.
16. All the activities are spread evenly throughout the year.
17. During processing, Labour and overheads accrue evenly.

Solution:

Statement showing working capital requirement
For the year 2014

Particulars	**Working**	**Rs.**	**Rs.**
Current Assets			
Stock of Raw Material	10,000 x 4		40,000
Stock Of WIP			
Raw Material	10,000 x 4	40,000	
Wages	2,000 x 4 x 50%	8,000	
Overheads	2,000 x 4 x 50%	4,000	52,000
Stock of Finished Goods	16,000 x 4		64,000
Debtors	20,000 x 6		1,20,000
Cash			40,000
Total Current assets			3,16,000
Less: Current Liabilities			
Creditors	10,000 x 4 x 80%	32,000	
Outstanding Wages	4,000 x 4	16,000	
Outstanding Overheads	2,000 x 2	4,000	
Total Current Liabilities			52,000
Working Capital			2,64,000

5.11 EXERCISE

1. Explain in brief consequences of inadequate working capital.
2. Explain in brief working capital cycle.
3. State different types of working capital with its components.
4. Explain in brief the difference between Gross Working capital and net working capital.
5. Explain in brief seasonal working capital.
6. Explain in brief factors determining working capital.
7. Define working capital. Why it is necessary to have adequate working capital?
8. Objective type questions:

A. Match Group A With Group B

Group A		Group B	
a)	Gross working capital	1.	Stock of Material + 50% of wages & overheads
b)	Net working capital	2.	Excess of current liabilities over current assets
c)	WIP	3.	Minimum working capital
d)	Negative working capital	4.	Lag of payment of expenses
e)	Permanent working capital	5.	Current assets less current liability
f)	Outstanding expenses	6.	Total working capital

Answer a –6 , b –5 , c- 1, d- 2, e –3, f -4

B. Fill in the Blanks with proper words / phase.
1. Minimum amount of working capital is _______________ .
2. Stock of finished is valued at __________________.
3. An organization which grant longer period of credit required _______________ working capital.
4. Value of creditors depends on _____________ of credit allowed by_____________ .
5. ________ operating cycle required more working capital.
6. Working capital can be decided on the basis of _____________.

Answer: 1.Permanent, 2. Cost of production, 3. More, 4. Period, creditors, 5. Longer, 6. Balance sheet.

C. State whether following statement are True or False.
1. Working capital is excess of current assets over current liabilities.
2. Debtors may be valued at cost or sale price.
3. Lag in payment of overheads increases working capital requirement.

4. Temporary working capital is known as core working capital.
5. Permanent working capital remains constant.
6. Higher net working capital leads to higher liquidity.

Answer: 1.True 2.True 3.False 4.False 5.True 6.True

D. Multiple Choice Questions.

1. Negative working capital is equal to
   a) Current assets less current liabilities
   b) Current assets less fixed assets
   c) Current liabilities less current assets
   d) None of the above

2. Seasonal working capital is
   a) Permanently required
   b) Fluctuating in nature
   c) Required to meet seasonal needs of the organization
   d) None of the above

3. Shortage of working capital may result in
   a) Poor credit worthiness
   b) Higher trade discount
   c) Higher cash discount
   d) None of the above

4. Margin of safety is provided to
   a) Cover possible variations in estimation
   b) Have safety in management of working capital
   c) Ensure safety in estimation of working capital
   d) Both B & C

5. Working capital finance is raised from
   a) Bank overdraft
   b) Cash credit
   c) Bill Finance
   d) All of the above

6. Balance sheet working capital is calculate on the basis of
   a) Book value of current Assets and current liabilities as per balance sheet
   b) Market value of current assets and current liabilities
   c) Fair value of current assets and current liabilities
   d) None of the above

Answer 1. c , 2. c , 3. a , 4. d , 5. d, 6. a

❖❖❖❖

6

CASH FLOW STATEMENT

Unit Structure

6.0 OBJECTIVES

After studying the unit the students will be able to:

- Understand the nature of Cash flow statement.
- Know the classification of activities related to Cash flow
- Treat the extra ordinary items while preparing the Cash flow statement.
- Solve the practical problems.

6.1 INTRODUCTION

Cash flow statement is a very important financial statement, which shows inflows and outflows of the cash and cash equivalents. This statement is usually prepared by companies which come as a tool in the hands of users of financial information to know about the sources and uses of cash and cash equivalents of an enterprise over a period of time from various activities of an enterprise. It has gained substantial importance in the last decade because of its practical utility to the users of financial information.

Accounting Standard-3 (AS-3), issued by The Institute of Chartered Accountants of India (ICAI) in June 1981, which dealt with a statement showing 'Changes in Financial Position', (Fund Flow Statement), has been revised and now deals with the preparation and presentation of Cash flow statement. The revised AS-3 has made it mandatory for all listed companies to prepare and present a cash flow statement along with other financial statements on annual basis.

A cash flow statement provides information about the historical changes in cash and cash equivalents of an enterprise by classifying cash flows into operating, investing and financing activities. It requires that an enterprise should prepare a cash flow statement and should present it for each accounting period for which financial statements are presented.

6.2 NATURE OF CASH FLOW STATEMENT

6.2.1 Nature

A Cash flow statement shows inflow and outflow of cash and cash equivalents from various activities of a company during a specific period. The primary objective of cash flow statement is to provide useful information about cash flows (inflows and outflows) of an enterprise during a particular period under various heads, i.e. operating activities, investing activities and financing activities.

This information is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generation.

6.2.2 Benefits of Cash Flow Statement

Cash flow statement provides the following benefits:

- A cash flow statement when used along with other financial statements provides information that enables users to evaluate changes in net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timings of cash flows in order to adapt to changing circumstances and opportunities.
- Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises.

- It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events.
- It also helps in fine tuning its cash inflow and cash outflow, keeping in response to changing condition. It is also helpful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and impact of changing prices.

6.3 CASH AND CASH EQUIVALENTS

As stated earlier, cash flow statement shows inflows and outflows of cash and cash equivalents from various activities of an enterprise during a particular period. As per AS-3, 'Cash' comprises cash in hand and demand deposits with banks, and 'Cash equivalents' means short-term highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value. An investment normally qualifies as cash equivalents only when it has a short maturity, of say, three months or less from the date of acquisition. Investments in shares are excluded from cash equivalents unless they are in substantial cash equivalents. For example, preference shares of a company acquired shortly before their specific redemption date, provided there is only insignificant risk of failure of the company to repay the amount at maturity. Similarly, short-term marketable securities which can be readily converted into cash are treated as cash equivalents and is liquid able immediately without considerable change in value.

Cash Flows

'Cash Flows' implies movement of cash in and out of non-cash items. Receipt of cash from a non-cash item is termed as cash inflow while cash payment in respect of such items as cash outflow. For example, purchase of machinery by paying cash is cash outflow while sale proceeds received from sale of machinery is cash inflow. Other examples of cash flows include collection of cash from trade receivables, payment to trade payables, payment to employees, receipt of dividend, interest payments, etc.

Cash management includes the investment of excess cash in cash equivalents. Hence, purchase of marketable securities or short-term investment which constitutes cash equivalents is not considered while preparing cash flow statement.

6.4 CLASSIFICATION OF ACTIVITIES

We know that various activities of an enterprise result into cash flows (inflows or receipts and outflows or payments) which is the subject matter of a cash flow statement. As per AS-3, these activities are to be classified into three categories: (1) operating, (2) investing, and (3) financing activities so as to show separately the cash flows generated (or used) by (in) these activities. This helps the users of cash flow statement to assess the impact of these activities on the financial position of an enterprise and so also on its cash and cash equivalents.

1. Cash from Operating Activities

Operating activities are the activities that constitute the primary or main activities of an enterprise. For example, for a company manufacturing garments, procurement of raw material, incurrence of manufacturing expenses, sale of garments, etc. These are the principal revenue generating activities (or the main activities) of the enterprise and other activities that are not investing or financing activities. The amount of cash from operations' indicate the internal solvency level of the company, and is regarded as the key indicator of the extent to which the operations of the enterprise have generated sufficient cash flows to maintain the operating capability of the enterprise, paying dividends, making of new investments and repaying of loans without recourse to external source of financing.

Cash flows from operating activities are primarily derived from the main activities of the enterprise. They generally result from the transactions and other events that enter into the determination of net profit or loss. Examples of cash flows from operating activities are:

Cash Inflows from operating activities

- Cash receipts from sale of goods and the rendering of services.
- Cash receipts from royalties, fees, commissions and other revenues.
- Cash Outflows from operating activities
- Cash payments to suppliers for goods and services.
- Cash payments to and on behalf of the employees.
- Cash payments to an insurance enterprise for premiums and claims, annuities, and other policy benefits.
- Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities.

The net position is shown in case of operating cash flows.

An enterprise may hold securities and loans for dealing or trading purposes in which case they are similar to inventory acquired specifically for resale. Therefore, cash flows arising from the purchase and sale of dealing or trading securities are classified as operating activities. Similarly, cash advances and loans made by financial enterprises are usually classified as operating activities since they relate to main activity of that enterprise.

2. Cash from Investing Activities

As per AS-3, investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. Investing activities relate to purchase and sale of long-term assets or fixed assets such as machinery, furniture, land and building, etc. Transactions related to long-term investment are also investing activities.

Separate disclosure of cash flows from investing activities is important because they represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Examples of cash flows arising from investing activities are:

Cash Outflows from investing activities

- Cash payments to acquire fixed assets including intangibles and capitalised research and development.
- Cash payments to acquire shares, warrants or debt instruments of other enterprises other than the instruments other than those held for trading purposes.
- Cash advances and loans made to third party (other than advances and loans made by a financial enterprise wherein it is operating activities).

Cash Inflows from Investing Activities

- Cash receipt from disposal of fixed assets including intangibles.
- Cash receipt from the repayment of advances or loans made to third parties (except in case of financial enterprise).
- Cash receipt from disposal of shares, warrants or debt instruments of other enterprises except those held for trading purposes.
- Interest received in cash from loans and advances.
- Dividend received from investments in other enterprises.

3. Cash from Financing Activities

As the name suggests, financing activities relate to long-term funds or capital of an enterprise, e.g. cash proceeds from issue of equity shares, debentures, raising long-term bank loans, repayment of bank loan, etc. As per AS-3, financing activities are activities that result in changes in the size and composition of the owners' capital (including preference share capital in case of a company) and borrowings of the enterprise. Separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of funds (both capital and borrowings) to the enterprise. Examples of financing activities are:

Cash Inflows from financing activities

- Cash proceeds from issuing shares (equity or/and preference).
- Cash proceeds from issuing debentures, loans, bonds and other long- term borrowings.

Cash Outflows from financing activities

- Cash repayments of amounts borrowed.
- Interest paid on debentures and long-term loans and advances.
- Dividends paid on equity and preference capital.

It is important to mention here that a transaction may include cash flows that are classified differently. For example, when the instalment paid in respect of a fixed asset acquired on deferred payment basis includes both interest and loan, the interest element is classified under financing activities and the loan element is classified under investing activities. Moreover, same activity may be classified differently for different enterprises. For example, purchase of shares is an operating activity for a share brokerage firm while it is investing activity in case of other enterprises.

6.5 TREATMENT OF SOME PECULIAR ITEMS

1. Extraordinary items

Extraordinary items are not the regular phenomenon, e.g. loss due to theft or earthquake or flood. Extraordinary items are non-recurring in nature and hence cash flows associated with extraordinary items should be classified and disclosed separately as arising from operating, investing or financing activities. This is done to enable users to understand their nature and effect on the present and future cash flows of an enterprise.

2. Interest and Dividend

In case of a financial enterprise (whose main business is lending and borrowing), interest paid, interest received and dividend received are classified as operating activities while dividend paid is the financing activity.

In case of a non-financial enterprise, as per AS-3, it is considered more appropriate that payment of interest and dividends are classified as financing activities whereas receipt of interest and dividends are classified as investing activities.

3. Taxes on Income and Gains

Taxes may be income tax (tax on normal profit), capital gains tax (tax on capital profits), dividend tax (tax on the amount distributed as dividend to shareholders). AS-3 requires that cash flows arising from taxes on income should be separately disclosed and should be classified as cash flows from operating activities unless they can be specifically identified with financing and investing activities. This clearly implies that:

- tax on operating profit should be classified as operating cash flows.
- dividend tax, i.e. tax paid on dividend should be classified as financing activity along with dividend paid.
- Capital gains tax paid on sale of fixed assets should be classified under investing activities.

4. Non-cash Transactions

As per AS-3, investing and financing transactions that do not require the use of cash or cash equivalents should be excluded from a cash flow statement. Examples of such transactions are – acquisition of machinery by issue of equity shares, or redemption of debentures by issue of equity shares. Such transactions should be disclosed elsewhere in the financial statements in a way that provide all the relevant information about these investing and financing activities. Hence, assets acquired by issue of shares are not disclosed in cash flow statement due to non-cash nature of the transaction.

With these three classifications, Cash Flow Statement is shown below:

Cash Flow Statement

(Main heads only)

Particulars	Amt.
(A) Cash flows from operating activities	Xx
(B) Cash flows from investing activities	Xx
(C) Cash flows from financing activities	Xx
Net increase (decrease) in cash and cash equivalents (A + B + C)	Xx
+ Cash and cash equivalents at the beginning	Xx
= Cash and cash equivalents at the end	Xx

Ascertaining Cash Flow from Operating Activities

Operating activities are the main source of revenue and expenditure in an enterprise. Therefore, the ascertainment of cash flows from operating activities need special attention.

As per AS-3, an enterprise should report cash flows from operating activities either by using :

- Direct method whereby major classes of gross cash receipts and gross cash payments are disclosed;

or

- Indirect method whereby net profit or loss is duly adjusted for the effects of (1) transactions of a non-cash nature, (2) any deferrals or accruals of past/future operating cash receipts, and (3) items of income or expenses associated with investing or financing cash flows. It is important to mention here that under indirect method, the starting point is net profit/ loss before taxation and extra ordinary items as per Statement of Profit and Loss of the enterprise. Then this amount is for non-cash items, etc. adjusted for ascertaining cash flows from operating activities.

Accordingly, cash flow from operating activities can be determined using either the Direct method or the Indirect method. These methods are discussed in detail as follows.

6.6 DIRECT METHOD TO DETERMINE CASH FLOW

As the name suggests, under direct method, major heads of cash inflows and outflows (such as cash received from trade receivables, employee benefits expenses paid, etc.) are considered. It is important to note here that items are recorded on accrual basis in statement of profit and loss. Hence, certain adjustments are made to convert them into cash basis such as the following:

1. **Cash receipts from customers** = Revenue from operations + Trade receivables and Bills receivable in the beginning – Trade receivables at the end.
2. **Cash payments to suppliers** = Purchases + Trade Payable in the beginning Creditors and Bills Payable at the end.
3. **Purchases** = Cost of Goods Sold – Opening Inventory + Cl. Inventory.
4. **Cash Expenses** = Expenses on Accrual basis – Prepaid Expenses in the beginning and Outstanding Expenses at the end + Prepaid Expenses at the end and Outstanding Expenses in the beginning.

However, the following items are not to be considered:

1. Non-cash items such as depreciation, discount on shares, etc. be written- off.
2. Items which are classified as investing or financing activities such as interest received, dividend paid, etc.

As per AS-3, under the direct method, information about major classes of gross cash receipts and cash payments may be obtained either–

- from the accounting records of the enterprise, or
- by adjusting sales cost of sales and other items in the statement of profit or loss for the following:
- changes during the period in inventories and operating receivables and payables;
- other non-cash items; and
- other items for which cash effects are investing or financing cash flows.

Proforma of cash flows from operating activities using direct method.

Cash Flows from Operating Activities (Direct Method)

Particulars	Amt.
Cash flows from operating activities:	
Cash receipts from customers	xx
(–) Cash paid to suppliers and employees	xx
= Cash generated from operations	xx
(–) Income tax paid	xx
= Cash flow before extraordinary items	xx
+/– Extraordinary items	xx
= Net cash from operating activities	xx

6.7 INDIRECT METHOD TO DETERMINE CASH FLOW

Indirect method of ascertaining cash flow from operating activities begins with the amount of net profit/loss. This is not so because statement of profit and loss incorporates the effects of all operating activities of an enterprise. However, income statement is prepared on accrual basis (and not on cash basis). Moreover, it also includes certain non-operating items such as interest paid, profit/loss on sale of fixed assets, etc.) and non-cash items (such as depreciation, goodwill to be written-off, etc. Therefore, it becomes necessary to adjust the amount of net profit/loss as shown by Statement of Profit and Loss for arriving at cash flows from operating activities. Let us look at the example :

Statement of Profit and Loss Account
For the year ended March 31, 2013

Particulars	Note	Figures in Rs.
Revenue from operation	1	1,00,000
Other Income		2,000
Total Revenue		1,02,000
Less: Expenses		
Cost of material Consumed		30,000
Purchases of stock in trade		10,000
Employee Benefits expenses		10,000
Finance Cost		5,000
Depreciation		5,000
Other Expenses		12,000
Profit before tax		30,000

Notes
Other income includes profit on sale of land.

The above Profit and Loss Account shows the amount of net profit of Rs.30,000. This has to be adjusted for arriving cash flows from operating activities. Let us take various items one by one.

1. Depreciation is a non-cash item and hence, Rs.5,000 charged as depreciation does not result in any cash flow. Therefore, this amount must be added back to the net profit.

2. Finance costs of Rs.5,000 is a cash outflow on account of financing activity. Therefore, this amount must also be added back to net profit while calculating cash flows from operating activities. This amount of interest will be shown as an outflow under the head of financing activities.

3. Other income includes profit on sale of land: It is cash inflow from investing activity. Hence, this amount must be deducted from the amount of net profit while calculating cash flows from operating activities.

The above example gives you an idea as to how various adjustments are made in the amount of net profit/loss. Other important adjustments relate to changes in working capital which are necessary (i.e. items of current assets and current liabilities) to convert net profit/loss which is based on accrual basis into cash flows from operating activities. Therefore, the increase in current assets and decrease in current liabilities are added to the net profit, and the decrease in current assets and increase in current liabilities are deducted from the net profit so as to arrive at the exact amount of net cash flow from operating activities. As per AS-3, under indirect method, net cash flow from operating activities is determined by adjusting net profit or loss for the effect of :

- Non-cash items such as depreciation, goodwill be written-off, provisions, deferred taxes, etc. which are to be added back.
- All other items for which the cash effects are investing or financing cash flows. The treatment of such items depends upon their nature. All investing and financing incomes are to be deducted from the amount of net profits while all such expenses are to be added back. For example, expenses which is a financing cash outflow is to be added back while finance income such as interest received which is investing cash inflow is to be deducted from the amount of net profit.
- Changes in current assets and liabilities during the period. Increase in current assets and decrease in current liabilities are to be deducted while increase in current liabilities and decrease in current assets are to be added up.

Proforma of calculating cash flows from operating activities as per indirect method.

The direct method provides information which is useful in estimating future cash flows. But such information is not available under the indirect method. However, in practice, indirect method is mostly used by the companies for arriving at the net cash flow from operating activities.

Cash Flows from Operating Activities (Indirect Method)

Particulars	**Amt.**
Net Profit/Loss before Tax and Extraordinary Items	XX
+ Deductions already made in Profit and Loss on account of Non-cash items such as Depreciation, Goodwill to be Written-off.	XX
+ Deductions already made in Profit and Loss on Account of Non-operating items such as Interest.	XX
- Additions (incomes) made in Profit and Loss on Account of Non-operating Items such as Dividend Received, Profit on sale of Fixed Assets.	XX
Operating Profit before Working Capital changes	XX

+ Increase in Current Liabilities	XX
+ Decrease in Current Assets	XX
- Increase in Current Assets	XX
- Decrease in Current Liabilities	XX
Cash Flows from Operating Activities before Tax and Extraordinary Items.	XX
– Income Tax Paid	XX
+/– Effects of Extraordinary Items	XX
Net Cash from Operating Activities	XX

As stated earlier, it may be noted that while working out the cash flow from operating activities, the starting point is the 'Net profit before tax and extraordinary items' and not the 'Net profit as per statement of profit and loss and that the income tax paid is deducted there from as the last item to arrive at the net cash flow from operating activities.

Illustration 1

From the following information, calculate cash flow from operating activities using indirect method.

Profit and Loss Account
For the year ended on March 31, 2011

Particulars	Note	Figures for current reporting period
Revenue from Operation		2,20,000
Other Income		-
Total Revenue		2,20,000
Expenses		
Cost of material Consumed		1,20,000
Employee Benefits Expenses		30,000
Depreciations		20,000
Other Expenses		
Insurance Premium		8,000
Income Tax		10,000
Total Expenses		1,88,000
Profit Before Expenses		32,000

Additional information:

Particulars	1.4.2010	31.3.2011
Trade Receivable	33,000	36,000
Trade Payable	17,000	15,000
Inventory	22,000	27,000
Employee Benefits Expenses	2,000	3,000
Prepaid Insurance	5,000	5,500
Income Tax outstanding	3,000	2,000

Solution:

Particular	Amt.
Cash Flows from Operating Activities	
Net Profit before Taxation and Extraordinary Items (Note 1)	42,000
Adjustments for–	
+ Depreciation	20,000
= Operating Profit before working capital changes	62,000
- Increase in Trade Receivables	(3,000)
- Increase in Inventories	(5,000)
- Increase in Prepaid Insurance	(500)
- Decrease in Trade Payables	(2,000)
+ Increase in Employees Benefits Expenses Payable	1,000
Cash generated from Operations	52,500
- Income tax paid	(11,000)
Net cash from Operating Activities	41,500

You will notice that the amount of cash flows from operating activities is the same whether we use direct method or indirect method for its calculation.

Notes 1:

The net profit before taxation and extraordinary items has been worked out as under:

(1) Net Profit	= Rs. 32,000
+ Income Tax provided for Profit and Loss	= Rs.10,000
= Net Profit before Tax and Extraordinary	= Rs.42,000

Ascertainment of Cash Flow from Investing and Financing Activities

The details of item leading inflows and outflows from investing and financing activities have already been outlined. While preparing the cash flow statement, all major items of gross cash receipts, gross cash payments, and net cash flows from investing and financing activities must be shown separately under the headings 'Cash Flow from Investing Activities' and 'Cash Flow from Financing Activities' respectively.'

Illustration 2

Welprint Ltd. has given you the following information:

Particulars	Amt.
Machinery as on April 01, 2012	50,000
Machinery as on March 31, 2013	60,000
Accumulated Depreciation on April 01, 2012	25,000
Accumulated Depreciation on March 31, 2013	15,000

During the year, a Machine costing Rs. 25,000 with Accumulated Depreciation of Rs.15,000 was sold for Rs. 13,000.

Calculate cash flow from Investing Activities on the basis of the above information.

Solution:

Particulars	Amt.
Cash Flows from Investing Activities	
Sale of Machinery	13,000
Purchase of Machinery	(35,000)
Net cash used in Investing Activities	(22,000)

W.N.

Dr. Machinery A/c Cr.

Particulars	**Amt.**	**Particulars**	**Amt.**
To Opening Balance	50,000	By Bank	13,000
To P& L A/c (Profit)	5,000	By Accumulated Depreciation	15,000
To Bank (Bal. Figure)	35,000	By Closing Balance	60,000
Total	**88,000**	**Total**	**88,000**

Dr. Accumulated Depreciation A/c Cr.

Particulars	**Amt.**	**Particulars**	**Amt.**
To Machinery	15,000	By Bal B/d	25,000
To Bal c/d	15,000	By P& L a/c (Depreciation)	5,000
Total	**30,000**	**Total**	**30,000**

Illustration 3

From the following information, calculate cash flows from financing activities:

	(Rs.)	(Rs.)
Long-term Loans	2,00,000	2,50,000

During the year, the company repaid a loan of Rs. 1,00,000.

Solution

Particulars	Amt.
Cash flows from Financing Activities	
Proceeds from long-term borrowings	1,50,000
Repayment of long-term borrowings	(1,00,000)
Net cash inflow from Financing Activities	50,000

Dr. Long Term Loan A/c Cr.

Particulars	**Amt.**	**Particulars**	**Amt.**
To Bank (paid)	1,00,000	By Bal. B/d	2,00,000
To Bal. c/d	2,50,000	By Bank (Loan taken)	1,50,000
Total	**3,50,000**	**Total**	**3,50,000**

Preparation of Cash Flow Statement

As stated earlier cash flow statement provides information about change in the position of Cash and Cash Equivalents of an enterprise, over an accounting period. The activities contributing to this change are classified into operating, investing and financing. The mythology of working out the net cash flow (or use) from all the three activities for an accounting period has been explained in details and a brief format of Cash Flow Statement has also been given. However, while preparing a cash flow statement, full details of inflows and outflows are given under the head including the net cash flow (or use) arise there from. The aggregate of the net 'cash flows (or use) is worked out and is shown as, Net Increase Decrease in cash and Cash Equivalents' to which the amount of 'cash and cash equivalent at the beginning' is added and thus the amount of 'cash and cash equivalents at the end' is arrived . This figure will be the same as the total amount of cash in hand, cash at bank (or overdraft) and cash equivalents (if any) given in the balance sheet. Another point that needs to be noted is that when cash flows from operating activities are worked out by an indirect method and shown as such in the cash flow statement, the statement itself is termed as 'Indirect method cash flow statement'.

6.8 SOLVED PROBLEMS

Illustration 1

Amit Ltd. furnishes you the following summarised financial position as on 31.3.2014

Liabilities	2014 Rs.	2015 Rs.	Assets	2014 Rs.	2015 Rs.
Equity share Capital	3,00,000	2,80,000	Land & Building	5,40,000	3,20,000
10% Pref. Share Capital	2,00,000	1,70,000	Plant & Mach.	2,55,000	1,80,000
General Reserve	1,20,000	95,000	Furniture	1,08,000	36,000
P & L A/c	1,48,000	1,39,000	Motor Vehicles	85,000	1,00,000
12% Debenture	3,50,000	3,00,000	Stock	2,20,000	2,83,000
Creditors	1,43,000	1,20,000	Accounts Receivable	2,45,000	3,44,000
Expenses Payable	84,000	77,000	Cash & Bank	64,000	58,000
Provision for Tax	92,000	67,000			
Proposed Dividend	80,000	73,000			
	15,17,000	**13,21,000**		**15,17,000**	**13,21,000**

Additional Information:

1. Issue of shares, debentures and additions to assets were made on 1st April, 2013.
2. Depreciation @10% p.a. was charged on land building and furniture.
3. Plant & Machinery and motor vehicles, both were depreciated by 15%p.a.
4. Income tax paid and proposed dividend during the year were Rs.69,000 and Rs.80,000 respectively.

Prepare Cash Flow Statement as per AS-3 for the year ended 31.3.2014 using indirect method.

Solution

Cash Flow Statement of Amit Ltd. for the year ended 31.3.2014

Particulars	**Rs.**	**Rs.**
I - Cash Flow from Operating Activities		
Net Profit (Rs.1,48,000 – Rs.1,39,000)	9,000	
Adjust – Non cash / Non operation Items:		
Transfer to general reserve	25,000	
Interest on Debentures paid	42,000	
Provision for Tax	94,000	
Proposed Dividend	80,000	
Depreciation (60,000+45,000+12,000+15,000)	1,32,000	
Operating profit before Working Capital Changes	3,82,000	
Adjust : Working Capital changes		
Increase in expenses payable	7,000	
Increase in creditors	23,000	
Decrease in stock	63,000	
Decrease in Accounts Receivable	99,000	
	5,74,000	
Less: Income tax paid	(69,000)	
Net Cash used in Operating Activities		5,05,000
II – Cash Flow from Investing Activities		
Purchases of land & Building	(2,80,000)	
Purchases of Plant & Machinery	(1,20,000)	
Purchases of Furniture	(84,000)	
Net Cash used in Operating Activities		(4,84,000)
III – Cash Flow from Financing Activities		
Issue of Equity shares	20,000	
Issue of 10% Pref. Sh.	30,000	
Issue of 12% Debentures	50,000	
Interest on Debentures paid	(42,000)	
Dividend Paid	(73,000)	
Net Cash used in Financing Activities		(15,000)
IV – Net Decrease in cash and cash Equivalents		6,000
V – Opening Balance of Cash and Cash Equivalents		58,000
VI – Closing Balance of Cash and Cash Equivalents		64,000

Working notes:

Dr. Land & Building A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	3,20,000	By P&L A/c (Depreciation)	60,000
To Bank (Purchases)	2,80,000	By Closing Balance	5,40,000
Total	**6,00,000**	**Total**	**6,00,000**

Dr. Plant & Machinery Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	1,80,000	By P&L A/c (Depreciation)	45,000
To Bank (Purchases)	1,20,000	By Closing Balance	2,55,000
Total	**3,00,000**	**Total**	**3,00,000**

Dr. Furniture A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	36,000	By P&L A/c (Depreciation)	12,000
To Bank (Purchases)	84,0000	By Closing Balance	1,08,000
Total	**1,20,000**	**Total**	**1,20,000**

Dr. Motor Vehicles A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	1,00,000	By P&L A/c (Depreciation)	15,000
		By Closing Balance	85,000
Total	**1,00,000**	**Total**	**1,00,000**

Dr. Provision for Taxation A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Bank (Payment of tax)	69,000	By opening Balance	67,000
To Closing Balance	92,000	By P & L A/c (Provision For Tax)	94,000
Total	**1,61,000**	**Total**	**1,61,000**

Dr. Proposed Dividend A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Bank (Dividend Paid)	73,000	By opening Balance	73,000
To Closing Balance	80,000	By P & L A/c (Proposed Dividend)	80,000
Total	**1,53,000**	**Total**	**1,53,000**

Illustration 2

Balance sheet of Pure Ltd. are given below:

(Rs. in lakhs)

Liabilities	31.3.13 Rs.	31.3.14 Rs.	Assets	31.3.13 Rs.	31.3.14 Rs.
Equity sh. Capital	6.5	8	Land & Building	2.8	2.3
9% Pref. Sh. Capital	4	3	Plant & Mach	9.3	12.6
General Res.	0.64	0.89	Investment	2.25	2.85
Profit & Loss A/c	1.19	1.64	Inventory	4.19	4.01
Trade Payable	4.14	3.95	Trade Receivable	1.48	2.29
Bank Overdraft	2.18	3.10	Advanced Income Tax	1.10	1.35
10% Debentures	1	2.6	Cash Balance	0.18	0.10
Outstanding Expenses	0.25	0.32	Discount On Issue of Dentures	0.40	0.30
Proposed Dividend	0.65	0.80			
Provision for Tax	1.15	1.50			
Total	21.70	25.80	Total	21.70	25.80

You are required to prepare Cash Flow Statement as per AS -3 by Indirect Method after considering the following.

1. 9% Preference Share capital was partially redeemed on 1.4.2013 and preference dividend is paid in March every year.
2. Additional 10% were issued on 1.4.2013.
3. Depreciation provided during the year on Land & Building was Rs.50,000 and on Plant & Machinery was Rs.80,000.
4. Investment of Rs.50,000 were sold at a profit of Rs.10,000.
5. Income tax assessment was completed for the year ended 31.3.13 on 1.1.14 at Rs.1,15,000.

Solution

Cash Flow Statement of Pure Ltd. for the year ended 31.3.2014

Particulars	**Rs.**	**Rs.**
I - Cash Flow from Operating Activities		
Net Profit (1.64 – 1.19)	0.45	
Adjust – Non cash / Non operation Items:		
Transfer to general reserve	0.25	
Pref. Dividend Paid	0.27	
Debenture Interest Paid	0.26	
Proposed Dividend	0.80	
Provision for Tax	1.50	
Depreciation on Building	0.50	
Depreciation on Machinery	0.80	
Discount on issue of debentures w/off	0.10	
Loss on sale of Investment	0.10	
Operating profit before Working Capital Changes	5.03	
Adjust : Working Capital changes		
Add: Decrease in Inventory	0.18	
Add: Increase in outstanding expenses	0.07	
Less: Increase in trade Receivable	(0.81)	
Less: Decrease in trade payable	(0.19)	
Cash flow from operating activities after working capital change	4.28	
Less: Income tax paid (1.35-0.05)	(1.40)	
Net Cash used in Operating Activities		2.88

II – Cash Flow from Investing Activities		
Machinery Purchased	(4.10)	
Sale proceeds from Investment	0.40	
Investment Acquired	(1.10)	
Net Cash used in Operating Activities		(4.80)
III – Cash Flow from Financing Activities		
Preference shares redeemed	(1.00)	
Preference Dividend paid	(0.27)	
L.Y. Dividend paid on equity capital	(0.65)	
Fresh issue of equity capital	1.50	
Fresh issue of Debentures	1.60	
Debenture Interest paid	(0.26)	
Net Cash used in Financing Activities		0.92
IV – Net Decrease in cash and cash Equivalents		(1.00)
V – Opening Balance of Cash and Cash Equivalents		(2.00)
VI – Closing Balance of Cash and Cash Equivalents		(3.00)

Working Notes:

Dr. Provision for Taxation A/c Cr.

Particulars	**Amt.**	**Particulars**	**Amt.**
To Income tax	1.15	By opening Balance	1.15
To Closing Balance	1.50	By P & L A/c (Prov. For Tax)	1.50
Total	**2.65**	**Total**	**2.65**

Dr. Adv. Income tax A/c Cr.

Particulars	**Amt.**	**Particulars**	**Amt.**
To Opening Balance	1.10	By Provision for tax	1.15
To Bank	1.35	By Closing Balance	1.35
To Bank	0.05		
Total	**2.50**	**Total**	**2.50**

Dr. **Machinery A/c** **Cr.**

Particulars	Amt.	Particulars	Amt.
To Opening Balance	9.30	By P&L A/c (Depreciation)	0.80
To Bank (Purchases)	4.10	By Closing Balance	12.60
Total	**13.40**	**Total**	**13.40**

Dr. **Investment A/c** **Cr.**

Particulars	Amt.	Particulars	Amt.
To Opening Balance	2.25	By Bank	0.40
To Bank (Purchases)	1.10	By P&L (Loss)	0.10
		By Closing Balance	2.85
Total	**3.35**	**Total**	**3.35**

Illustration 3

Following are the balances sheet of Yogesh Ltd.

Liabilities	2013 Rs.	2014 Rs.	Assets	2013 Rs.	2014 Rs.
Equity sh. Capital	6,00,000	8,00,000	Goodwill	20,000	15,000
15% Pref. share Capital	3,00,000	2,00,000	Building	2,40,000	2,10,000
General Reserve	1,80,000	2,30,000	Machinery	6,15,000	6,07,000
Profit & Loss A/c	-	55,000	Investment	1,25,000	1,00,000
20% Debentures	2,00,000	-	Inventory	2,60,000	2,90,000
Bank overdraft	1,40,000	1,60,000	Trade Receivable	3,37,000	4,87,500
Trade Payable	1,41,500	1,96,500	Adv. Income tax	37,500	40,000
Outstanding Expenses	28,500	23,500	Cash & Bank	30,500	40,500
Proposed Dividend	60,000	80,000	Profit & Loss A/c	20,000	--
Prov. For tax	35,000	45,000			
Total	16,85,000	17,90,000	Total	16,85,000	17,90,000

You are required to prepare Cash Flow statement as per AS -3 by Indirect Method, after considering the following.

1. 15% Preference capital was partially redeemed on 31.3.2014 and preference dividend is paid in March every year.
2. 20% Debentures were converted into equity shares on 31.3.2014.
3. Additional Machinery of Rs.1,10,000 was purchased during the year.
4. Investment of Rs.40,000 were sold at Rs.25,000.
5. Income tax assessment was completed for the year ended 31.3.2013 at Rs.35,000 and refund of advance tax of Rs.2,500 was received on 1.1.2014.

Solution

Cash Flow Statement of Yogesh Ltd. for the year ended 31.3.2014

Particulars	**Rs.**	**Rs.**
I - Cash Flow from Operating Activities		
Net Profit	75,000	
Adjust – Non cash / Non operation Items:		
Transfer to general reserve	50,000	
Pref. Dividend Paid	45,000	
Proposed Dividend	80,000	
Provision for Tax	45,000	
Depreciation on Building	30,000	
Depreciation on Machinery	1,18,000	
Goodwill w/off	5,000	
Loss on sale of Investment	15,000	
Operating profit before Working Capital Changes	4,63,000	
Adjust : Working Capital changes		
Add: Increase in Trade Payable	55,000	
Less : Increase in Inventory	(30,000)	

Less: Increase in trade Receivable	(1,50,500)	
Less: Decrease in Outstanding expenses	(5,000)	
Cash flow from operating activities after working capital change	3,32,500	
Less: Income tax paid	(40,000)	
Add: Income tax refund	2,500	
Net Cash used in Operating Activities		2,95,000
II – Cash Flow from Investing Activities		
Machinery Purchased	(1,10,000)	
Sale proceeds from Investment	25,000	
Investment Acquired	(15,000)	
Net Cash used in Operating Activities		(1,00,000)
III – Cash Flow from Financing Activities		
Preference shares redeemed	(1,00,000)	
Preference Dividend paid	(45,000)	
L.Y. Dividend paid on equity capital	(60,000)	
Net Cash used in Financing Activities		(2,05,000)
IV – Net Decrease in cash and cash Equivalents		(10,000)
V – Opening Balance of Cash and Cash Equivalents		(1,09,500)
VI – Closing Balance of Cash and Cash Equivalents		(1,19,500)

Working Notes

Dr. Provision for Taxation A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Income tax	35,000	By opening Balance	35,000
To Closing Balance	45,000	By P & L A/c (Prov. For Tax)	45,000
Total	**80,000**	**Total**	**80,000**

Dr. Adv. Income tax A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	37,500	By Provision for tax	35,000
To Bank	40,000	By Bank (refund)	2,500
		By Closing Balance	40,000
Total	**77,500**	**Total**	**77,500**

Dr. Machinery A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	6,15,000	By P&L A/c (Depreciation)	1,18,000
To Bank (Purchases)	1,10,000	By Closing Balance	6,07,000
Total	**7,25,000**	**Total**	**7,25,000**

Dr. Investment A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	1,25,000	By Bank	25,000
To Bank (Purchases)	15,000	By P&L (Loss)	15,000
		By Closing Balance	1,00,000
Total	**1,40,000**	**Total**	**1,40,000**

Illustration 4

Following are the balances sheet of M/s Kohili Ltd. as on 31.3.11 and 31.3.12 were as follows:

Liabilities	31.3.11 Rs.	31.3.2012 Rs.	Assets	31.3.11 Rs.	31.3.12 Rs.
Equity sh. Capital	3,00,000	3,00,000	Land & Building	1,50,000	1,46,250
General Reserve	1,00,000	1,00,000	Plant and Mach.	3,00,000	3,22,750
Profit & Loss A/c	-	63,000	Furniture & Fixture	60,000	40,000

12% Debenture	1,90,000	1,00,000	Stock	86,000	80,000
Creditors	60,000	1,40,000	Book Debts	95,000	1,63,000
Outstanding Expenses	20,000	20,000	Cash	15,000	5,000
Provision for Tax	1,10,000	1,00,000	Bank	10,000	6,000
Proposed Eq. Div.	30,000	33,000	Advance tax	84,000	90,000
Unclaimed Dividend	-	2,000	Preliminary Expenses.	10,000	5,000
	8,10,000	8,58,000		8,10,000	8,58,000

Additional Information:
New Machinery costing Rs.80,000/- was bought on 31st March 2012 and an old Machinery costing Rs.18,000/- (accumulated depreciation Rs12,000)was sold on 1.4.2011 for Rs.11,000.

Prepare Cash flow statement as per AS- 3 (Use Indirect Method)

Solution
Cash Flow Statement for the year ended 31.3.2012

Particulars	**Rs.**	**Rs.**
I - Cash Flow from Operating Activities		
Net Profit	63,000	
Adjust – Non cash / Non operation Items:		
Provision for Tax	1,00,000	
Proposed Dividend	33,000	
Depreciation on Land & Building	3,750	
Depreciation on Furniture	20,000	
Depreciation on Plant & Machinery	51,250	

Preliminary expenses w/off	5,000	
Less: Profit on sale of Plant and Machinery	(5,000)	
Operating profit before Working Capital Changes	2,71,000	
Adjust : Working Capital changes		
Add: Decrease in stock	6,000	
Add: Increase in Creditors	80,000	
Add : Increase in Unclaimed Dividend	2,000	
Less: Increase in Book Debts	(68,000)	
Cash flow from operating activities after working capital change	2,91,000	
Less: Income tax paid Last year	(26,000)	
Less: Income tax paid Current Year	(90,000)	
Net Cash used in Operating Activities		2,75,000
II – Cash Flow from Investing Activities		
Sale of plant & Machinery	11,000	
Purchase of Plant & Machinery	(80,000)	
Net Cash used in Operating Activities		(69,000)
III – Cash Flow from Financing Activities		
Redemption of Debenture	(90,000)	
Payment of Dividend	(30,000)	
Net Cash used in Financing Activities		(1,20,000)
IV – Net Decrease in cash and cash Equivalents		(14,000)
V – Opening Balance of Cash and Cash Equivalents		25,000
VI – Closing Balance of Cash and Cash Equivalents		11,000

Working Notes:

Dr. 12% Debentures A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Bank A/c	90,000	By opening Balance	1,90,000
To Closing Balance	1,00,000		
Total	**1,90,000**	**Total**	**1,90,000**

Dr. Provision for Taxation A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Adv. Income tax	84,000	By opening Balance	1,10,000
To Bank	26,000	By P & L A/c (Provision for Tax)	1,00,000
To Closing Balance	1,00,000		
Total	**2,10,000**	**Total**	**2,10,000**

Dr. Proposed Dividend A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Bank	30,000	By opening Balance	30,000
To Closing Balance	33,000	By P & L A/c (Provision for Tax)	33,000
Total	**63,000**	**Total**	**63,000**

Dr. Adv. Income tax A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	84,000	By Provision for tax	84,000
To Bank	90,000	By Closing Balance	90,000
Total	**90,000**	**Total**	**90,000**

Dr. Land & Building A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	1,50,000	By P&L A/c (Depreciation)	3,750
		By Closing Balance	1,46,250
Total	**1,50,000**	**Total**	**1,50,000**

Dr. Preliminary Expenses A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	10,000	By Bank	5,000
		By Closing Balance	5,000
Total	**10,000**	**Total**	**10,000**

Dr. Furniture & Fixtures A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	60,000	By P&L A/c (Depreciation)	20,000
		By Closing Balance	40,000
Total	**60,000**	**Total**	**60,000**

Dr. Plant & Machinery A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	3,00,000	By Bank	11,000
To Bank (Purchases)	80,000	By Depreciation	51,250
To P& L A/c (Profit)	5,000	By Closing Balance	3,22,750
Total	**3,85,000**	**Total**	**3,85,000**

Profit on sale of Machinery	
Cost of Machinery Sold	18,000
Less: Depreciation	12,000
Book Value	6,000
Less Sale value	11,000
Profit on sale	5,000

Illustration 5

M/s Tara ltd, a newly formed company, commenced its business on 1.4.2011.

Following are its opening transitions;

a) Issue 5,100 equity shares of Rs.10 each.
b) Issue 2,200 10% Debentures of CRs.100 each.
c) Purchased Land & Building Rs.1,15,000 and Plant & Machinery Rs.65,000.

The projected income statement for the year ended 31st March, 2012 was as follows:

Particulars	Rs.	Rs.
Net Sales		5,55,000
Less: Cost of goods Sold		
Opening Stock	Nil	
Purchases	4,44,000	
Wages	22,000	
Closing Stock	(88,000)	3,78,000
Less : Establishment Expenses		22,000
Selling and Distribution Expenses		33,000
Debenture Interest		22,000
Depreciation		18,000
Net Profit		82,000

It is expected that on 31.3.2012:

a) Sundry Debtors Rs.77,000
b) Sundry Creditors Rs.25,000
c) Interest on debentures is outstanding for a quarter.
d) Outstanding Wages Rs.3,000
e) Outstanding Establishment Expenses Rs.2,000.

Prepare projected Cash Flow Statement for the year ended 31.3.2012 as per AS – 3, using Indirect Method.

Solution

Balance sheet as on 1.4.2011

Liabilities	Amt.	Assets	Amt.
Share Capital	51,000	Land & Building	1,15,000
10% Debentures	2,20,000	Plant & Machinery	65,000
		Cash / Bank	91,000
	2,71,000		**2,71,000**

Dr. Cash & Bank A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Bal b/d	91,000	By Creditors	4,19,000
To Debtors	4,78,000	By wages	19,000
		By Establishment Expenses	20,000
		By Selling and Dist. Expenses	20,000
		By Deb. Interest 22,000 Less : Outstanding -5,500	16,500
		By Balance c/d	61,500
	5,69,000		**5,69,000**

Dr. Debtors A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Sales	5,55,000	By Bank	4,78,000
		By Closing Balance	77,000
Total	**60,000**	**Total**	**60,000**

Dr. Creditors A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Bank	4,19,000	By Purchases	4,44,000
To Bal C/d	25,000		
Total	**4,44,000**	**Total**	**4,44,000**

Balance sheet as on 31.3.2012

Liabilities	Amt.	Assets		Amt.
Capital	51,000	Land & Building	1,15,000	
10% Debentures	2,20,000	Plant & Machinery	65,000	
P & L A/c	82,000	Total	1,80,000	
Creditors	25,000	Less: Depreciation	- 18,000	1,62,000
Outstanding Wages	3,000	Closing Stock		88,000
Outstanding Est. Expenses	2,000	Debtors		77,000
O/s Interest on Debentures	5,500	Cash / bank		61,500
	3,88,500			**3,88,500**

Cash Flow Statement for the year ended 31.3.2012

Particulars	**Rs.**	**Rs.**
I - Cash Flow from Operating Activities		
Net Profit	82,000	
Adjust – Non cash / Non operation Items:		
Add Depreciation	18,000	
Add Interest on Debentures	22,000	
Operating profit before Working Capital Changes	1,22,000	
Adjust : Working Capital changes		
Add: Increase in creditors	25,000	
Add: Increase in Outstanding Wages	3,000	
Add: Increase in Outstanding Establishment Expenses.	2,000	
Less: Increase in Debtors	(77,000)	
Less: Increase in closing stock	(88,000)	

Cash flow from operating activities after working capital change	(13,000)	
Less: Income tax paid Last year	-	
Net Cash used in Operating Activities		(13,000)
II – Cash Flow from Investing Activities		
Net Cash used in Operating Activities		Nil
III – Cash Flow from Financing Activities		
Payment of Interest on debentures	(16,500)	
Net Cash used in Financing Activities		(16,500)
IV – Net Decrease in cash and cash Equivalents		(29,500)
V – Opening Balance of Cash and Cash Equivalents		91,000
VI – Closing Balance of Cash and Cash Equivalents		(61,500)

Illustration 6
Following are the summarised Balance sheet of M/s Sharma Ltd.

Liabilities	31.3.13 Rs.	31.3.2014 Rs.	Assets	31.3.13 Rs.	31.3.14 Rs.
Equity sh. Capital	1,00,000	1,00,000	Land & Building	22,000	8,000
General Reserve	30,000	30,000	Cash at Bank	23,000	37,000
Profit & Loss A/c	45,000	33,000	Sundry Debtors	33,000	22,000
12% Debentures (F.V. 100each)	45,000	35,000	Marketable Investments	55,000	38,000
Current Liabilities	55,000	54,000	Stock in trade	41,000	52,000
			Land & building	75,000	60,000
			Plant & Mach.	26,000	35,000
	2,75,000	2,52,000		2,75,000	2,52,000

Additional Information:

a) Interim dividend @ 10% was paid during the year 2013-14.

b) New Machinery for Rs.15,000 was purchased and an old machine costing Rs.6,000 (accumulated depreciation Rs.3,000) was sold at book value.

c) Debentures were redeemed by purchasing from open market @ Rs.90 per debenture and profit credited to profit and loss A/c.

You are required to prepare Cash flow Statement for the year ended 31.3.2014 in accordance with the AS – 3 using indirect method.

Solution

Cash Flow Statement for the year ended 31.3.2014

Particulars	**Rs.**	**Rs.**
I - Cash Flow from Operating Activities		
Operating profit before Working Capital Changes	15,000	
Adjust : Working Capital changes		
Add: Decrease in Debtors	11,000	
Less: Increase in Stock	(11,000)	
Less: Decrease in Current liabilities	(1,000)	
Cash flow from operating activities after working capital change	14,000	
Less: Income tax paid	-	
Net Cash used in Operating Activities		14,000
II – Cash Flow from Investing Activities		
Sale of Investment	17,000	
Purchase of Machinery	(15,000)	
Purchase of own Debentures	(9,000)	
Sale of Machinery	3,000	
Net Cash used in Operating Activities		(4,000)

III – Cash Flow from Financing Activities		
Payment of Interim Dividend	(10,000)	
Net Cash used in Financing Activities		(10,000)
IV – Net Decrease in cash and cash Equivalents		Nil
V – Opening Balance of Cash and Cash Equivalents		45,000
VI – Closing Balance of Cash and Cash Equivalents		45,000

Dr. Profit & Loss A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Depreciation Bldg.	15,000	By Balance b/d	45,000
To Depreciation Machinery	3,000	By Debentures A/c	1,000
To Interim Dividend	10,000	By Fund from Operation	15,000
To Balance c/d	33,000		
Total	61,000	Total	61,000

Dr. Debentures A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Own Debentures	9,000	By Balance c/d	45,000
To Profit and loss A/c	1,000		
To Balance c/d	35,000		
Total	**45,000**	**Total**	**45,000**

Dr. Plant & Machinery A/c Cr.

Particulars	Amt.	Particulars	Amt.
To Opening Balance	26,000	By Bank	3,000
To Bank (Purchases)	15,000	By Depreciation	3,000
		By Closing Balance	35,000
Total	**41,000**	**Total**	**41,000**

6.9 EXERCISE

1. What is a Cash flow statement?
2. How the various activities are classified (as per AS-3 revised) while preparing cash flow statement?
3. State the uses of cash flow statement.
4. What are the objectives of preparing cash flow statement?
5. State the meaning the terms: (i) Cash Equivalents, (ii) Cash flows.
6. Prepare a format of cash flow from operating activities under and indirect method.
7. Describe the procedure to prepare Cash Flow Statement.
8. Describe "Indirect" method of ascertaining Cash Flow from operating activities.
9. Explain the major Cash Inflows and outflows from investing activities.
10. Explain the major Cash Inflows and outflows from financing activities.
11. Objective type question:

A. Match Group A With Group B

Group A		Group B	
a)	Sale of investment	1.	Cash from financing activity
b)	Cash flow statement	2.	Operating activity
c)	Issue of shares	3.	Cash and cash equivalent
d)	Decrease in stock	4.	Total debtors A/c
e)	Cash comparison	5.	AS 3 Format
f)	Collection from debtors	6.	Cash flow from Investment Activity

Answer a –6 , b –5 , c- 1, d-2 , e – 3, f -4

B. Fill in the Blanks with proper words / phase.
1. Cash flow statement is prepared as per AS __________.
2. Cash flow statement is compulsory for ___________ companies.
3. Cash receipt from sale of goods is cash flow from ________________.
4. Cash received from sale of machinery is a cash flow from _______________.

5. Depreciation is ___________________ to net profit to get cash flow from operating activities.
6. Decrease in working capital __________ cash flow from operating activities.

Answer 1. AS 3, 2. Listed, 3. Operating Activities, 4. Investing Activities, 5. Added 6. Increase.

C. State whether following statement are True or False.

1. Cash flow statement is mandatory for all the firms.
2. Proposed dividend for the previous year shows cash used in operating activities.
3. Trading Commission received creates cash inflow from operating activities.
4. Cash from business operations can be determined from income statement.
5. Issue of bonus shares affect cash flow from Financing Activities.
6. Bank overdraft reduces cash and cash equivalents.

Answer: 1.False 2.False 3.True 4.False 5.False 6.True

D. Multiple Choice Questions.

1. Cash flow statement provides information that
   a) Supplement the P&L A/c and balance sheet
   b) Is independent of financial statements
   c) Provide basis for financial planning
   d) Of a cash budget

2. Decrease in debtors
   a) Increase cash flow from operating activities
   b) Decrease cash flow from financing activities
   c) Decrease cash flow from investing activities
   d) None of the above

3. For cash flow statement cash equivalent includes
   a) Bank deposits for 21 days
   b) Money market instruments
   c) Treasury Bills
   d) All of the above

4. Cash receipts from future contracts is a cash flow from
   a) Operating activities
   b) Investing activities
   c) Financing Activities
   d) None of the above

5. Buy back of equity shares creates cash flow from
   a) Investing activities
   b) Financing activities
   c) Operating Activities
   d) None of the above

6. Investment on 1.1.2015 Rs. 2,10,000
   Investment on 31.12.2015 Rs.50,000
   During the year the company purchased investment costing of Rs.2,16,000 and sold some investment at a loss of 20% on book value. The cash inflow from investing activities will be
   a) 44,800
   b) 2,16,000
   c) 56,000
   d) 59,000

Answer 1. a, 2.a , 3.d , 4.b , 5.a, 6.a

❖❖❖❖

7

AUDITING CONCEPTS

Unit Structure:

7.0 OBJECTIVES

After studying this chapter the students will be able to:

- Understand the Basics of auditing,
- Explain the errors and frauds,
- Discuss about the limitations of audit,
- Know the Auditors duties and responsibilities in respect of frauds,
- Understand the principles of auditing and different auditing concepts.

7.1 INRODUCTION

Origin of the term Audit is said to be in the Latin term auditor which means to listen. In the Middle Ages whenever any fraud or misappropriation was suspected in the books of accounts, there was a system of appointment of an outside expert to verify the accounts. Such expert used to first listen to what the concerned person in the accounts department or The Manager has to say on the issue. In those days the scope of Auditing was restricted to detecting errors and frauds in the books of accounts only.

In simple terms auditing is nothing but verification of the correctness of the books of accounts. After completing writing of books of accounts, somebody else will go through them to check their correctness. This is audit. So it is said auditing starts after accounting job is over.

Auditor is an expert in accounts and he will check whether the books of accounts are properly written and principles and rules of Book-keeping and Accounts are strictly followed. Entries in the bo0oks of accounts should be properly supported by different documents like bills, receipts, vouchers etc.

Financial Statements :

After the books of accounts like journal, subsidiary books, ledger etc. are written financial statements like Trial balance, Trading and Profit and Loss account and Balance Sheet etc. are prepared. In addition these days cash flow statement is also prepared. These different financial statements are read not only by the owners of the business like the proprietors, partners and shareholders, but also by the investors, Tax Authorities, Bank officials, Trade Unions etc. From the point of view of all these people, maintenance of books of accounts correctly is important. Owners want to know whether their capital is being properly utilised, and adequate profits are being earned. Trade union leaders are interested in knowing that correct profits are shown by the company so that they can demand a reasonable bonus and rise in salary. Tax authorities are interested in knowing the correct profit of the business and that proper tax on the same is paid. Bankers who lend money, want to know that their loans are being properly utilised and can be recovered easily on due date, So, from the point of all these people maintenance of books of accounts correctly is important. So, after writing the accounts they are checked by an independent outside expert i.e. the auditor. Al these people go through the financial statements from their own different point of view.

Even the customers of the products are also interested in the correctness of the accounts because if the company is making huge profits, they can demand for lowering the prices of the products produced by the company. Thus all these persons read the financial statements and all of them are interested in the correctness of them. This brings out the importance of audit of the accounts.

7.2 DEFINITION AND OBJECTIVES OF AUDITING

Different authors have defined auditing in different words. We may consider the following few important selected definitions :

1) Spicer and Pegler :

"Auditing is an examination of books of accounts and voucher of a business as will enable the auditor to satisfy himself that the balance sheet is properly drawn up, so as to give a true and fair view of the state of affairs of the business and the profit and loss account gives a true and fair view of the profit or loss for the financial year or period."

2) Prof. Dickers :

"Audit is an examination of accounting records, undertaken with a view to establishing whether they correctly and completely reflect the transactions to which they purport to relate."

3) Arthur W. Holme :

"Long range objectives of an audit should be to serve as a guide to management's future decisions in all financial matters such as controlling, forecasting analysing and reporting. These objectives help the business unit to improve its performance."

4) R. R. Mautz :

"Auditing is concerned with the verification of accounting data, determining the accuracy and reliability of accounting statements and reports."

Longrange objectives of an audit should be to serve as a guide to the managements future decisions in all financial matters such as controlling forecasting analysing and reporting.

To put it in a hutshell, auditing is a through intelligent systematic and critical examination of books of accounts. Audit may be done throughout the year or periodically.

Objectives of Auditing :

Objectives of auditing are changing with the changes in the business techniques. Earlier it was only checking of correctness of accounts. It was then expanded to detection of frauds. The main objective of audit is to find the reliability of financial position and profit and loss statement. Objectives of audit can be divided in to two parts. Main and subsidiary or secondary objectives.

Objectives of Audit

Main objects

Verification of accounts and financial statements

Subsidiary objects

1) Detection and prevention of Frauds
2) Detection and prevention of Errors

A) Main objects of Audit :

1. Verification of Accounts and Financial Statements:

The main or principal objective of audit is to verify and establish that at a given date the balance sheet presents true and fair view of financial position of the business and the profit and loss account gives the true and fair view of profit or loss for the accounting period.

Under the Indian Companies Act Books of accounts must be kept according to the provisions of the Act and they should reveal true and fair view of the state of affairs of the company.

2. Checking of the entries with the relevant documentary evidences:

Audit involves checking the entries in the books of accounts with the relevant vouchers and other supporting documents. This is the main job of the auditor. Entries in the books of accounts are verified with the bills vouchers and receipts. He will also check whether all the money received is accounted for or not and all payments made have proper supporting vouchers. During such routine checking errors and frauds can be detected.

3. Taking independent review of the financial statements:

He conducts an independent review of financial statements. He has to be personally satisfied about their reliability and he should be able to form his opinion about them. He must examine the existing internal control and internal check system prevailant in the organisation. He must check the arithmetical accuracy of the books of accounts. These days this aspect has lost its relevance as machines and computers are mostly used for this purpose by almost all organisations. Auditor has also to check the physical existence of various assets shown in the accounts and see that they are valued correctly.

In short, he has to assess the internal check system, check posting balancing etc. and verify the correctness of the entries with supporting documents. Capital and revenue items should be correctly classified. In the case of certain institutions, there are specific laws which contain rules regarding maintenance of accounts. Then the auditor should see that those legal provisions are complied in maintaining the books of accounts.

B) Subsidiary or Secondary objects of Audit :

1) Detection and prevention of errors.
2) Detection and prevention of frauds.

The main difference between the two is that errors are committed due to negligence or lack of knowledge and the frauds are committed knowingly for some ulterior motive of getting some benefit.

Expression of Opinion :

After going through the accounts the auditor should express his opinion on the maintenance of books of accounts. If he finds any lacuna or defect in the same, he must be frank enough to express his real opinion and suggest to the managements the steps to be taken to set right the same. Auditor should not come under anybody's pressure. He should be bold enough to call a spade a spade.

7.3 ERRORS AND FRAUDS

A. Errors :

Generally they are committed due to negligence or lack of knowledge or ignorance of the principles of writing accounts of the person writing the accounts. This is an important objective of an audit. Error is generally taken to be innocent and not deliberate.

Errors can be classified in to following five categories :

a) Errors of principle
b) Errors of omission
c) Errors of commission
d) Errors of duplication
e) Compensating errors

a) Errors of Principle :

These errors are usually committed due to lack of knowledge of science of Book-keeping. E.g. wrong classification of expenses in to capital and revenue, treating personal income or expenditure as those of business or vice versa, providing less or more depreciation than reasonably necessary, not taking in to account all outstanding income or expenditure etc. Such errors are not disclosed in the trial balance. They can only be detected by thorough checking of each and every transaction in the books of accounts. Errors of principle affect the correctness and reliability of financial statements. To prevent commission of such errors, the job of writing accounts, should be assigned to a duly qualified person only. He must have good knowledge and experience in the field of dealing with accounts.

b) Error of Omission:

Here a particular transaction is not at all recorded in the books of accounts. Such errors may be committed through oversight or even intentionally. They affect the profit or loss of the year. Trial balance will tally in spite of such errors. Hence it is difficult to defect them.

c) Error of Commission :

Here the transaction is recorded but recorded incorrectly. E.g. amount received from A may be credited to B's account or Rs. 890 received may be recorded as Rs. 980. Some such errors may not affect the agreement of the trial balance.

d) Errors of duplication :

Here the same transaction is written twice. This will also not affect the agreement of the trial balance. Auditor can detect such errors only by carefully conducting the process of vouching. Such errors may be committed due to oversight or even intentionally.

e) Compensating errors :

Here there are two mistakes of the same amount, one on the debit side and the other on the credit side. The total effect of one or more errors on either side is the same. Such errors are difficult to detect as the trial balance will tally in spite of such mistakes. Careful conduct of procedure of audit alone can detect such errors.

B. Frauds :

Fraud refers to intentional misrepresentation of financial information by persons in the management, employees or third parties. It may involve manipulation or falsification of accounts, misappropriation of assets, suppression of transactions, or misapplication of accounting policies etc. Frauds are intentionally committed by people in the higher authority. So it is more difficult to detect them than errors. Detection of frauds is one of the principal functions of the auditor.
Frauds may be classified as follows :

1) Misappropriation or embezzlement of cash.
2) Misappropriation of goods.
3) Manipulation of accounts.

1. Embezzlement of cash :

Usually this is done by theft of cash receipts. Petty cash, cheques or by showing bogus payments to workers, creditors etc. Fictitious purchases may be shown and the payment for the same may be embezzled. This type of fraud is very easy where there is no proper control over the cash box. So in a smaller concern the cash box is handled either by the owner or his nearest relative or by a very senior trusted employee. In a large business there is no direct control of the owner in the day to day receipts and payments of cash. So embezzlement on a small scale can be easily done. However it is difficult in a smaller business where there is direct control of the owner on the day to day transactions.

Embezzlement is done either by not accounting for the whole amount received from a particular party or a lesser amount is shown in the accounts and the difference is pocketed by the cashier. Secondly false payments may be shown and the amount is pocketed. To avoid such frauds, there should be strict control on the receipt and payment of cash and the work of one should be routinely checked by the other. This is called internal check system. Another method of reducing such loss of cash by embezzlement is to insure the fidelity of the cashier. You can take an insurance policy and insure the fidelity or honesty of the cashier. If there is embezzlement, then the insurance company will make good the loss.

Different innovative methods are used to embezzle cash. Fictitious purchases may be shown. Wages are shown as paid to dummy workers. Old debt recovered or amount received by selling the scrap may not be shown in the accounts. When an amount is received from a debtor or customer, a lesser amount is shown as received in the counter foil of the receipt book. Some of the cash sales may not be shown in the accounts and so on.

2. Teaming and Lading :

This is method of temporary misappropriation of cash. Teaming and lading means when an amount is received from one customer say A, it is not accounted for in the books and the cash is used by the cashier for his personal purpose, When the next customer say B, pays his dues it is shown as received from A and so on. However, finally before closing the accounts at the end of the year the money used is paid back and the cash balance is correctly shown. Thus here there is only a temporary misappropriation of cash. Auditor should not allow or condone even such frauds. They must be brought to the notice of the owner. The auditor can easily detect such frauds by comparing the date on the receipt and the data on which the transaction is written in the books of accounts, carefully.

3. Misappropriation of goods :

Where the goods produced or sold are small in size and light in weight but of high value, such frauds are commonly committed. Normally in any business there is higher and stricter control over cash than on goods. This is a wrong policy. After all goods represent cash. To prevent such frauds, It is absolutely necessary to maintain proper record of purchases and sales of goods in prices as well as quantities. There should be a good internal control system regarding the movement of goods. Goods should not be allowed to leave the premises without the proper permission of some responsible official. Stock on hand should be physically checked from time to time. If there are any discrepancies, causes for the same should be thoroughly investigated immediately. Bin card system should be used to maintain proper control over the stock. Remedial measures wherever necessary should be immediately taken.

Auditor should undertake surprise check of the physical stock and tally it with the stock shown in the accounts.

4. Manipulation of Accounts :

This type of fraud is committed by higher level management to mislead certain parties. Such frauds usually involve a huge amount and are intentionally committed after adequate preparation. Managers, Directors etc. commit such frauds.

Here accounts are falsified but no cash or goods are misappropriated. False, incorrect or fictitious entries are made in the books of accounts. E.g. bogus sales, purchases or expenses are recorded in the books, closing stock is not correctly valued. It may be over or under valued. Profitability of the business or the financial position of the business is not correctly shown.

Profits may be shown loss to reduce or avoid payment of income tax and other taxes or to deter entering of view units in the business. Value of the shares of the company in the stock Exchange may also be inflated or deflated. Profits may be shown higher than what they are to get more commission or remuneration to the Manager. Another purpose may be to deceive the investors and make them invest more funds in the company. Prices of the shares of the company in the market may be artificially pushed up to sell the shares with the management and make more profits. Financial institutions may be made to lend more money.

Falsification of accounts may also be done by showing purchases or sales more or less than what really they are. Closing stock may be over or under valued, outstanding or prepaid expenses and outstanding and received in advance income are intentionally ignored or necessary adjustment for them may not be made in the accounts. Assets may be over or under depreciated, capital expenditure may be treated as revenue or vice – versa.

5. Window – Dressing :

Showing the financial position better than what it is called window dressing. It is done to attract more capital in the business or get more remuneration for the manager etc.

6. Secret – Reserve :

Showing the financial position worse than what it is, is called creating secret reserve. It is done to reduce tax burden or to see that no new competitors enter the field.

Thus these manipulations are done with different motives and by using number of different methods. So it is rather difficult to detect the manipulation of accounts as it is systematically committed with the connivance of the top management. But never the less, it is an important duty of the Auditor to detect manipulation in accounts. If he fails to do this, he will be held responsible for certifying the false accounts and legal action may be taken against him.

CHECK YOUR PROGRESS:

1. Enlist the objectives of Auditing.
2. Define the following terms:
   a. Auditing
   b. Error
   c. Frauds
   d. Secret-Reserve
   e. Window-dressing
   f. Teaming and lading

3. Fill in the Blanks:
   a. Recording of bogus sales, purchases or expenses in the books means --------------------------------.
   b. Maintaining proper record of purchases and sales of goods in prices as well as quantities is essential to avoid the ------------------------of goods.
   c. ------------------------system should be used to maintain proper control over the stock.
   d. Fraud refers to------------------------of financial information.
   e. Teaming and lading means temporary misappropriation of--------------.
   f. If the same transaction is written twice it is the error of -------.
4. Give the examples of following type of errors;
   a. Error of commission
   b. Error of omission
   c. Error of duplication
   d. Compensating errors

7.4 ADVANTAGES AND DISADVANTAGES OF AUDIT

- **Advantages of Audit :**

Audit of accounts by a duly qualified Chartered Accountant is compulsory for the registered joint stock companies, public trusts, bigger co-operative societies only. Auditing has also been made mandatory these days for Income Tax and VAT payers above a particular limit. The limit for Income Tax payers is income above Rs. 25 lakhs and for VAT payers the limit is a turnover of above Rs. 1 Crore. These days even cost Accounts are to be audited by a qualified Cost Accountant if the turnover is above Rs. 1 Crore. In other words, it is not compulsory for all. However though not legally compulsory, many business units these days, get their accounts Audited because there are number of advantages of Auditing.

They can be enumerated as follows :

1) Audited accounts are considered more reliable by the general public, Government authorities and financial institutions like banks.
2) Errors and frauds are detected in time and immediately rectified. Remedial action can be taken in time to avoid or prevent them in future. Quick action can be taken against inefficient or negligent staff and possible future loss can be avoided.
3) Employers will write the accounts in time or immediately and take sufficient care to see that there are no mistakes. They will not be easily tempted to commit frauds because they know that

the accounts are to be audited at an early date by the experts in the field and they may be caught and punished.

4) Auditor is an expert in the science of keeping books of accounts. He is familiar with different laws governing different businesses. So, he can guide the accounts department in time. Such timely advice is very valuable for the business. Now a day there are number of laws and new laws are added to them from time to time. A busy businessman even though highly educated can not keep track of such ever changing laws. Businessmen have neither time nor inclination to study and understand these laws. Auditor will come to their rescue.

5) Shareholders of joint stock companies are laymen and scattered all over the country and in the case of certain companies even all over the world. The auditor audits the accounts of the business on behalf of these shareholders and submits his report to them. From such reports the shareholders come to knows how their company is functioning and how their hard earned money is being used. They can also take a decision about retaining or selling their shares in the company.

6) Government and different tax authorities like Sales Tax officers. Income Tax officers, Service Tax and Excise officers etc. readily accept the audited accounts and the matter of assessment of tax becomes simple and less time consuming.

7) When there is loss due to theft, fire, floods etc. claim of loss from the Insurance Company is settled quickly if the accounts are audited.

8) In the case of Partnership Firm, when any partner retires or dies, his account can be easily and quickly settled.

9) Banks and other financial institutions sanction loans quickly on the basis of accounts audited by a duly qualified auditor.

10) Trade unions will demand bonus and rise in salary for a reasonable amount only because the workers will believe in the accounts kept by the management if they are duly audited.

If the accounts are not audited, the trade union leaders feel that the company’s accounts do not reveal the real profits made by the company and they are not getting reasonable remuneration and bonus.

Due to all these advantages of Audit of Accounts, business organisation like sole traders and partnership firms where audit of accounts is not legally mandatory, mostly get their accounts audited by a duly qualified Auditor.

- **Disadvantages or Limitations of Audit :**

Though there are number of advantages of getting the accounts audited as noted above, there are also some inherent limitations which can not be easily ignored.

1) Even though the accounts are carefully audited by the auditor. Some times the auditor fails to detect certain mistakes and frauds. After all the Auditor is a watchdog and not a blood hound. So, if the accounts are prepared intentionally and thoughtfully with flaws to commit frauds, the auditor may not be able to detect them. Thus, you cannot guarantee that there are absolutely no errors or frauds in the accounts that are audited.
2) Normally the Auditor depends on the explanation, clarification and information given by the client or his staff. This information may not be necessarily always correct.
3) Under the Indian Companies Act, the real owners are the shareholders. They appoint the Auditor in their Annual General Meeting. This is only in theory or on paper. In practice, he is appointed by the Directors only. So, he may not necessarily act independently. He may try to avoid displeasing the Directors to continue to get the business.
4) Auditor has to seek the opinion of experts in different subjects like those of Architect; technical experts etc. and depend on the same. Such opinion given by the experts may not be flawless.
5) Many Auditors are not bold enough to express their frank opinion and displease the clients. So, they may give a clean chit or favourable opinion even though there are errors or frauds. They are not prepared to displease their clients and loose their business.
6) Audit is a post mortem examination. Things have already happened and nothing much can be done now. Usual reply given by the Government Authorities for different Audit objections is “Noted for future guidance.”
7) It is very difficult end time consuming to verify certain items like stock in trade.
8) Success of Audit ultimately depends upon the sincerity with which it is conducted by the Auditor.

However in spite of the above limitations, there is no alternative to Audit and its advantages outweigh the disadvantages. So, all business units mostly get their accounts Audited by a qualified Auditor.

Expressing Opinion :

After completing his Audit work, Auditor finally expresses his Frank opinion on the quality of the accounts maintained. He suggests ways and means to further improve their quality.

7.5 DISTINCTION BETWEEN ACCOUNTING AND AUDITING

Audit begins where accounting ends. The job of the accountant is to record the different business transactions systematically in the books of accounts. He should also verify the correctness of the totals to check arithmetical accuracy of the books of accounts. He may prepare a trial balance at the end of the year or even at the end of each month. On the basis of the trial-balance of the year, he should prepare Profit and Loss Accountant and Balance Sheet. Of course these days manual accounting is hardly prevalent as even the small concerns have started using computers for account writing. Computerized accounting system has done away with the clerical mistakes like totaling mistakes in accounts.

Some people try to make a distinction between Book – keeping and Accountancy. Recording the transactions in the books of accounts is called Book – keeping and the preparation of Trading and Profit and Loss Accountant and Balance Sheet is called Accountancy.

Book – keeper or Accountant is usually a trusted employee of the business unit. In recent years many small concerns adopt the method of outsourcing for this job. They get their accounts written by outside professional firms. Outsourcing the job of accounting saves a lot of money.

Auditing is verification of books of accounts. Auditor also confirms that all business transactions are correctly recorded in the books of accounts. This work is done by an outside expert usually a Chartered Accountant. He goes through not only the books of accounts, but all other relevant records like receipts, vouchers, invoices and other papers. Auditor is not concerned with the writing of the books of accounts. Sheet reveals the true and correct financial position of the business concern on a particular day. Balance sheet is called a financial photograph of the concern on that date. The Auditor is expected to work independently without any fear. He should not work under anybody's pressure. He must frankly write in his report his honest opinion about the books of accounts. This report is written after completing the Audit work.

Thus the Accountant records the business transactions whereas the Auditor checks their correctness. In other worlds, the Accounts are written first by the Accountant and then they are Audited by the Auditor. That is why it is said that "Auditing begins where Accounting ends."

7.6 AUDITING AND INVESTIGATION

The procedure of conducting Audit and Investigation is almost identical. But there are differences between the objects and contents of the two.

Audit is done to ascertain whether the accounts have been properly maintained or not. This is routinely done every year. Here the purpose is to check the correctness of the accounts. Audit of accounts is a normal routine activity.

Investigation is done with same special purpose like finding out the future trends of profits or to check the financial strength of the business. It may also be conducted when any fraud or misappropriation is suspected. Thus the scope of audit and investigation are different. The scope of investigation done for different purposes is also different.

Auditing is done on behalf of the owner of the unit on his request. Investigation may be done on behalf of the owner as well as the purchaser of the entire business or substantial shares in the company or by one who wants to lend money to the business or a person who wants to join a partnership firm as a partner. If the business applies to the bank, for a loan, the bank may conduct investigation to find out whether there are chances of return of the loan and payment of interest in time.

When the owner of the business suspects that there is a fraud or misappropriation of cash or goods, he may order for investigation to fix the responsibility for the same and find out the exact amount of the fraud. Auditing is usually done of the accounts of one year whereas investigation may cover even a period of 3-4 years also.

Investigation is conducted even though the accounts have been audited. Under the Indian Companies Act Annual Audit of accounts is compulsory. However investigation is ordered only under certain special circumstances. Audit is a routine checking of the accounts but investigation is a special detailed checking. Lastly report of the Auditor is short and is in a prescribed proforma. But investigators report may be detailed and lengthy.

7.7 QUALITIES OF AN AUDITOR

The Auditor checks the accounts and gives his report to the owners of the concern. He is expected to express his opinion on the following points:

1) Whether the accounts have been maintained on proper lines.
2) Whether the Profit and Loss Account shows the correct profit or loss made by the business unit.
3) Whether the Balance sheet gives true and fair view of the financial position of the concern.

The Auditor is expected to express his opinion frankly on the above points without any fear or favour. He is expected to be independent and should not succum to the pressure brought on him by anybody.

He must possess the following qualities to perform his duties satisfactorily.

1) He must have an expert knowledge of the science of Book – keeping and Accounts. Then he must also have a good knowledge of Acts connected with the business like Income Tax Act. Service Tax Act etc. Besides he must have an upto date knowledge of the Law concerning the particular business in which the unit is doing its business. Like co-operative Act., Excise Duty Act etc.
2) Business people usually maintain Accounts in their own Mother tongue. E.g. Gujarati business people maintain their accounts in Gujerati. So, he must know rudiments of that language also.
3) The Auditor should be social and possess good personality. He must have a sharp mind and ability to take quick decisions. He must possess self confidence. He must be intelligent enough to grasp the intricacies of different business units whose accounts he is auditing.
4) He must be prepared for hard work clients have to follow different deadlines. So the Auditor should complete his work and submit his report to the client in time.
5) He must have a liking for figures and he must be systematic in his work. He must have an open mind. He must not check the accounts with a presumption that some fraud has been committed. He must not have a suspicious mind.
6) He must be honest and straight forward. He must not write his report until he is fully satisfied. He must be bold enough to write in the report what he personally feels. He must call a

spade a spade. He must not come under the pressure of anybody and sign a false report. His report should be brief, clear, correct and to the point and in the prescribed form if any.

7) While auditing the accounts, he comes to know number of secrets of the business. He must not reveal them to anybody else.

8) In short, he must have a good practical knowledge.

7.8 PRINCIPLES OF AUDIT

The institute of Chartered Accountants has issued a circular in April 1985 describing the basic principles which govern the professional responsibilities of an auditor. They an be described in brief as follows :

1) Integrity, objectivity and independence
2) Confidentiality
3) Skill and confidence
4) Work performed by others
5) Documentation
6) Planning
7) Audit evidence
8) Accounting system and internal control
9) Audit conclusion and reporting

1) Integrity, objectivity and independence :

The Auditor should be honest and sincere. He must maintain objectivity. He must not have any prejudice. He should have an impartial attitude and an open mind while doing his job.

2) Confidentiality :

Auditor acquires lot of secret information during his job. He must not disclose it to any third party. He is legally and professionally bound to keep secrets.

3) Skill and Competence :

Auditor should have acquired sufficient knowledge and skill to perform his job. People look towards him as an expert in the subject. His knowledge should be upto date. Number changes are made in rules and regulations concerning business of from time to time. He must have an upto date knowledge of all these changes.

4) Work performed by others :

During the course of his work the Auditor may delegate some work to his colleagues and assistants. Similarly he may make use of some work already performed by other auditor. While making use of such work done by others, he must use his own skill and get himself satisfied that the work has been done properly. Sometimes, some other Auditor, Audits the accounts of branches situated in another country or at a place at a great distance. Then he should mention this fact in his report.

5) Documentation :

The Auditor should prepare and preserve all necessary documents while conducting the Audit. He should preserve these documents. In future if there is any case against him about negligence in his work he can use these documents as evidence to defend himself.

6) Planning :

Planning is defined as thinking before doing. To complete his job in time, he must always plan it in advance. He must study client's accounting system and the internal control system prevalent in the unit. He must decide to what extent he can rely upon it. He must decide the procedure to be followed and co-ordinate the work done by different assistants.

7) Audit Evidence :

He should obtain sufficient supporting evidence before passing a particular transaction. Evidence will prove accuracy and validity of the transaction. Working of the internal control system should be satisfactory.

8) Accounting system and Internal control :

The management is expected to follow a reliable accounting system. There should be satisfactory internal control system. It means the work done by one member of the staff should be routinely checked by the other. After studying the accounting system and internal control system in the unit, the Auditor decides the procedure to be followed to Audit that unit.

9) Audit conclusion and Reporting :

After completing his audit work, the Auditor should express his opinion on the financial statements. Auditor should get himself satisfied that a proper accounting system has been followed and all government rules and regulations are strictly complied with. Sufficient information should be made available in the accounts.

Auditor's report should express his frank opinion about the accounting system followed. If there are any defects in the same he should offer necessary advice for correction. All legal requirements should be complied with. If the auditor is fully satisfied, he submits a clean or unqualified report. However, if he is not fully satisfied he will submit a qualified report.

7.9 AUDITING CONCEPTS

Interalia (amongst other things) following are the important concepts of Auditing:

1) Materiality
2) Going concern
3) True and Fair
4) Independence

1) Materiality Concepts :

Material here means important. The auditor should verify every important transaction. Which is important and which is trivial or not important is to be decided by the Auditor. Here his past experience in the Audit field and his discretion will help him. In every business different things have different degree of importance. Auditor should be able to decide which things are important and which are not in a particular business unit which he is auditing. He should devote sufficient time and verify toughly all important transactions. At the same time, he should not unnecessarily waste his time in verifying small and unimportant transactions. An auditor can achieve all objects of audit by properly following this principle.

Information is material if its misstatement or omission will affect the financial or economic decision to be taken by the users of this information i.e. Auditor's report. Materiality depends upon the size and nature of the transaction. Some matters are individually or in the aggregate are relatively more important than others in presenting a true financial position of the concern. Materiality may also be decided by some legal and regulatory requirements.

The concept of materiality is fundamental to the process of accounting. This concept is applicable in planning as well as performing audit. Auditor will insist upon more reliable evidence for passing material transactions. He will see that such items are properly and distinctly disclosed in the financial statements.

2) Going concern concept :

Accounting standard regarding disclosure of accounting policies lays down that the "going concern" is one of the fundamental accounting assumption underlying the financial statements. We pressume that the business is going to be continued at least for some time to come. Accounts are prepared under this concept unless we know that it is likely to be closed down soon. Here the assets and liabilities are recorded on the basis that the business unit will be able to realize its assets and discharge its liabilities in the normal course of business. If this concept is followed, there is no need to state it specifically while preparing annual accounting statements. However, if this assumption is not followed in a particular case, then a special mention of the same should be made.

While planning and performing audit procedure, the auditor should always follow this concept. Business is assumed to be continued atleast for one more year. So, the assets and liabilities are recorded in the normal course of business.

3) True and Fair :

According to Indian Companies Act, the auditor has to report whether the account statements give a true and fair view. Balance sheet should show true financial position and profit and loss account should reveal true profits made or losses incurred.

Companies Act 1913 contained the words true and correct. However, subsequently these words were substituted by True and Fair. Many a times it was found that though the accounts were true and correct, they did not disclose the position of the concern in a fair manner if they were not presented properly.

The phrase True and Fair has not been defined by the companies Act. However, the Auditor is expected to report in these words. So, the auditor should check the full background of each and every transaction. He must not restrict his attention only to the documents produced before him. He must probe deep in to the matter.

This is one of the fundamental concept in auditing. In the case of assets, the auditor should see that they are neither over valued or under valued. If there is any charge on the assets, that should be disclosed clearly. The auditor should ensure that no important asset is omitted. Similarly liabilities should not be under or overstated and no liability should be omitted, accounting policies should be consistingly followed, and all legal requirements should be complied with.

In short what constituents true and fair view is a matter of an auditor's judgment. However all legal requirements should be strictly complied with.

We may also note here that under the companies Act the directors have to state in their report that accounting policies selected and applied by them are such that the annual account statements i.e. Balance sheet and profit and loss account prepared on their basis at the end of the year give a true and fair view of the state of affairs of the company

Normally truth is fair but some times it may be shown in an unfair manner. A small story will convince us that truth alone is not sufficient. It must also be presented in a fair manner. The story is about a ship where there was a system of keeping a diary of the events of the day when it was on the journey. The diary was written by every member of the crew by turn. On one day a nurse on the ship took drinks while on duty. It was the turn of the captain to write the diary. Nurse requested the captain not to write about this incident in the diary because it will affect her future career. Captain said. No. All events of the day should be correctly or truly recorded in the diary.

After some days it was the turn of the Nurse to write the diary. She wrote in it "Captain did not drink today" suggesting that he drinks every day but did not drink on that day.

Captain's statements as well as Nurse's statement both were true but the later was unfair or true but not fair.

4) Independence :

Auditor's job is a responsible job. He should be fair to all. He must be capable of taking quick and correct decisions and must be bold enough to speak out his mind. He should not be afraid of anybody and should not succum to the pressure brought on him by any person like Directors. Managers etc. Thousands of outsiders believe in the truth of his report. Hence his behavior should be such as to justify the confidence of all these people.

7.10 SUMMARY

This chapter deals with the basic concepts of Audit. The Audit has come from a Latin term Auditor which means to hear. When a fraud was suspected an outside expert was appointed to check the accounts. He used to hear or listen to different concerned parties before fixing the responsibility of the fraud on any one person. Hence the term Auditor which then became audit. In simple terms audit means critical checking of the account books. Audit begins, where accounting ends.

Trial balance, profit and loss account and balance sheet prepared at the end of the year are called financial statements. Besides owners, these annual statements are read by investors. Government taxation authorities Trade Unions, financial institutions etc. They will readily believe in the accounts if they are audited by a qualified auditor. So, even where auditing is not compulsory, business people go in for auditing.

The term audit has been defined by different people in different words. The auditor has to check the accounts and report whether they are prepared properly and there are no errors or frauds. He must also report, whether they reflect a true and fair view of the financial position of the concern.

Main object of audit is to check the accounts and the subsidiary objects are detection and prevention of different types of errors and frauds. Window dressing and creation of secret reserve both should be avoided.

There are number of advantages of Audit and it has some inherent limitations also. However, the advantages outweigh the disadvantages.

There is difference between accounting and auditing and auditing and investigation. There is also difference between book – keeping and accounting.

Auditor should have good knowledge of the science of keeping books of accounts and also different laws concerning different types of business. He must be straight forward and honest and think independently. He must be bold enough to frankly expense his mind in his report. He must not reveal the business secrets to outsiders or competitors.

He should plan his work in advance and complete the same in time. He must be able to decide what is material or important and what is not. He must concentrate on material matters. He must proceed with an assumption that the business is going to be continued for a considerable future period.

7.11 QUESTIONS

1. What do you mean by auditing? Discuss its objects.
2. Distinguish between accounting and auditing.
3. Write short notes on :
   i. Compensating errors
   ii. Principles of Auditing
   iii. Window dressing
   iv. Secret reserves drop
   v. Going concern concept.
   vi. Methods of selecting sample items
   vii. Error of principle.
4. Define and explain the term auditing
5. Distinguish between auditing and investigation
6. What is a fraud? What are the different types of frauds?
7. Explain the concept of True and Fair view.
8. What are the advantages and limitations of auditing?
9. Explain in brief different types of errors.

10. **Objective type questions :**

A. Select the appropriate option and rewrite the following sentences :

i) The main object of an audit is --------------------.
   a) To ensure that the final accounts are prepared.
   b) Detection and prevention of frauds and errors.
   c) Verification of accounts and financial statements.
   d) To ensure future viability of the concern.

ii) The main objective of window – dressing is ---------------------.
   a) To reduce tax ability
   b) To mislead investors
   c) To understate profits
   d) To avoid payment of bonus to workers

iii) Auditing commences after ------------------------.
   a) Investigation is over
   b) Accounting work is over
   c) The General Meeting is over
   d) None of the above

iv) --------------------- is not an error of commission.
   a) Arithmetical error
   b) Compensating error
   c) Posting error
   d) None of the above

v) Misappropriation of goods is generally done by --------------------.
   a) Auditors   b) Employees
   c) Shareholders   d) All of the above

vi) The responsibility of adopting sound accounting policies and maintaining adequate internal control rests with ------------------.
   a) Chief Accountant
   b) Company Management
   c) Company's internal audit department
   d) Statutory Auditor

vii) Audit conclusions and reporting is --------------------.
   a) Advantage of audit
   b) Technique of audit
   c) Limitation of audit
   d) Principle of audit

B. State whether the following statements are True or False.

a) An error of principle will not affect the trial balance.
b) The term audit has been derived from the Latin term Audire.
c) The allocation of amount between capital and revenue expenditure is a compensating error.
d) Audited accounts are free from errors and frauds.

❖❖❖❖

8

AUDIT PLANNING AND PROCEDURES AND DOCUMENTATION

Unit Structure :

8.0 OBJECTIVES

After studying this chapter the students will be able to:

- Understand the meaning and importance of audit planning and audit programme
- Know the advantages and disadvantages of Audit programme.
- Explain the Meaning and importance of Audit working paper.
- Discuss the factors determining form and contents of audit working paper.
- Explain the Ownership, custody, access of other parties to audit working papers.
- Understand the Auditor's lien on working papers.
- Know the Auditor's lien on client's books.
- Explain the Main functions, importance, features, contents of permanent audit file, temporary audit file.
- Understand the Meaning, structure, contents, General information, current information, Importance of Audit Note book.

8.1 INTRODUCTION

In simple terms, planning is thinking before doing. We all think before doing any importance work. We think about the best method of doing that job successfully and in time. Audit of accounts being an important job, the auditor thinks in advance before starting any audit and prepares a detailed programmes to be followed to complete the job success fully in time. Institute of Chartered Accounts issued detailed instructions in this regard in 1989. The Auditor should plan his work to enable him to conduct an effective audit in an efficient and timely manner.

.

8.2 MEANING AND OBJECTIVES OF AUDIT PLANNING

Audit planning means planning of his work by the auditor. It will help him to conduct the audit in an efficient manner and complete it in time. He has to plan about the area, scope, depth of transactions to be audited, time to be devoted for each job, persons to be deployed for different operations etc.

Audit plan should inter-alia cover the following :

a) Acquiring knowledge of the client's accounting system, policies and internal control procedures.
b) To what extent reliance should be placed on the internal control system.
c) Deciding nature timing and extent of the audit procedure to be performed.
d) Coordinating the work to be performed by different individuals.

The audit plan prepared should not be rigid. As and when necessary it should be altered to suit the changed conditions.

Planning should be continuous throughout the engagement. It involves developing an audit programme, showing nature, timing and extent of audit procedures. Changes in surrounding conditions may require revision of the overall plan. However, when there are significant changes, the auditor should state the reasons for the same. He must give reasons in support or justification of the changes made and they should be documented.

- **Objectives of Audit Planning :**

Planning the audit work will immensely help the auditor to complete the work successfully and in time. Objectives or benefits of planning audit can be enumerated as follows :

1) If he thinks in advance he can decide which things are important and which are not. Accordingly, he can devote more time and attention to important matters while actually conducting the audit.
2) If any problems are likely to crop up, the auditor can find or seek solutions for the same well in time.
3) Planning will help him to conduct his work efficiently.
4) This will also help him to select a suitable team of assistants and properly distribute the job amongst them. Each member of the team should get that part of the job which he likes and which he can complete in time. Every person has his own likes and dislikes. If a person gets a job of his liking, he will always perform it more efficiently and find pleasure in doing the same. In other words, he gets work satisfaction which is very important. Members of appropriate levels of capabilities and competence can be selected in the team.
5) Planned work can be supervised easily. Suitable directions and instructions can be given to the staff in time.
6) Co-ordination between the work done by different members of the team can be easily done.
7) Audit planning will help the auditor to utilize the services of all assistants fully and properly.

- **Factors to be considered while preparing the audit plan :**

While preparing the audit plan the auditor should consider the following factors:

i) Complexity of audit
ii) Environment in which the business is working at present.
iii) Personal nature of the client. What is the previous experience?
iv) Special features of the client's business.

Before actually framing the programme the auditor should personally discuss with the client the proposed programme and consider his suggestions and amendments in this connection. The auditor should discuss with the client the overall plan and the procedure he wishes to follow while conducting the audit. Client's convenience should also be taken into account.

Audit plan cannot be formulated by sitting in isolation. It's a brain-storming exercise. The auditor should use his wisdom, foresight, professional knowledge, previous experience knowledge about the industry and the particular unit etc. in preparing the audit plan. The plan once prepared, should be altered as and when there are changes in the circumstances and a change is warranted.

8.3 PREPARATION FOR AUDIT

Proper execution of any work requires appropriate planning and programme of action. Before commencing any new Audit, Auditor should take the following steps.

1) Ascertain the scope of his duties.
2) Procure engagement letter.
3) Acquire complete knowledge about the business of the unit and the accounting system followed by the concern.
4) Obtain a list of responsible officers.
5) Knowledge of technical details.
6) Inquiry into special circumstances.
7) Instructions to the client.

1) Scope of duties :

To begin with the auditor should ascertain the exact nature and scope of his duties. This question does not arise in case of statutory audit because his duties are enumerated in the concerned law only. E.g. when an auditor is appointed to audit the accounts of a joint stock company, there are provisions in the companies act about his duties rights and liabilities. However if a concern in which audit is not legally mandatory, appoints an auditor, auditor should get clear instructions about the work expected from him by the appointing authority, so that he can plan his work accordingly. Auditor should discuss the scope of his duties with the person who is going to hire his services.

2) Procure engagement letter :

Before starting his work, the auditor should obtain his appointment letter from the client. Such letter should clearly mention amongst other things, his duties, remuneration, period allowed to complete the job etc. In other words, such letter leads to an audit contract. Such a letter or contract is highly desirable to avoid any misunderstanding with the client in future. Such a letter will also help if the client accuses him of not performing the work promised.

3) Knowledge about business :

Every type of business has its own special features. So, every business follows an accounting system that suits its needs. There is no one uniform accounting system that can be followed by every business unit. So, the auditor before starting his work of audit should study the special problems of the business unit and the system of account followed by it. If necessary the auditor should visit the factory and acquaint himself with the production procedure followed by the factory. He must acquire knowledge about the raw material and the machines used in production.

An auditor should understand the broad economic environment in which his client is working. He must also study the different regulatory provisions and taxes payable by the client.

Auditor should obtain a list of all books of accounts and registers etc. maintained by the firm. He must also study the internal control system followed. If the internal control system in the concern is adequate and reliable, he need not check each and every transaction. He may adopt test check system and audit only few selected items in detail.

4) List of Principal officers :

In an Accounts department there may be different officers in charge of different books of accounts. Auditor should obtain their list so that while going through the audit procedure, if the auditor needs any information or clarification on any specific point, he can directly contact the concerned officer. Auditor should also obtain information about the extent and scope of authority of each one of them.

5) Knowledge of technical details :

He should also acquire some knowledge about the technical details if any of the business. This will enable him to grasp easily the nature of the transactions while auditing them.

6) Enquiry into special circumstances if any :

An auditor should also enquire into special circumstances surrounding his appointment. He is required to be careful about the implications of such special circumstances. In case he is appointed in place of another auditor, it is his professional duty to communicate with him.

7) Instructions to the client :

After making above preparation, he should issue following instructions to his client :

a. Accounts should be finalized and kept ready for audit.
b. Necessary schedules be prepared and made available to him. E.g. schedules of debtors and creditors, bad and doubtful debts, fixed assets, outstanding and prepaid expenses, outstanding incomes and incomes received in advance, investments, cost of acquisition and market price, stock sheets, statements of deferred revenue expenditure etc.

Then the auditor should ask for final accounts of last 2-3 years with auditor's reports.

8.4 SOURCES OF OBTAINING INFORMATION

As we have seen earlier, the auditor should acquire full information about the business of the client before the actual commencement of audit. He has to collect this information from the following sources.

Sources of information can be classified into two parts.

i) Internal sources
ii) External sources.

1. Internal sources :

Examples :

a. Annual reports sent to the shareholders.
b. Minutes of Annual General Meetings and those of Directors' Board Meetings and Directors' Committee meetings.
c. Budget forecasts and projections.
d. Auditor's last year's working papers.
e. Policy manuals
f. Internal Audit reports.

2. External sources:

Examples :

a. Trade journals, magazines and news papers.
b. Text books on different subjects.
c. Publications of different professional bodies
d. Industry publications
e. Websites

3. Discussions with the management:

Next source of information is actual discussion with the management. The auditor should meet the senior management staff and discuss in detail about the special issues relating to the business of the client. He should obtain information on the following points in particular.

a. Changes in management, organisational structure and activities, if any during the year.
b. Current Government legislation, rules and regulations regarding the business of the client.

c. Current business developments affecting client.

d. Current or expected financial difficulties or accounting problems.

e. Plant facilities available.

f. Recent changes if any in technology, types of products or services and production and distribution methods.

g. Important matters arising from previous years' financial statements, audit reports and management letters.

h. Changes in accounting policies procedures and internal control made in the year under review if any.

4. Visit to client's premises for a personal discussion.

The auditor may personally visit the client's premises and get first hand information about the plant layout, process of manufacturing and different registers etc. maintained. It is always useful to have a personal discussion with the client about his method of writing accounts and his other accounting policies.

Auditor may ask his client or his staff to prepare the following statements before he actually starts his work of audit.

He may be asked to balance all the accounts in the ledger and prepare a trial balance as on the closing date of the accounting year.

On the basis of the trial balance, the client may prepare Trading and Profit and Loss account and Balance sheet. Besides, he may also be asked to prepare the following documents to help the auditor to do his work expeditiously.

a) Bank Reconciliation statement.
b) Arrange the vouchers chronologically or serially.
c) Statement of cash or goods in transit if any.
d) A statement of cheques returned from banks.
e) A schedule of Debtors and creditors.

A separate statement may also be prepared of aging debtors i.e. Debtors outstanding for a long time.

All debtors may be sent a copy of their account with the client and they may be asked to confirm the correctness of the balance. Replies received from the debtors may be kept systematically.

f) A statement of Bills Receivable.
g) A schedule of investments on hand and a statement of investments sold and purchased during the year. A statement of dividend received and receivable.
h) List of inventories and their location and valuation.
i) A schedule of fixed assets and details about new assets purchased and sold during the year.
j) A schedule of prepaid expenses and outstanding expenses. Similarly a schedule of income outstanding and the income received in advance.
k) A list of long term liabilities etc.

If the client keeps all the above statements prepared in advance, the auditor can complete his work within a short time and submit his report to the client.

8.5 POINTS TO BE CONSIDERED WHILE PREPARING AUDIT PLAN

While preparing the audit plan the auditor takes into account the following factors :

1. Terms of appointment :

If audit of the unit is compulsory, terms and conditions of his audit are contained in the concerned Act itself. If audit of a firm is done voluntarily, then the client should give him a letter of appointment stating the terms and conditions of his appointment scope of his work etc. Auditor will take these terms in to account while preparing his audit plan.

2. Audit Report :

Auditor has to prepare his report at the end of his work. The contents of the report will vary according to the terms of this appointment. In some acts is making appointment of the auditor where mandatory, the format of the report is also given and the auditor has to submit his report to the client in that format only. Copies of his report are also to be sent to certain parties as per the provisions of the concerned act. E.g. A copy of the auditor's report of a Joint Stock Company is required to be submitted to the stock Exchanges along with annual returns.

3. Legal requirements :

If there are any special provisions in the concerned law regarding the Audit, Auditor should take them into account while preparing the audit plan.

4. Accounting Policies :

Every concern may adopt certain accounting policies to suit their needs. These policies, once decided are not usually frequently changed. However, when it becomes necessary, the firm may change these policies. The auditor should take in to account these existing policies and changes made in them during the year under consideration. If such changes, affect the final results of the year, the auditor should mention the effects of these changes in his final report.

5. Changes in the Accounting standards :

The Institute of Chartered Accountants has prescribed certain accounting standards. Changes are made and new additional standards are added by the Institute from time to time. Business people have to keep their books of accounts according to these standards. So, the auditor should take in to account the prevailing accounting standards while preparing his audit plan.

6. Deciding the possible areas of errors and frauds:

While conducting the Audit, the auditor should decide, on the basis of his past experience the possible areas where frauds are likely, and the auditor should check these items in greater details. This fact should be taken into account while preparing the audit plan.

7. Reliance on internal control system :

Though the accounts are audited at the end of the year, every concern has its own internal check system in at least some areas to prevent errors and frauds. A simple definition of internal check system is to follow a routine wherein the work done by one person is routinely checked by another. E.g. in a departmental store, one man sells the goods on the counter, next man prepares its bill third man packs it and finally the cashier at the counter collects the price. All these 4 people drio independently maintain a record of goods sold. At the end of the day records thus maintained by different employees are tallied with each other. Thus there are checks and counter checks on sales. Auditor will study the prevalent internal control system and will decide how much to rely on it. Where there is a reliable internal check system, the auditor need not check every item in detail. He can adopt test check system and audit only certain items selected at random. Auditor should devote more time to check these items where frauds are more likely.

1. Considering the nature and volume of work, the auditor should decide the number of staff members required to complete the work within the time limit. He should select the staff with appropriate skill and efficiency.

2. Auditor is an expert in the science of accounting. But if there are any special problems in an organisation, he may have to seek the opinion of experts in the different fields like Architect, Mechanical engineer, valuer etc. So, wherever necessary, he must seek the advice of such outside experts.

Secondly, some times the branches of the clients business may be at a far off distance. Then the auditor can assign the audit of the branch to others and incorporate their report in his final report.

Taking in to account the above different factors, the auditor should prepare an audit plan for his particular assignment.

CHECK YOUR PROGRESS:

1. "Proper execution of the Audit work requires appropriate planning and programme of action", Discuss.
2. Give the examples of Internal and External sources.
3. Enlist the points to be considered while preparing the audit plan.
4. Enlist the points to be considered before commencing any new Audit.

8.6 AUDIT PROGRAMME

The auditor should prepare a written programme containing procedures needed to implement it. It should also contain audit objectives. Detailed instructions should be included so that the assistants can properly implement the programme. If the assistants follow this programme, it will be easy for the boss to control the proper execution of the same.

While preparing such a programme the auditor has to decide to what extent he can rely on the internal control system being used by the business unit. If there is a proper internal control system, auditor need not check each and every item in detail as possibilities of errors and frauds are rare. If he feels that the system is not sufficiently reliable, he must insist on production of appropriate reliable evidence for every transaction entered in the books of accounts. The auditor may also decide the timings for different procedures to be followed. He must also take into account the number of assistants he can spare for this particular assignment.

Usually the auditor has enough freedom to decide the timing. However sometimes he was no such option. E.g. If he has to check the closing stock, he has to do it on the last working day only.

The auditor may have to make changes in the plan if there are significant changes in the circumstances. In other words, the Audit plan should be flexible.

- **Audit Programme :**

To complete his work successfully in time, the auditor should draw up an audit programme for every audit especially in the case of audit of a large concern. Audit programme is a sort of a time table containing the sequence in which the auditor wants to verify the books of accounts of the firm and the time he allots to each operation.

- **Procedure of Audit Programme**:

It contains the exact procedure the auditor wants to adopt to complete his assignment.

1. Each business unit has its own special problems. So, for each audit, the auditor should prepare a different programme. Objective of audit of different firms may also be different. The audit programme should contain the nature of the work to be done. It should be prepared in such a way that allotted time is fully utilized. No time should be wasted. After all time is money.

2. Though every audit is different from the other, in every audit there are some common factors. So, the auditor should prepare one standard programme which can be used in every audit. Then suitable changes may be done in this standard programme taking in to account the special features or points in each audit.

3. Though a detailed programme is prepared, it should not be treated as sacrosanct. The persons actually doing the work should be free to make changes in the programme from time to time as and when they feel necessary. However, they should first discuss the proposed changes with their seniors or the chief.

4. The audit programme once prepared should be reviewed from time to time. Business units may make changes in their accounting policies. Auditor should take them in to account and update the programme.

5. The audit programme lists the tasks to be carried out and instructions to carry them out successfully. In the programme the evidence to be insisted upon to prove the correctness of different transactions is prescribed. They assistants actually carrying out the audit should insist upon such evidence. E.g. To prove a transaction of sale usual evidence insisted upon is invoice issued by the client, price list. Stock issue record, sales

manager's advice to stock section, acknowledgement of receipt of goods by the customer, collection of money and so on.

6. The audit programme contains distribution of work amongst different assistants. In making such distribution, the auditor should take into account the past experience of the assistants, their qualifications and likes and dislikes. As it is said the job of the manager is to assign proper work to proper man. The person to whom a particular work is assigned, should be capable enough to complete the same successfully and in time. There lies the success of the whole audit programme. If each person completes his part, successfully and in time, the whole task will also be completed in time as per the schedule. Where there is a proper audit programme, it becomes easy for the boss to exercise proper control over the work of his assistants.

- **Development of an Audit Programme :**

While developing an audit programme the auditor should pay special attention to the following points :

1. Internal Control :

Before preparing the audit programme the auditor should study the internal control system prevalent in the organisation and to what extent it is reliable. In the field in which the system is found to be reliable, the Auditor need not verify each and every item in detail. He can pick and choose some items at random and adopt test checking. However in the fields where the control system is not found to be strictly followed or is not sufficiently reliable the auditor should go and check each and every item in detail and insist on reliable evidence in support of such entries. E.g. If there is proper internal control system on purchases and sales and perpetual inventory system is in vogue, the auditor need not spend more time on verification of closing stock.

2. Business of the Client :

The auditor should study the special features of the client's business and develop a suitable audit programme. E.g. Audit programme for a service industry like a bank will be entirely different from the audit programme of a factory. While auditing a bank, the auditor should pay more attention on the loans given by the bank and their recovery. Whereas in a factory he should pay more attention on purchase of machinery and its proper depreciation, purchase of raw material and its utilization etc.

3. Cost benefit :

Auditor cannot neglect the cost factor. He must take in to account the cost involved in following the procedure and the benefit that accrues. Procedure which costs the least should be naturally selected.

4. The auditor should consider all the possibilities of errors.

5. Different procedures adopted should be suitably co-ordinated.

6. Assistants available :

The auditor should take into account the number of assistants he can make available to complete this assignment.

7. Other Auditors :

It services of internal auditor, Branch Auditor or outside experts are available, the auditor should decide to what extent he can rely on the work done by them.

- **Contents of Audit Programme :**

Contents will differ from client to client. E.g. In a company audit he has to verify memorandum and articles of association whereas in the case of a partnership firm, he has to verify the partnership deed.

1. Programme contains a list of things to be verified.
2. It also contains the names of different assistants and the work assigned to each one of them.
3. It may also contain date of commencement and the date of completion. It contains names of books of accounts and different documents to be verified.
4. If test checking is adopted, the number of items to be checked.
5. It may also contain a date wise schedule of work to be done on different days.
6. Audit programme should be in writing. It should contain details of work to be done and its distribution amongst different assistants. It should be simple to understand.

Format of an Audit Programme :
Audit programme for the year 2014 – 2015
Name of the client ………..
Date of commencement of Audit ………….
Date of completion of Audit ………….
Any special information from previous audit

As and when the person completes verification of cash on hand or verification of cash book for the month of April 2014, he will put his signature or initials in the concerned column and put the date. Auditor by looking at the audit programme from time to time, can easily see the progress of the work at a glance.

- **Advantages of an Audit Programme.**

1) It will ensure that each and every book of account and the register is verified. There is absolutely no possibility of any book being left out through oversight.
2) If facilitates the work of distribution of the job by the chief auditor amongst his subordinates. He can make proper distribution of the work amongst different audit assistants. While dividing the work amongst different persons, the Auditor should take into account each person's past experience, qualifications, efficiency, likes and dislikes, level of understanding and work habits etc.
3) Chief auditor can see the day to day progress of the work at a glance.
4) As the work is carefully planned in advance and distributed, control over the work of the assistants becomes easy.
5) It facilitates timely completion of the work. If on any day any assistant is absent another person can continue the work as he can easily know what work the earlier person has actually completed on the previous day.
6) If later on any mistakes are noticed responsibility for the lapse can be easily fixed on the concerned person and suitable action can be taken against him. Remedial action may be taken immediately if necessary.
7) This years' programme is very useful while preparing the programme for the next year.
8) Audit programme contains instructions to the concerned staff about carrying out their work.
9) It makes the job of selection of suitable persons for different jobs easy.
10) It facilitates systematic auditing.
11) It serves as a guide for audit work in future.
12) In future if nay case is filed against the auditor for negligence in duty etc. it an be produced in the court as an evidence to prove the actual work done.
13) There is uniformity in the audit work done.
14) It enhances the efficiency of audit staff.
15) It is very useful to the Auditor, while preparing his final audit report.
16) Due to systematic working, the auditor may get more clients.
17) Potential problems are promptly identified and services of assistants can be fully and properly utilised.

18) Co-ordination of the work done by different persons becomes easy.

- **Disadvantages of an Audit Programme :**

1) The work may become mechanical. A part of the audit programme may be carried out without understanding the importance of that part in the complete work of audit.
2) Programme may become rigid and inflexible. There are continuous changes in the business world. If Cognisance of these changes are not taken in to account in time, original progtramme itself may be carried out.
3) A hard and fast programme may kill the initiative of efficient and enterprising assistants.
4) Elaborate programming may not be necessary in the case of the audit of a comparatively smaller concern. Here programming may just amount to unnecessary waste of time and energy.
5) The job may be finished hurriedly to complete it within the time schedule. So, the quality of the work may be affected.
6) A uniform audit programme cannot be used in the audit of every company. A fresh programme unit is to be prepared for each and every audit every year. Thus it becomes a time consuming activity.
7) Assistants may not verify anything more than what is given in the programme.

All these disadvantages may be eliminated by imaginative supervision of the work carried on by the assistants. Assistants should be encouraged to suggest changes in the programme as and when necessary.

Secondly if we take an overall view, the advantages outweigh the disadvantages and programming is absolutely necessary atleast in the case of audit of bigger concerns.

- **Method of Work:**

In order that an audit may be carried out in a systematic and efficient manner, the following steps should be taken:

1) Work may be carried on regularly. Record of time of arrival, and departure of the staff should be maintained with the actual work done by each member of the staff every day. Entries should be made in the audit note book.
2) Definite portion of the work should be completed every day.

3) Different coloured pencils should be used and different types of ticks should be done for different jobs. These should not be disclosed to the staff of the client.
4) Vouchers examined should be immediately cancelled so that the same may not be produced again.
5) Staff members should not discuss amongst themselves or with outsiders the details of the client's affairs. They should maintain absolute secrecy about these matters.
6) The auditor should collect sufficient evidence to enable him to form an opinion about:
   a. Truth and fairness of the accounts and that
   b. They are kept regularly following all necessary legal requirements.

7) All assets and liabilities should be properly classified and mentioned.
8) Details of mortgaged assets must be clearly stated.
9) Income and expenses should be properly classified and stated.
10) No material omissions should be done.
11) Errors and frauds are avoided.
12) Books of accounts should be properly kept.

8.7 AUDIT WORKING PAPERS

Audit working papers constitute the link between the auditor's report and client's records. Documentation is one of the basic principles. SA 230 audit documentation refers to the record of audit procedures performed, evidence obtained and the conclusions reached by the auditor.

- **Information contained in the working papers:**

Audit working papers are also called working papers or simply work papers. They contain a record of the audit work done Interalia (amongst other things) they contain information on the following points:

a) Evidence of audit work performed
b) Schedules prepared
c) Additional items in the accounts.
d) Information in short about the business of the client and its recent history.

- **Working papers include:**

Working papers of audit of different concerns are different. But usually they contain the following:

1) Memorandum and Articles of Association in the case of a company audit, partnership deed in the audit of a partnership firm and Trust Deed in the audit of a Trust.
2) Extracts from minute books of meetings of managing committee.
3) Trial Balance Sheet and profit and loss account.
4) Letter of appointment or engagement given to the auditor etc.
5) Correspondence done between the auditor and outsiders like banks, Insurance companies, debtors, creditors etc.
6) Details regarding valuation of stock.
7) Certificate from the management regarding stock and its valuation.
8) Bank Reconciliation statement.
9) Adjustment entries passed.
10) Details of investments.
12) Contingent liabilities.
13) Audit time budget.
14) Certificate from the management regarding accrued liabilities.
15) Any other working papers.

- **Importance of working papers :**

a) The auditor can understand the sincerity of his assistants.
b) They are useful to the auditor when he finally drafts his report.
c) If there is a change in the Audit staff the new incumbent can easily continue the work i.e. link up his work with the work done by the earlier member of the staff.
d) These papers provide training to the audit staff.
e) Auditor can plan his next years programme on the basis of these papers.
f) Auditor can understand the weaknesses of the internal control system in the organisation.
g) In future, if there is a suit against the auditor accusing him of negligence in his duties, he can easily defend himself in the court of law on the basis of these papers.
h) Exercising control over the audit work is facilitated.

i) If any mistakes are noticed subsequently in the work carried on by the staff the auditor can easily fix responsibility of the same on the concerned staff member and take suitable action against him if found necessary.

In view of their importance, the auditor should keep these papers in a safe custody and retain them for a reasonable period of time.

- **Classification of working papers :**

Working papers should be properly organized. All significant matters which require the exercise of judgement by the auditor should be included. The conclusions drawn by the auditor on the basis of these papers should also be recorded. Some schedules he gets prepared by the client's staff and some he prepares himself with the assistance of his own staff. Clients are mostly permanent. They do not frequently change their auditor because the auditor has secret information about their business. So, the working papers collected are classified into two parts.

1) A permanent audit file
2) The current file

1) Permanent File :

A permanent audit file normally contains papers which can be used every year. The file is updated as and when necessary. It includes the following papers :

a. Memorandum of association. Articles of association partnership and Trust Deed etc.
b. Description of the business of the client.
c. List of books of accounts maintained and names of concerned officers.
d. Information on accounting policies like method of depreciation, valuation of stock etc.
e. Copies of continuing contracts
f. Copies of balance sheets of earlier years etc.

2) Current file or Audit administrative Papers :

These papers are concerned only with the current year's audit. All the work done in the course of audit planning, assignment of staff, evaluation of internal control and audit programme are included in this group of papers. Usually this file contains the following papers :

i. Appointment letter
ii. Discussion with the management and client.

iii. Audit time budget
iv. Internal control systems
v. Audit programme
vi. Trial balance prepared
vii. Adjustment entries passed
viii. Copies of communications the auditor has with bankers, creditors, debtors etc. and replies received.

As working papers are important and are to be preserved for a longer period, there should be a standard form in which they should be prepared. There should be proper layout and space for margin. They should be complete and there should be clarity and accuracy. A good quality paper should be used for this purpose.

- **Ownership and custody of working papers :**

There is a controversy amongst the different experts about the ownership of these papers. An important and pertinent question arises as to who is the owner of these working papers. One set of experts say that their ownership is with the auditor whereas others argue that they belong to the client.

First category of experts argue that they are prepared by the auditor. So he has a right over them. He can use them in future as evidence in the court of law if any case is filed against him for negligence of his duties. He has spent his time and energy on them. So, naturally their ownership should go to him.

People in the second category argue that their ownership should go to the client as these papers contain important and sometimes even secret information about his business. So, to preserve or maintain trade secrets, audit papers should be handed over to the client as soon as the job of auditing his accounts is over. He is the agent of the client and should surrender the papers to him.

Both the arguments have some substance or force in them. However, in an English case in 1938 Soekoc Kinsky Vs Bright Grahm & Co. it was held that the working papers belonged to the auditor because they were independent contractors and not agents of the client. In a second case Chantrey Martin & Co Vs Martin in 1953 it was held that working papers prepared by the Accountant for the sole purpose of producing a balance sheet belonged to the client. The court opined that where the accountant merely acted as agent of the client like in the case of corresponding between the Accountant and Income Tax Authorities, the papers belong to the client and not to the accountant.

On the basis of these judgements, we can conclude that generally an Auditor as an independent professional is entitled to the working papers prepared by him. However, where he corresponds with any third party as an agent of the client, the papers rightfully belong to the principal. But where an auditor has not been paid his fees he can retain such papers. He has a right of particular lien upon the books of accounts and other documents also.

According to the views of the institute of Chartered Accountants, the working papers are property of the auditor. Auditor should however maintain confidentiality of the information in the papers and properly maintain these papers for a reasonable period of time He can give copies of some papers if demanded by the client.

8.8 AUDIT NOTE BOOK

It is like a diary maintained by the auditor of the day to day work of audit of a particular concern. It is usually a bound book. Large varieties of matters observed during the course of audit are recorded in it. It is a permanent record of the auditor available for reference later on. It provides a vital link of the work when one assistant is away or the work is temporarily stopped. Various queries made, explanations obtained and the evidence seen is all recorded in the note book clearly and in detail. Regarding the different queries made and explanation received may be recorded by some people on loose sheets which are subsequently kept in a separate file. A separate query file may be maintained for each client for each year.

- **Record Details in the Audit Note Book:**

Usually the details of the following matters observed during the course of audit are recorded in the Audit Note Book.

a) Audit queries not cleared immediately Missing vouchers, receipts etc.

b) Mistakes observed during the course of audit like non compliance with the provisions of different Acts in connection with the business. Similarly if there is any change in the accounting policy regarding valuation of closing stock or work in progress, method and rate of depreciation of certain fixed assets etc. a specific mention of the same is done in the Audit Note Book and disclosed in the final financial statements.

c) If the method of keeping books of accounts or costing records are found unsatisfactory.

d) Any other important information about the company not revealed by the accounts.

e) Special points and important matters to be considered at the time of finalisation of accounts.

f) A list of books of accounts maintained along with the names of officers maintaining them.

g) Points requiring clarification and explanations.

h) Various totals and balances.

i) Points to be dealt with in the final report of the auditor.

j) Date of commencement and the date of completion of audit.

In short Audit Note Book is a diary or register maintained by the audit staff to note errors, doubtful queries and difficulties. The purpose is to note down various points which need to be clarified either with the client or the Chief Auditor. Important points to be included in the Auditors report are also mentioned. It is a complete record of doubts and their clarification.

- **Advantages of Audit Note – Book :**

Advantages of the Audit Note Book can be enumerated as follows :

1) There is uniformity in the Audit work. Note book helps the Auditor to know the amount of work actually performed.
2) Important matters relating to the audit work can be easily recalled in future if necessary.
3) Facilitates preparation of final Audit Report.
4) If any assistant is changed the new incumbent can easily continue the work.
5) Responsibility of any mistake can be easily fixed on the concerned person.
6) Evaluation of the work of Audit Assistants becomes easy.
7) It ensures that the Audit Programme has been strictly followed – Deviations if any can be easily notices.
8) It is a reliable evidence in the court of law if the auditor has to defend himself.

- **Limitations of the Audit Note Book :**

If the staff fails to conduct the Audit properly, the Audit Note Book will act as an evidence against the Auditor himself. However, it is a document whose advantages out do its limitations. So, the

Audit Note Book is commonly used in all Audits and specially the Audit of larger concerns.

- **Distinction between Working Papers and Audit Note Book :**

Though there is much similarity between the two, there is also some difference between the two and that cannot be ignored.

Working Papers		Audit Note Book	
1)	These are written records kept by the Auditor	1)	It is a Note Book maintained by the Auditor for recording various matters observed during Audit.
2)	They have a broader scope	2)	It is a narrow concept
3)	There are permanent and current files. They are prepared by the senior auditor.	3)	It is prepared by Audit Assistants

8.9 SUMMARY

This chapter deals with Audit Planning procedures and documentation. Any important task to be completed successfully needs proper planning. Similarly Audit of a firm needs proper pre planning before it is actually performed. All the information of the clients business is first collected. His accounting system is studied. A list of books of accounts maintained along with the names of the persons responsible to maintain each book is obtained, Accountant of the client is then asked to close the books of accounts and prepare a Trial Balance and Trading and Profit and Loss Account and Balance sheet. Auditor then studies the internal control system prevalent in the organisation and decides to what extent he can rely on the same. If the system is satisfactory, he may adopt test checking. In such cases he need not waste much time on routine checking of each and every item.

Auditor collects information about the client's business from various sources – internal as well as external. He discusses relevant issues with the client. If necessary, he visits the client's premises and his factory. Accounting policies adopted by the client are noted down.

Auditor decides the number of persons to be spared for the particular Audit assignment taking into account the volume of work involved. The task is divided amongst different assistants taking into account their past experience, qualifications, degree of efficiency and likes and dislikes. Time schedule is to be prepared. Dates of commencement and completion are decided. These dates are decided in consultation with the client taking in to account his convenience. Thus an Audit programme is developed.

Audit programme has number of advantages. It ensures that each and every book of account and register is checked. Auditor can see the progress of the work completed every day. Audit Assistants can follow the instructions given in the programme and complete the work in time, work is done systematically. Possible problems are properly dealt with Co-ordination between the work done by different assistants can be easily done.

There are also some disadvantages for Audit Programme. Work becomes rigid inflexible and mechanical. It may kill the initiative of the efficient and enterprising assistants. However by imaginative supervision, the disadvantages may be overcome. There is no alternative to planning and programming specially for the efficient, systematic and timely completion of audit of large concerns.

Audit Working Papers :

There are two files of working papers – 1) Permanent file 2) Current file. Permanent file consists of documents like Memorandum of Association, Articles of Association, Partnership Deed, Trust Deed etc. Current files contains Bank Reconciliation statement prepared, contingent liabilities, Adjustment entries passed etc.

Working papers are very useful to the Auditor while preparing his final report. They can also be used as evidence in the court of Law if subsequently any case is filed against the auditor for negligence in his duties. They are the evidence of the work done by the Auditor and his subordinates. They are carefully prepared and preserved for a reasonable period of time.

There is a controversy amongst the experts about their ownership. However courts have held that they belong to the Auditor and not the client. However, the Auditor should not misuse the secret information contained in them about the business of the client. He may at his discretion give copies of the same to the client.

Audit Note Book :

In addition to working paper files Auditor also maintains an Audit Note Book. It is a bound book. It's a sort of a diary. Assistants record in it the actual work done by them every day. It may also contain details of the queries made with the client and the replies received unanswered queries and missing bills, vouchers etc are also recorded in it. Dates of commencement and completion of the Audit are recorded. It can be used as an evidence in the court of law. It is also useful to the Auditor while preparing his final report. It has also some disadvantages but the advantages outweigh the disadvantages. So, the use of Audit Note Book is very common these days.

8.10 QUESTIONS

1. Explain the importance of Audit Working papers.
2. What are the contents of Working Papers?
3. What are the contents of Audit Programme?
4. Write a short note on :
   a) Audit Note Book
   b) Audit Planning
   c) Routine checking
5. Explain current file. Give examples of its contents.
6. Elaborate the factors considered by an auditor while preparing an Audit plan.
7. What do you mean by an Audit Programme? What are its contents?
8. Discuss the importance of Audit Note Book.
9. Explain “Permanent Audit File. Give examples of its contents.
10. Explain Audit Working Papers and Auditor’s lien on them.
11. Objective type questions:

A. Select most appropriate option and rewrite the following sentences.

a) Audit Programme should be –
   i) Oral
   ii) Rigid
   iii) Flexible
   iv) Oral and Flexible

b) Working papers are the property of the –
   i) Client
   ii) Auditor
   iii) Client and Auditor
   iv) Equity Share holder

c) Audit programme must be prepared –

i) Before commencement of an audit.

ii) During the conduct of an Audit.

iii) After completion of an audit.

iv) After submission of an audit report.

B. Write True of False.

a) Audit plan should be primarily based on knowledge of client's business.

b) Permanent Audit file includes Trust Deed.

c) Audit working papers constitute the link between the auditor's report and client's records.

❖❖❖❖

9

AUDITING TECHNIQUES

Unit Structure:

9.0 OBJECTIVES

After studying this unit the students will be able to:

- Understand the concept routine checking.
- Know in detail about Test checking
- Learn about audit sampling.
- Know in detail about internal control system and its utility.

9.1 INTRODUCTION

Audit means confirmation of the correctness of entries in the books of accounts by finding out suitable evidence for each and every entry. There are techniques of finding out suitable evidence for every entry.

Methods of collecting Information:

1) Inspection of different documents.

To start with the auditor must inspect different documents produced before him, by the client. Most of the transactions are supported by some documents. So, the auditor should examine all documents and find out suitable evidence. With the help of the document the auditor can get information about the correctness of the transaction, it is genuine and has effected after taking permission from a proper authority in the organisation. There is a physical examination in the case of tangible assets.

2) Observation.

Second method of collecting evidence is by observation. The auditor will observe carefully, the procedure being followed by the client. E.g. suppose the staff is taking physical inventory on the last working day, of stock on hand. The auditor can visit the premises of the client and see whether the staff is doing its job properly.

3) Discussion.

Then the auditor can personally discuss with the client and get some information. He can also ask the staff of the client to supply him information on some points in writing. In the case of debtors and creditors, the auditor may write directly letters to them giving balance of their respective account and ask them to confirm the correctness of these balances. Debtors and creditors are asked to send their letters of confirmation directly to the auditor. Of course before doing this the auditor should take a regular permission of the client. Auditors should then check the arithmetical accuracy of the transactions written in the books of accounts. Of course this step has lost its significance in recent years as the accounts are written with the help of the computers and there are no possibilities of mistakes in casting etc. Auditor then calculates different accounting ratios to form his own view about the financial position of the concern.

For completing the audit work successfully various audit techniques are there. Routine Checking, Test checking, Internal Audit, Internal Control are these techniques.

9.2 ROUTINE CHECKING

9.2.1 MEANING

Routine checking will include checking the casting carry forwards and other calculations in the books of original entry. Posting from these books to relevant accounts are verified. Balancing and carry forward of different ledger accounts are also verified. While doing this routine checking the auditor uses different types of ticks and different coloured pencils so that they may not be copied easily by the staff of the client. Information about these ticks is kept secret e.g. normally we use blue or black colour pen but to keep their separate identify auditors use a green colour pen. The auditor uses special ticks for each class of transaction checked. Like posting, casting, carry forward, bank statement and vouching.

As far as possible the same tick should not be used for the same transaction in all the firms to maintain secrecy of these ticks.

While auditing each section, work should be completed up to a certain point otherwise the chances of mistakes increase.

All important balances and totals and note worthy points should be noted down in the Audit Note Book. Vouching work should be done by two audit assistants together. The Auditor should not accept any figures written in pencil because they can be easily changed after auditing. He should insist on writing the figures in ink only.

Routine checking involves checking of such common records and books which is carried on by the auditor as a matter of routine.

9.2.2 Routine Checking includes the following functions :

a) Checking casts and sub-casts, carry forwards and other calculations in the books of original entry.
b) Checking of postings in the ledger.
c) Checking balances in the ledger.
d) Checking transfer of balances from ledger to the trial balance.

Routine checking helps the auditor in finding out certain errors and frauds. However, here only clerical errors and simple frauds can be defected and rarely errors of principle. For detecting clever frauds and errors of principles an auditor has to go beyond routine checking.

9.2.3 Advantages of Routine Checking :

i) Usual errors are quickly detected.
ii) Arithmetical accuracy of most of the entries is verified.
iii) A thorough checking of books of original entries minimises the carry forward of many mistakes.
iv) Checking postings and castings is helpful in the preparation of a trial balance.
v) Routine checking is a simple job and can be done even by an untrained audit clerk.

9.2.4 Disadvantages of Routine Checking :

i) We can only detect arithmetical and clerical mistakes.
ii) Errors of principle are not generally detected.
iii) Similarly compensating errors may not be detected.
iv) The process is too mechanical and monotonous.
v) Where self balancing ledger system is adopted this routine checking will not have any utility.

In spite of all these disadvantages routine checking plays an important role in the conduct of Audit.

9.3 TEST CHECKING

9.3.1 MEANING

The main objectives of audit is to formulate an overall opinion on the accounts and financial statements of a unit. This enables the auditor, to finally submit his report to the party concerned. He has to express his opinion on the quality of the accounts maintained and whether they give a true and fair views of the profits earned and valuation of assets and liabilities. In a large organisation there are thousands or even lakhs of transactions to be verified. It is practically impossible for any auditor to physically verify each and every transaction. In such concerns if there is an effective internal check and internal control system the auditor can adopt test check system. He need not check each and every entry thoroughly. He an check in depth few items selected at random and if he finds that there are no errors in them, he can pressure that other entries are also correct and proceed further.

Thus test checking can be defined as “in depth checking of only few selected items and form an opinion about the quality of the accounts”.

If the items selected are correct, he can presume that other entries are also correct. For the success of test checking system, representative number of entries of each class is selected for checking. Test checking is an accepted substitute of detailed checking. In many cases, hundred percent checking of entries is neither possible nor necessary. It will also involve lot of unnecessary expenditure. Test checking is based on the theory of probability. If the sample is truly representative of the population, the test checking will give reliable results.

Test checking owes its origin to the statistical theory of sampling. Based on his past experience and taking in to account the nature and size of the organisation the auditor picks up few entries for examination. Normally entries involving large amounts and entries in the important accounts are invariably selected for in-depth verification. Other items are selected at random. Items are selected by different people on different basis and for different audits. Sometimes entries are checked for some specified months exhaustively and the rest go unchecked. Where all items of large amounts and important accounts are selected for in-depth checking and are found to be correct, even if there are some mistakes in the remaining items, the mistakes will not affect final conclusions to a large extent. But auditors cannot be certain even after checking

100% of the transactions. The cost and time involved is to be taken into consideration. If with lesser amount of checking the position is the same there is no point in checking every transaction and we cannot forget that audit work is to be completed within a stipulated time.

Anyway the auditor has to verify the financial statements with the help of available evidence. He has to pay special attention to:

1) The method of presentation,
2) Information disclosed
3) Arithmetical accuracy,
4) Following principles of accounting
5) Complting the provisions of the laws applicable to that business.

There should be no errors and frauds in the books of accounts. The auditor should know why errors and frauds occur and how they are committed. It is his prime duty to detect them.

9.3.2 Precautions to be taken before adopting Test Checking :

The number of transactions in any large concern are large. There will be number of purchases and sales. Salary may have to be paid to thousands of workers. There may even be overseas transactions. Bank loans, letters of credit, overdrafts, bills discounted etc. may have to be verified. There is the problem of volume and variety. So, selection of the items for test checking should be carefully done.

It should be remembered that by adopting test checking the auditor only reduces his physical labour. However, in no way it reduces his liability. Subsequently if any error or fraud is detected in the accounting entries which were not checked by the auditor due to adoption of test checking, he will still be held personally liable for negligence in his duties. So, he must be doubly careful in selecting the items for test check. They should be fairly representative items and he should be fully satisfied that they are in order. If he comes across any thing fishy, he must give up test checking and check all the entries.

While selecting items for test check auditor should consider the following points:

1) He should classify the transactions under appropriate heads.
2) He should thoroughly study the system in the concern from authorisation, documentation, recording and evidencing the same. The system should be found perfectly O.K.
3) The auditor should carefully study the internal check system followed by the concern. As we have seen earlier, internal check

system means a system where the work of one is automatically checked by the other as a matter of routine. Financial data provided by the system should be reliable. If and only if the auditor is fully satisfied by the internal check system, he should adopt test check. Not otherwise.

4) There should be absolutely no bias in selecting items for test check.
5) Test check should not be adopted in the audit of such concerns where there are only few transactions of large amount. E.g. A company may have only 20 export or import transactions and each transaction may be in crores of rupies. In such cases, 100% transactions should be checked.
6) The number of transactions to be selected for test check is decided by the degree of reliance on the internal check system.
7) It the auditor comes across any material errors, they should be properly and thoroughly investigated.

9.3.3 Difference between Test Checking and Routine Checking :

Test Checking	Routine Checking
Meaning	
Here only parts of the transactions are checked to form an opinion.	Detailed checking of all transactions at all stages.
Objectives	
To obtain reasonable level of satisfaction about all transactions by verifying only a few representative transactions	To verify arithmetical accuracy, accuracy of posting to ledgers, correctly balance the ledger A/cs
Advantages	
Volume of work is reduced, time is saved	Errors and frauds are easily detected and trial balance can be easily prepared
Disadvantages	
Some errors and frauds may go undetected as all the transactions are not checked. There is doubt and risk in the auditor's opinion.	Highly mechanical process and monotonous activity. If may lead to boredom, compensating errors and errors of principle will not be detected

Thus Test checking means examination of few selected transactions from the beginning to the end through various stages. For the success of the system of test checking, samples of transactions selected should be fairly representative. It is a mathematical truth that scientifically selected sample would reveal the features and characteristics of the population. Theory of sampling is based on a scientific law. There should be some surprise element. Client's staff should not be able to anticipate the pattern of test checking. Otherwise they will predict the areas and periods to be covered for audit and will be careful only about those transactions and neglect the others. There should be flexibility. Auditor should change his method of selecting transactions for test check from year to year. In selecting appropriate transactions for test check, the auditor should use his past experience and discretion current developments and changes made in the internal check system, should also be taken in to account.

9.3.4 Factors to be considered :

While selecting the items for test check the auditor should take in to account the following factors :

a) Size of the organisation.
b) Efficiency of the internal control system.
c) Reliability of books of accounts and other records etc.

9.3.5 When test check can be used.

Test check an be used only under the following circumstances :

a) When the number of transactions to be audited is very large.
b) The auditor has limited time at his disposal.
c) There are number of identical transactions.
d) There is efficient system of internal control.
e) Audit history of the organisation in the past will also decide the size of the sample. The areas requiring audit depend on the previous history.

9.4 AUDIT SAMPLING

9.4.1 Methods of selecting Sample Size:

SA 530 deals with Audit sampling. (S.A. standards on auditing issued by the institute of chartered accountants of India). There are two methods of selecting the size of the sample and individual items. They are :

1) Judgmental sampling
2) Statistical sampling

Whichever method is adopted it should be particularly noted that the sample selected must be representative. It should be closely similar to the whole population. It should be large enough to provide statistically meaningful results.

1) Judgmental Sampling Method :

Here size and composition of the sample are decided on the basis of his past experience and knowledge by the auditor. It is decided at his discretion. The method is simple. So it was adopted for several years. Auditor may decide the number of pages or personal accounts in the purchase or sales ledger to be checked. E.g. January, April, July and October months may be selected for verification in one year and February, May, August and November months maybe selected next year. However usually a large number of items at the close of the year are selected for detailed checking.

Some people criticize this method. They say that the method is neither objective nor scientific. Risk of personal bias cannot be completely eliminated. Statistical techniques are not used. Selection of items is entirely left to the discretion of the auditor. But mostly, experienced auditor will succeed in selecting right representative items.

2) Statistical Sampling :

a. Meaning

The auditor should select sample items in such a way that the sample can be expected to be representative of the population. This happens only when all the items in the population have an equal opportunity of being selected.

This is a scientific method of selection of samples. Hence definitely better than the earlier discussed judgment sampling method which entirely depends upon the discretion of the auditor. Statistical sampling methods use mathematical laws of probability in determining the sample size in different circumstances. This method is widely used especially where the population consists of large number of similar transactions. It is also used for debtors' confirmation, payroll checking, vouching of invoices and petty cash vouchers. Readymade statistical tables are available. So, the auditor need not have knowledge of statistics and mathematics to use this method.

b. Methods of Selection of sample in Statistical Sampling:

Sample should be selected in such a manner that it is representative of the whole population. Each item in the population should have an equal chance of being included in the sample.

Following Methods of selection of sample are applied in Statistical Sampling:

1) Random Sampling
2) Internal sampling or systematic sampling

1. Random Sampling :

There are two types of random sampling.

i. Simple random sampling:

Under simple random system each purchase or sales invoice has an equal chance of being selected. Selection may be done with the help of computers or by picking up numbers randomly from a drum. This method is simple and easy to use. This method can be used where the items are of fairly similar nature. There is no wide difference between two items.

ii. Stratified sampling:

Under stratified sampling the whole population is divided in to some groups and items are selected from each group. E.g. debtors may be divided in to (a) Above Rs. 1,00,000, (b) Rs. 75,000 to 1,00,000, (c) Rs. 25,000 to 75,000 and (d) Below Rs. 25,000 etc. Then certain percentage of items are selected from each group. The percentage of items selected from each group need not be the same. In the above example e.g. more items may be selected from the 1st group and very few items from the last group.

2. Interval sampling or systematic sampling :

Here again there are two methods.

i. **Block sampling**: Block selection means say first 100 items of sales of August, then first 100 sales of December etc. may be selected.
ii. **Cluster sampling**: means dividing the items in to groups called clusters e.g. 500 to 540. 2015 to 2055 etc. These figures are again selected at random.

c. Advantages of statistical sampling in auditing :

It has following advantages.

1) Sample size will not increase in proportion to the size of the area involved.
2) Selection is more objective as there is absolutely no personal element involved.
3) The size of the sample is minimum.
4) Calculated risk is taken.

However, the system should not be universally applied. Sometimes other methods may be more convenient or useful e.g. when exact accuracy is required or there may be legal compulsions.

9.4.2 Factors determining Sample size :

The following factors determine the size of the sample –
1) Sampling Risk
2) Tolerable Error
3) Expected Error
4) Efficiency of internal control

1. Sampling Risk:

Auditor in auditing only the sample entries and arriving at his final conclusion no doubt takes risk. Because, if subsequently errors or frauds are noticed in those entries which he has not audited, he will still be held responsible. Sampling risk means if he audited 100% entries, he may arrive at a different conclusion than the one he arrived by auditing only sample of transactions.

The auditor is faced with sampling risk in both tests of control and substantive procedure. In test of control it may be risk of under reliance or over reliance. In risk of substantive procedures. There may be risk of incorrect rejection, or incorrect acceptance.

2. Tolerable Error :

Sample size is affected by the level of sampling risk the Auditor is willing to accept from the results of the sample. If he is prepared to take higher risk, he will select a smaller sample and if he is not and prepared to take much risk, he will select a larger sample. Tolerable error is the maximum errors in the population that the auditor is willing to accept.

3. Expected Error :

If the auditor expects error in the population, the size of the sample is large and if no errors are expected, the size of the sample will be comparatively small. Auditor should decide expected error taking into account his past experience and changes done in the procedures etc.

4. Efficiency of internal control :

If the internal control system is found to be satisfactory, the Auditor may select a smaller sample. On the other hand if he finds that it is not effective, he may select a larger sample.

5. Evaluation of Sample Results :

After selecting the sample items for detailed investigation, the auditor should audit all these sample entries in detail. Then the should analyse the errors in the sample. First the auditor should confirm that it is really an error. For that he should take in to account the objective he has decided while auditing. If expected evidence is not available to audit a particular item, he should look for alternate evidence. The auditor should consider the qualitative aspect of the error. i.e. nature and course of the error and the possible effect of the error on other phases of the audit. The auditor may come across some common factors like type of the transaction, location, period of time etc. Then the auditor should check all items of his type of transactions and not restrict himself only to the scrutiny of the sample transactions selected. The auditor should project the error results of the sample to the population. He should keep in mind the qualitative aspects of the errors found. If the population is divided in to sub population, the projection of errors is done to each sub – population and the results are combined.

Then the auditor should decide whether the error in the population exceeds the tolerable error limit. If so, he must reassess the sampling risk. If that risk is unacceptable, he should adopt alternative audit procedure.

9.4.3 Auditor's Liability in conducting Audit based on Sample

While auditing the selected sample entries, the auditor should take maximum care in analysing the evidence produced before him in support of the entry. Auditor should select the sample in a scientific manner. He must use statistical rules of sampling. He should exercise his best judgment so that he may not be held responsible subsequently for the opinion he has expressed. As far as possible the auditor should use test check method only after selecting the samples scientifically. He must be extra careful in using test check method because by adopting test check method, he only reduces his physical labour. His liability for errors and frauds extends to the entries in the whole population. He cannot escape from his liability saying that he had not audited that particular transaction.

CHECK YOUR PROGRESS

1. Define the following terms:
   a. Routine Checking
   b. Test checking
   c. Judgment Sampling
   d. Stratified Sampling
   e. Block sampling
   f. Cluster sampling
2. Enlist the factors determining the Sampling size.

9.5 INTERNAL CONTROL

9.5.1 MEANING AND DEFIITION

Control is a basic human requirement. It has existed throughout the ages in different human activity. With technological development business has become more complex. In business control is an accepted device for optimum utilisation of the resources and opportunities for maximization of profits. In the conduct of business different tasks are assigned to different people and different equipment. Supervision or control is necessary on both of them so that they carry out their activities properly and avoid wastes.

Internal control is a broad term with wide coverage. It covers the control of the whole management system. It may be financial as well as non financial. It involves number of checks and controls in order to ensure that the business is carried on efficiently. Only with the help of control, efficient and effective management of business becomes possible. Internal control system helps the business to achieve its goals effectively. Effective internal control system is important from the point of view of the management as well as auditor. It helps the auditor in devising a proper audit procedure for the audit of a particular unit.

9.5.2 Definitions of internal control:

W.W. Bigg defines it as "internal control is best regarded as indicating the whole system of controls, financial and otherwise, established by the management in the conduct of the business including internal check, internal audit and other form of control." This definition explains internal control from the auditors point of view.

According to American Institute of Certified Public Accountants, "Internal control comprises of the plan of organisation and all the co-ordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data to promote operational efficiency and to encourage adherence to prescribed managerial policies." In this definition both accounting and administrative control are emphasised.

Internal control adopts methods and procedures to achieve management's objectives. It helps the orderly and efficient conduct of the business. Assets are safeguaed and errors and frauds are prevented. Financial statements can be prepared in time.

In short, internal control included not only internal check and internal audit but the whole system of control's financial and non-financial. Thus accuracy and reliability of records is ensured.

Internal control includes financial and administrative controls. It is established by the management to run the business smoothly. Internal control system is very important from the point of view of the auditor. It will help him to select the right method of working.

9.5.3 Purposes of Internal Control :

Internal control system is beneficial or useful to both the client and the auditor.

1) Usefulness to the client :

i) Reliable data is provided. On the basis of such data the management takes its day to day decisions e.g. Fixation of selling price, quantity of goods to be produced etc.

ii) Assets and records are safeguarded. If there is no proper system of control, the physical assets may be stolen, misused or accidentally destroyed. Same is the case of other important documents in the business. Confidential records may be properly maintained. Now a days lot of such documents are fed to the computers. If proper care is not taken magnetic tapes can be destroyed.

iii) Internal control system promotes operational efficiency. Business resources are properly used. Business policies are strictly followed.

2) From the Auditor's point of view :

The business will have competent and trust worthy personnel. This will reduce the chances of errors and frauds and the job of the auditor becomes safe and simple. There is scientific division of duties amongst different members of the staff. Every transaction is authorised by the competent authority. Duties and responsibilities of each member of the staff are clearly stated. The internal audit is part of the whole system of internal control.

9.5.4 Inherent limitations of Internal Control :

Standard auditing practice SA–6 issued by the Institute of Chartered Accountant of India mentions certain inherent limitations of internal control. They are :

1) The control system involves expenditure of time and money. If attempts are made by the management to economise in this expenditure, effectiveness of the control system is adversely affected.

2) Internal control system lays greater emphasis on routine transactions. So, unusual and irregular transactions are likely to be neglected.
3) The possibility of human error cannot be ruled out. This may affect the effectiveness of the control system.
4) Persons implementing the system may abuse the authority given to them.
5) Whenever there are changes in the circumstances, the system also needs to be changed. If such changes are not done in the systems from time to time, the system may loose its effectiveness.
6) Management may manipulate the system.

9.5.5 Scope of internal control :

Internal control is a broad term having wide coverage. It may normally cover the following areas :

1) **Financial control**: It includes proper system of accounting and proper supervision.
2) **Cash control** : There is proper control over receipts, payments and balance kept in hand missappropriation of cash in any way by anybody is not permitted.
3) **Trading transactions** : There will be proper control over purchase as well as sales transactions. Suitable procedures are laid down and handling of goods is effectively controlled and properly accounted for.
4) **Employees remuneration** : Pay sheets are properly prepared. A detailed record of work done by each worker is kept and used while preparing pay sheets. Salaries and wages must be paid to the concerned workers regularly in time. There should be no scope for payment to dummy workers.
5) **Capital Expenditure** : Capital expenditure involves heavy amount. So, it should be authorised by proper authority and wisely spent. Amount should be used properly.
6) **Others** : Control is also in existence on maintaining proper relationship with the staff, inventory in the factory and investment of funds.

9.5.6 Internal Control and Auditor :

The management of any business unit is duty bound to introduce a good system of internal control. Existence of an efficient system of internal control in the unit is very useful to the auditor. It helps him to reduce his workload to a large extent. So, if he finds any lacuna or defect in the existing internal control system the auditor can suggest suitable changes in the same as he is an expert in the field. However, it should be remembered that though he may suggest changes, his suggestions are not binding on the client. He can only help and guide the client. It is upto him (client) whether to accept the advice or not. Auditor will carefully study the existing system of internal control and then decide to what extent he can rely on the same. Then he can decide the audit procedure to be adopted for auditing this particular unit. Thus the purpose behind the study of the system of existing internal control system is to decide the exact degree of reliance on the same and then deciding an appropriate procedure for audit. The auditor has to decide to what extent he can adopt test check. The auditor is expected to critically review the existing system before the commencement of his work. Where there is a good internal check system; the work of the auditor, automatically becomes simple. However it should be distinctly remembered that adopting test check will in no way reduce his liability. He should perform all his normal duties as usual. If he performs his duties carelessly or negligently, he will be held liable subsequently if any errors or frauds are detected.

9.5.7 Internal Control Questionnaires (I.C.Q.) :

The auditor here prepares a series of questions to test the adequacy of the system. It contains questions for determining the adequacy or otherwise of the system. Such questionnaires may be used for all clients – big or small or may be changed according to the requirement of each client. Adequate space should be provided for the answers. If the answer to any question is negative, the auditor should seek further details from the client. Such questionnaire will help the auditor to decide whether the system in vogue is satisfactory or not.

9.5.8 An illustrative questionnaire for Petty Cash :

	Particulars	**Auditor's**		
		Answer Yes / No	**Verification name and date**	**Tests observations**
1.	Is imperest system in use?			
2.	Is responsibility of funds vested in only one person?			
3.	Whether petty cashier is a person other than the cashier? And so on --------------			

9.6 INTERNAL CHECK

9.6.1 MEANING AND DEFINITION

Internal check is an important part of internal control. The whole accounting system is so arranged that the work done by one is invariably checked by another as a matter of routine. No additional expenditure is incurred for this procedure. Different methods of internal check are devised for different types of concerns taking in to account the special needs of each concern.

It can be defined as **"an arrangement of the duties of the members of the staff in such a manner that the work done by one person is automatically and independently checked by the other."**

Each employee here works independently but it does not involve duplicating the work of other. Frauds, errors or irregularities are thus prevented. Under these circumstances if frauds are to be committed, a collusion among different members of the staff is necessary which is normally not easy.

Definition :

Spicer and Peglar "Internal check is an arrangement of staff duties where by no one person is allowed to carry through and record every aspect of transactions, so that without collusion between two or more persons, fraud is prevented and at the same time, the possibilities of errors are reduced to the minimum."

F.R.M. Paula "Internal check means practically a continuous internal audit carried on by the staff itself, by means of which the work of each individual is independently checked by other members of the staff."

Ronald A Irish – "Internal check refers to the organisation of office duties in such a way as to prevent or disclose both errors and frauds."

Many other authors have defined the term in almost similar words but the common idea is that here the system is internally organised in such a way that the work of one employee is automatically checked by the other and the possibility of error or fraud is reduced to the minimum.

9.6.2 Features of internal check system:

1) The work is divided amongst different assistants.
2) Work is divided amongst different persons, taking in to account the qualifications and ability of each member of the staff.
3) Only one person does not perform any task from the beginning to the end.
4) The work done by one is independently and automatically checked by the other. E.g. in the case of cash sales the salesman will not receive cash and deliver the goods to the customer. Price of the item is received by the cashier. Gate keeper or goods clerk will deliver the goods and the accountant will make entry in the cash book and so on.

9.6.3 Objectives of Internal Check System:

1. Internal check system is introduced to bring moral pressure on the staff.
2. Reliable and adequate information is made available from the books of accounts.
3. Valuable assets of the business can be saved and frauds and errors are avoided.
4. Available work in the accounts department is suitably distributed amongst the members of the staff.
5. If any error or fraud is subsequently found the responsibility for the same can be easily fixed on the person concerned.
6. Staff becomes more alert and efficient.
7. The firm can get all the advantages of division of labour.

9.6.4 Principles of a Good System of Internal Check :

1. Here the responsibilities of each member of the staff are clearly stated.
2. The available work load is equitably distributed so that no one is over burdened with work and there is no dissatisfaction amongst the staff on this issue.
3. People having custody of assets should not have access to books of accounts.
4. Duties allotted to the staff should be changed from time to time.

   Whenever a different person takes charge of the table, the mistakes if any committed by the earlier occupant of the table are easily detected. If the same man remains at the same table for a long time, this is not possible. Work done by one should be automatically checked by another.

5. The management should not rely too much on any one person. Frauds are normally committed only when there is over reliance in any person in the organisation.
6. Cheque books important files etc. should be maintained safe under lock and key.
7. The management should carryout supervision from time to time to ensure that the rules prescribed for internal check are being followed meticulously by one and all.
8. Deviations from the rules should be permitted only by the top authorities and only when it is absolutely necessary.
9. The system of internal check once introduced should be reviewed from time to time taking into account any changes that have occurred in the business in the interim period.

9.6.5 Advantages of Internal Check System :

The advantages of the system can be enjoyed by the business, auditor and also by the owner of the business. Let us study them one by one.

1. Advantages for the Business :

The business enjoys number of advantages of internal check system. Some of them are :

i) **Proper division of work :-**

Available workload is suitably divided amongst the different members of the staff. Division of work is done taking into account the qualifications, experience, likes and dislikes etc. of each member of the staff.

ii) **Detection of errors and frauds** :-

Errors and frauds are easily detected and taking up of prompt suitable remedial action becomes possible at an early date.

iii) **Increased efficiency of the staff and economy** :-

As each one is given the work he likes and capable of doing, there is increase in the efficiency of the staff and their efficiency will bring down the administrative expenditure.

iv) **Moral Check** :-

There is a moral check on the staff because the work done by every member is routinely and automatically checked by another. Members of the staff will not be easily tempted to commit frauds.

2. **Advantages for the Auditor :**

Internal check system is very useful to the auditor. It reduces his workload to a large extent. Advantages to him can be enumerated as follows :

i) Quick preparation of final accounts :

where there is an efficient system of internal check, the books of accounts are regularly written. So, the auditor can readily prepare annual statements like profit and loss account and balance sheet and start his work.

ii) Convenience :

Where there is an efficient system of internal check, the Auditor can adopt test check and complete his work within a short time. He need not undertake detailed checking of routine transactions.

3. **Advantages to the Owner :**

i) The owner can rely on the accuracy of the books of accounts.
ii) Increase in profits. As there is increase in the efficiency of the staff, there is economy in the cost of administration and this will lead to increase in total profits.

9.6.6 Disadvantages of Internal Check System :

Just like there are advantages, there are also some disadvantages of internal check system. They can enumerated as follows :

1) Costly :

Introduction of this system requires a large number of staff. Naturally the cost of administration will increase. So, the system can not be introduced in a smaller business unit.

2) Quality Sacrificed for promptness :

Here the quality of work may decline. Members of the staff may devote more time to complete the work in time but may not devote enough time towards the quality of the work.

3) Carelessness amongst high officials :

Higher officer may not strictly supervise the staff presuming that the work is being done properly.

4) Risky for the auditor :

Relying too much on the system is sometimes likely to be proved risky for the auditor. If there is any laxity in the implementation of the system, errors and frauds can not be ruled out.

In short the system should be carefully and continuously implemented. Auditor should use his tact and judgement while studying the system and relying on it.

9.6.7 Auditor and Internal Check :

Scope of the Auditor's work is largely decided by the internal check system prevalent in the organisation. After studying the system the auditor decides to what extent he can adopt test checking. Where there is an efficient system of internal check, the auditor need not check all the transactions in detail. The time thus saved an be utilized for more important matters. However, the auditor should always keep in mind that though his physical labour is saved, his responsibility is not at all reduced. He will be held responsible if any errors or frauds are found subsequently even in those transactions which he has not audited as he has not selected those transactions in the sample selected for test checking. He cannot argue that he did not audited 100% transactions as there was an efficient system of internal check. Thus though a good system of internal check is helpful to the auditor, in no way it relieves him of his contractual responsibilities. So, the auditor should take enough care before deciding the extent to which, he should depend upon the internal check system prevalent in the organisation.

9.7 INTERNAL CHECK SYSTEM FOR BUSINESS TRACTIONS

9.7.1 Internal Check System for Sales and Debtors :

Sales may be for cash as well as on credit. A businessman has to use both the types of sales to increase his turnover and profit. However, here we are considering only the internal check system for credit sales.

Example of Internal check System for cash sales of the goods

The salesman will only complete the transaction of sale by showing the goods to the consumer. He will neither receive cash nor deliver the goods. He prepares 3-4 copies of the invoice and sends the goods to the packing department. Packer packs the goods according to the invoice and forwards them with a copy of the invoice to the cashier. Cashier receives cash from the customer and sends a copy of the invoice to the accounts departments for making entry. He also sends the goods to the delivery department, which again verifies the goods with the copy of the invoice with the customer and then hands them over to him. Thus the work of selling the goods is divided amongst so many members of the staff.

1) **To start with, different forms used in this connection** like invoices; delivery challans etc. should be standardised. They should be serially numbered and kept in the custody of any responsible officer. If any of them are missing, efforts should be made to trace them and causes for their loss should be investigated. If not found even after all efforts, duplicate may be obtained and this fact may be mentioned by the auditor in his final report.

2) **Credit control** : No businessman can insist on cash sales only. To increase his sales and to meet the needs of the customers, he has to sell on credit. However, many a times, the recovery of the amount from the customers becomes difficult. Its an unpleasant task. So to avoid bad debts, though sales should be done on credit basis also, all care should be taken before extending credit to a new customer. Decision regarding grant of credit, extent and period of credit, should be decided by a responsible officer only. Before accepting an order for credit sale, a suitable enquiry should be conducted about the credit worthiness of the customer. Enquiries may be done about his credit worthiness with his other suppliers and also with his bankers. However, this should be done only after obtaining the permission of the prospective customer. It should always be remembered that selling on credit is easy but the job of recovering credit is difficult and unpleasant.

3) **Different functions related with the sales should be allotted to different persons** e.g. preparing invoice, dispatching the goods, recording the sales in the sales book maintaining customers' Ledger Accounts or Debtors Ledger, preparing their list at the end of the year etc.

4) **Delivery challans should be tallied with the orders received**. These challans should be serially numbered and kept in a separate file by a person who should not have any access to the stock.

5) **Customers should be asked to acknowledge** in writing the receipt of the goods. These acknowledgements should also be serially arranged and kept in a separate file.

6) **Along with the goods, invoice for the same should be sent**. Quantity mentioned in the invoice should be the same as the one mentioned in the order of the customer

7) **If there is any transfer of goods from the Head Office to Branch** or from one department to another it should be distinctly recorded.

8) **Invoices should be prepared with proper care**. There should be strict rules regarding the discount to be allowed if any.

9) **When the price of the goods is received from the customer,** an official receipt should be sent to him and entry for the same should be promptly done in the Cash book.

10) **If there are any sales returns**, they should be properly recorded in the books and the causes for the return should be investigated. If the return of the goods is found to be in order, a credit note should be sent to the customer.

11) **Debtors' balances should be tallied** with the balances in the control accounts if a self balancing system is in vogue.

12) **Reminders should be regularly sent to the customers** whose accounts are overdue. All possible efforts should be done to recover the dues as early as possible, without displeasing the customer.

9.7.2 Internal Control System for Purchases and Creditors :

There are different stages in purchasing and there should be proper control system of control at each stage. Purchases are also of two kinds' viz. cash purchases and credit purchases.

1) **Different departments which need different items for consumption or production send their requisitions** in a prescribed form to the purchase department. This department then prepares purchase order in duplicate and sends the original copy to the supplier. Duplicate copy is retained in the purchase department for future reference. In some concerns the order is prepared in triplicate and one copy is sent to the stores department to keep space ready for the receipt of the goods.

2) **Orders are always sent only to the selected or approved supplier**. Supplier is selected after inviting quotations or tenders. Prices of different suppliers and the quality of the goods are studied by experts and then 2-3 suppliers whose rates are reasonable and quality is satisfactory are selected as approved suppliers. Orders are sent only to these approved suppliers, 2-3 suppliers are selected instead of only one who is the best amongst the lot, because sometimes if the goods are not available due to any reason like strike etc. services of the alternative suppliers may be utilized to avoid inconvenience.

3) **Verification** – On receipt of the goods, the stores department verifies their quality, quantity and price with the copy of the order sent and the invoice received with the goods, and then send the invoice to the accounts department for making

necessary entry in the books of accounts and making payment as per the terms agreed upon. Stores department then stores the goods in the respective shelfs or bins.

If the goods are not found to be of appropriate quality or as per the order placed, they should be immediately returned along with a debit note.

4) **Copies of the personal accounts of the suppliers should be sent to them** at regular intervals for the confirmation of the balance.

5) **When the invoice is received from the stores department with a satisfactory remark,** the accounts department sends a cheque to the supplier.

As referred to above a list of approved suppliers is prepared by every concern. However, if any supplier, fails to supply the goods as per order in time his name should be dropped from the list. In other words, this list is revised from time to time on the basis of the experience.

9.7.3 Internal check system for Salaries and Wages :

Most common entry in the books of accounts of any concern after purchases and sales is that of payment of wages or salaries. Payment of wages or salaries in a large concern involves number of functions.

a) **A record is kept of Number of days or hours worked** by each employee. There is a punch card system and the card is punched when the employee enters the office or factory and when he leaves.

b) **On the basis of the above, pay sheets are prepared and wages or salaries payable are calculated**. From the gross amount of salary there are different deductions to be made for items like Provident Fund, Employees State Insurance, Income Tax, Profession Tax, deductions for housing or other loans or advances etc. After considering these different deductions net amount payable to the employee is arrived at. The old system was to draw necessary total amount from the bank and prepare packets for each individual employee with necessary currency notes. These packets were then handed over to the employee in the presence of his superior. However, these days, preparing packets etc. is not necessary. The pay sheet prepared is directly sent to the bank. The bank will then credit the net amount payable to each employee, to his bank account. Even the pay sheets are not manually prepared these days. They are prepared by the computer and the amounts are transferred to the accounts of the concerued employees electronically.

c) When pay-sheets were manually prepared one person used to make calculations. Second person used to prepare pay-sheets taking into account leave taken, hours worked etc. These salary sheets were then test checked by some higher authority. If a particular worker is absent on the date of payment, his packet was kept in the safe custody and handed over to him personally when he returns to work. Actual payments were done by persons different from those who prepared the paysheets.

d) Many a times bogus or ghost workers were shown and their salary was misappropriated. So, the Head of the Department should take proper care to avoid such misuse of funds.

Previously there was a procedure of obtaining signature of each employee on a revenue stamp. But such procedure is no more prevalent as the amount of salary or wages is directly credited to their bank accounts. So no other proof of payment is necessary.

Under the law wages are to be paid before 10th of every month. So, care should be taken to see that the whole procedure is completed in time.

Any way it should be remembered that there is no one standard internal check system applicable to all types of units. Each unit has to evolve its own system to suit its own needs.

9.8 DIFFERENCE BETWEEN TEST CHECK AND INTERNAL CHECK

Test Check		Internal Check	
1)	It means checking only selected few items instead of checking all transactions.	1)	It means division of work in such a way that work done by one is automatically checked by another.
2)	It is used by the Auditor	2)	It is instituted by the management
3)	Errors and frauds are detected by checking only few items.	3)	It helps to prevent errors and frauds.
4)	Management has no control over it.	4)	Management has full control over it.

CHECK YOUR PROGRESS:

1. Enlist the advantages and disadvantages of Internal check system.
2. “Internal control is a broad term having wide coverage”, Explain.
3. Define the terms Internal Control and Internal Check.
4. Explain the examples of Internal Check System.

9.9 INTERNAL AUDIT

9.9.1 MEANING AND DEFINITION

The normal concept about audit is it is checking the books of accounts by an outside expert to detect and prevent errors and frauds. In other words the auditor is an outsider and an independent expert. However, some concerns get their accounts audited by some members of its own staff before presenting the accounting before the outside expert. This is internal audit. Internal audit is the review of its records by its specially appointed staff.

Definition :

Watter B. Meigs defines Internal Audit as “Internal Audit consists of continuous critical review of financial and operating activities by a staff of auditors functioning as full time salaried employees.”

Internal Auditor comments on the effectiveness of the internal check system and suggests improvements in the same if necessary. Assets of the firm should be properly accounted for and adequately safeguarded. Acquisition and disposal of assets should be done only with the permission of the proper authority. Internal Auditor will ensure that the accounting policies laid down by the management are being meticulously followed :

9.9.2 Internal Check Vs Internal Audit :

Both internal check and internal audit are parts of the whole system of internal control. Both are complementary to each other and go together. Still there is lot of difference between the two.

Internal Check		Internal Audit	
1)	It is arrangement of duties in such a way that the work done by one is automatically checked by the other	1)	It is independent appraisal of the records
2)	Object is to prevent errors and frauds	2)	Object is to detect errors and frauds
3)	No additional staff is necessary	3)	Additional staff is to be appointed
4)	It starts before the transaction	4)	It starts after the recording of the transaction

9.9.3 Internal Auditor and Statutory or outside Auditor :

Both of them apply similar techniques for examining the books of accounts. However Internal Auditor is a representative of the management. He is a regular employee of the concern. He reports to the managements. Statutory auditor in the case of the company is appointed by the share holders and reports to them about the truth and fairness about the account statements. Scope of work and functions of the internal auditor are decided by the management. In the case of statutory auditor they are decided by law.

If an auditor finds that internal audit is adequate and satisfactory or effective, he may apply audit procedure to a limited extent. Thus presence of internal auditor reduces the physical labour of the auditor. However it in no way reduces his responsibility. He can not say that he did not verify a particular item because it was already verified by the internal auditor. The ultimate responsibility for reporting on financial statements is that of the statutory auditor only. Internal auditor will verify the reliability and integrity of the information. He will confirm that the management's policies are being strictly followed and the accounts are maintained taking in to account the different laws applicable to the business. Resources are used economically and the assets are being properly safeguarded.

Finally it is the past experience and discretion of the outside auditor which decides to what extent he can rely on the work done by the internal auditor. Internal auditor, being a regular employee, cannot act effectively as an independent auditor

9.10 SUMMARY

Test check means the auditor selects at random some transactions and checks them in detail. If he finds that there is nothing objectionable in these items, he will conclude that other transactions are also recorded properly.

Next technique of auditing dealt with in this chapter is sampling. There are two methods of selecting samples viz judgemental sampling and statistical sampling. In judgemental sampling, the auditor relies more on his past experience and selects items at his discretion.

Size of the sample is decided by taking in to account sampling risk, tolerable error, expected error and the efficiency of the internal control system.

It should always be remembered that by adopting test check of sample item, the auditor only reduces his physical labour. His liability for mistakes in auditing extends to the whole population of the transactions and not only restricted to the items he has actually checked.

The third important technique discussed in this chapter is that of internal control. Internal control means dividing the work amongst different members of the staff in such a way that the work done by one is routinely and automatically checked by the other.

In big concerns in addition to audit of accounts by an independent outside Auditors, they have their own Audit staff. Before presenting the books of accounts to the external auditor, they are audited by the internal auditor. The purpose behind this additional system of audit is to detect and prevent errors and frauds at an early date. Suitable penal action can be taken at an early date against the guilty persons and the concern may be saved from the further such loss in the future.

9.11 QUESTIONS

1. What is test checking? What are the advantages and disadvantages of test checking?
2. What precautions are to be taken by the auditor while adopting test checking?
3. What do you mean by internal check?
4. How internal check is different from internal audit?
5. What are the duties of an auditor in respect of internal check?

6. What are the principal aims of audit by Test – checking?
7. Write short notes on :
   a) Internal audit
   b) Objectives of Internal control
   c) Test Checking
   d) Technique of audit
8. What is internal control? How is the auditor concerned about it?
9. Explain the terms Internal control, internal audit and internal check.
10. What is internal control? Suggest internal control system for credit purchases.
11. Explain the terms "Internal control" an "Internal Audit".
12. What are the various techniques of auditing?
13. Select the appropriate option and rewrite the following statements :

    i. Internal auditor's appointment is made by --------------------
      a) Institute of internal auditors of India.
      b) Members at the Annual General meeting.
      c) The management
      d) The statutory auditor

ii. Internal check is meant for ------------------.
   a) Prevention of fraud
   b) Increase in the profits
   c) Detection of fraud
   d) Helping audit in depth

iii. ----------------- deals with audit sampling.
   a) SA 530
   b) SA 400
   c) SA 610
   d) SA 510

❖❖❖❖

10

VOUCHING

Unit Structure :

10.0 OBJECTIVES

After studying this unit the students will be able to:

- Understand about vouching.
- Vouch different types of receipt of Income and different types of expenditure.

10.1 INTRODUCTION

The act of examining vouchers is called vouching. In auditing vouching is done to establish the authenticity of the transaction recorded in the books of accounts. It is to find out the documentary evidence for the entry. Vouching plays a very important part in the process of audit. The auditor will verify whether the amount in the voucher is posted to the correct account while examining the voucher. Auditor should pay special attention to the following points:-

i) The date of the voucher. The date should be relevant to the period of audit.
ii) Voucher is in the name of the client.
iii) Voucher is duly authorised.
iv) The voucher is complete in all respects.

After examining the voucher, the auditor should either cancel it by putting a cross or put a stamp on the same so that the same voucher could not be produced once again.

10.2 MEANING AND DEFINITION OF VOUCHING

10.2.1 MEANING

Vouching is an inspection by the auditor of an evidence supporting the transaction entered in the books. It is a technique used by the auditor to judge the truth of entries appearing in the books of accounts.

Accounting entries are made in the books of accounts. All such entries must be supported by some document. An accountant is not supposed to make any accounting entry unless he is having a documentary evidence to support. If a proper supporting evidence is not available or such evidence is not fully supporting accounting entries made, Auditor has every reason to doubt about the existence of error, fraud or manipulation of accounts, goods or cash. Every transaction must be invariably supported by a suitable voucher. **Success of an audit depends upon the efficiency with which the devices of vouching has been used.** Without vouching auditing is incomplete.

Definition :

J. R. Batliboi : “Vouching means testing the truth of items appearing in the books of original entry.”

D. Cksee : “Vouching is an act of comparing entries in the books of accounts with documentary evidence in support there of.”

Thus vouching is a device used to prove that the various transactions for the period are fairly, truly and sincerely reflected in the books. Vouching is checking the accuracy of entries made in the books of accounts with the help of available documentary evidences. No transaction has been omitted and all the transactions have been recorded properly. So, vouching is called as an essence of auditing.

10.2.2 Objectives of Vouching :

Objectives of vouching is -

1. To confirm that all the transactions have been recorded and every transaction recorded has supporting documentary evidence.
2. Vouchers produced are legally valid, authentic and are in the name of the client.
3. Proper distinction has been made between capital and revenue items.

10.2.3 Importance of Vouching :

Vouching is an important part of auditor's duty. Vouching is essential in all types of audit viz. audit of a small concern or of a big concern where there may be a strict internal control system. Auditor will be held guilty if he is negligent in vouching. Vouching acts as a foundation on which the whole auditing structure is built up. The success of an audit is dependant only on proper vouching. Auditor can detect frauds only by conducting proper vouching. Vouching is the backbone of auditing.

10.3 VOUCHING PROCEDURE REGARDING REVENUE

Now let us consider vouching procedure of some transactions. Books of accounts mainly contain two types of transactions viz transactions regarding revenue and those of different types of expenses. Let us first consider transactions of revenue or income. The principal items of revenue or income are :

1) Revenue from sales and services.
2) Income from rent
3) Income from interest and dividend
4) Income from royalties.

Income of any business unit depends upon the nature of its activities. If it's a trading concern it earns its income by selling goods. If it is a service organisation, it earns its revenue by rendering services.

10.3.1 Revenue from Sales :

A trading concern earns its revenue by selling goods. Sales again are of three types.

i) Cash Sales
ii) Credit Sales
iii) Sale on approval or sale or return

All the three types of sales involve different procedure and hence naturally their vouching will involve adoption of different procedures.

i) Cash Sales :

a. **To start with the auditor should study the internal check system** prevalent in the organisation for cash sales. He should find out whether there is any loop hole in the same so that cash received from sales could be misappropriated. Then he should see whether there is a system of issuing a cash memo for every cash sale. In some business units, a cash memo is issued not only for cash sales but also for the amount collected from the debtors for previous credit sales. Such practice should be discouraged. Because if such system is in vogue then auditor can not be sure that all the debts have been collected before the end of the year. Amount received on some of the sales may not be accounted for and misappropriated.

b. **Cash sales are usually verified with the carbon copies of cash memos.** If the number of sales is very large, it becomes very difficult to check every sale. Here a cash sales summary book is maintained. Totals of such a book is than tallied with the cash memos.

c. **While checking cash sales, the auditor should particularly pay attention to the date on the cash memo** and whether the amount received is accounted for in the books on the same day. All cash sales are entered on the debit side of cash book.

d. **Then the auditor should verity whether the price of the goods sold is properly calculated**. If any cash memo is cancelled, the auditor should insist on the production of original of such receipt. It should be kept with the carbon copy. Production of both the copies is essential. Otherwise there is a possibility of showing cancellation of the receipt and misappropriating the sale proceeds.

e. In some business concerns, there is a system of giving discount on the price. **If so, the auditor should insist that there should be clear rules regarding rate of discount** to be granted to their customers. Auditor should, while vouching duplicate copies of the cash memos given, verify whether discount granted is according to these rules only. If any extra rate of discount is to be granted that should be granted by an official at the highest level only. This is necessary because there is a possibility of showing higher discount and misappropriating the difference.

f. **Auditor should verify that the date on the cash memo and date of the entry in the cash book is the same**. Otherwise there is a possibility of temporary misappropriation of the cash. That is cash received on sale of goods is used for personal purposes and then later returned to the business and accounted for.

g. **Auditor should also check the balance of stock in hand and the quantity of goods sold.** Transfer or posting of the entry from the cash book to the ledger should also be checked.

h. **Sale of fixed assets should not be included in the sale of goods.** If there is any sale of scrap, it should be recorded separately. If the business uses automatic cash register, the daily totals entered in the cash book should be checked with the till rolls.

i. **There are chances of cash misappropriation of cash sales.** Salesman may sell the goods but may not account for the cash received. To avoid such possibility internal control system in the concern regarding cash sales should be effective. In big stores like Malls the salesman is not allowed to receive cash from the customers. Goods are also not delivered by him to the customer. This is done by some other person. He is only expected to prepare four copies of memo of the goods sold. Of these two copies are handed over to the customer. The salesman will send one copy with the goods to the delivery clerk and retain one copy for his record. In the meantime the customer will make payment to the cashier. Who stamps the bill as "cash received". The customer can get the goods from the delivery clerk who is always at the exit point by showing the copy of the memo with the stamp cash received. At the end of the day the salesman, cashier and delivery clerk will prepare summaries all of which must tally. The auditor should check these summaries and cash book to detect mistake or fraud if any.

10.3.2 Credit Sales / Receipts from customers :

a. Receipts of cash from customers against price of goods sold are checked with the counter foils of receipts issued to them. Before taking up the work of such verification the auditor should **verify the internal check system existing in the concern about the accounting of receipts from debtors or customers**.

b. There should be no scope to the staff to misappropriate the cash received from the debtors even temporarily. Such temporary misappropriation of cash is called **teaming and lading** as seen earlier. Teaming and lading is a very common method of misappropriating cash received from customers practiced in many concerns. Such fraud remains undetected for a long time. Cashier returns the money misappropriated, just before the end of the year when normally cash balance is tallied with the balance shown in the books of accounts. Sometimes when the cashier is not in a position to return the cash used by him, he may show some bogus expenses to cover up the amount.

c. When the auditor suspects commission of such a fraud, **he must compare the amounts deposited in the bank from time**

to time with the amount received from the customers i.e. counterfoil receipts or carbon copy of the receipts issued to the customers on receipt of the dues received from them. If the amount deposited in the bank as per counterfoil pay in slips of the bank, is less than the amount collected, it is clear that the amount received from the customers is not fully paid in to bank immediately on receipt. Another evidence of such fraud is debit in customers accounts which ought to have collected in whole are cleared in small installments.

d. If such evidence exists, the matter should be further investigated. **This can be done by requesting the customer to send statement of accounts from their books for the relevant period in which such fraud is suspected**. On comparing items in each statement with the entries in the customer's account, it will be possible to locate amounts which were not deposited in the bank on the day they were received but are deposited subsequently.

e. There is also a possibility of issuing receipt to the customer for the actual amount received but to enter lesser amount in the counter foil of the receipt. **Cash received can also be misappropriated temporarily, by delaying the recording of this receipt in the books of accounts.**

f. **The auditor should verify amount received from debtors from the counter foils or carbon copies** of the receipts issued to the customers. All these receipts should be serially numbered. The amount should be entered in the cash book on the day when received. Discount allowed if any to the customer should be authorised by a responsible officer. If any correspondence is done on this subject with the customer that should also be seen or verified by the auditor.

g. **With the permission of the client, the auditor can contact debtors to verify the cash received from them**. Sometimes the amount written off as bad debt earlier may be recovered later. They may be received directly from the customer concerned or if the customer is declared insolvent, the amount may be received from the Official Receiver as dividend. Amount received from the customer can be verified as usual with the carbon copy of the receipt issued to the customer. If the amount is received from the Official Receiver, it may be verified with the correspondence with him. Auditor should verify the correctness of the accounting entry made in this respect. As usual such amount is not credited to the personal account of such customer as there is no more balance on that account. Such receipt is treated as a profit and credited to profit and Loss Account.

10.3.3 Goods sent on consignment :

a. Goods sent on consignment are not actual sales. So, the auditor should verify that their accounting is properly done.

b. **Proforma invoices are sent for such goods and auditor should verify them** with the duplicate copies of the proforma invoice sent.

c. Auditor should also see **that the stock with the consignee on the last working day is properly valued** at cost plus proportionate non recurring expenses incurred by the consignor or and consignee on the goods.

10.3.4 Sales Returns :

a. Returns are verified with the copies of the credit notes sent to the customers.

b. Sales returns of the first and last month, should be particularly verified as they are likely to be bogus.

c. To inflate or deflate profits, bogus sales may be shown and then shown as returns in these months.

d. Auditor should also verify whether the returned goods are in good condition.

10.3.5 Sales on approval or sale or return basis :

a. Auditor should see that a separate register is maintained for such sales.

b. Entries in such Register should be checked with the carbon copies of the proforma invoices sent with the goods.

c. When the customer informs that he has approved the goods, then such goods should be transferred from goods on approval register to regular sales book and further entries are passed.

d. Goods not approved but returned, should be entered in the goods sent on approval and stock register, Incidental expenses incurred, if any should be properly accounted for.

10.3.6 Goods sent in containers and packages.

a. Sometimes the goods are sent to customers in returnable containers. If the customers retain containers after the time stipulated, a separate sale invoice will be prepared for the sale of containers.

b. Sometimes the sale price of goods includes the cost of containers also.

c. When the customer returns the container a credit note is prepared in his favour and sales are reduced.

10.3.7 Sale of Scrap :

a. In the process of manufacture scrap is produced. Auditor should verify whether its sale is done as per the rules framed for the same and properly accounted.
b. As the value of the scrap is comparatively less, there is no strict supervision on its sale. So, there is scope for misappropriation. Hence the auditor should pay special attention to this item.

10.3.8 Sale of Investments :

If investments are sold, usually they are sold through a broker on the stock exchange. He sends details of the price received, security transaction tax paid, his brokerage and net amount payable. Auditor should see that all these items are properly accounted for. Secondly securities may be sold cum interest or ex – interest. That aspect should also be verified. In the case of listed securities, the auditor should verify the price at which the investments are sold with the stock exchange quotations on that day.

10.3.9 Sales of Services :

Manufacturing companies, manufacturer goods and traders sell them. Similarly there are companies which provides services and sell them to the customers. E.g. banks insurance companies, transport companies etc. The procedure for vouching different kinds of sales of services is almost the same as the procedure for vouching sales of goods. Such companies earn their profits through sale of services instead of goods.

10.3.10 Rental Income :

a. Rent is received from the tenants and the landlord issues them receipts. The auditor should verify the amount received with the carbon copies or counter foils of the receipts given to the tenant.

b. Then the auditor should look in to the agreements entered in to with the tenants. This will help him to see whether a correct amount is received from the tenant or not.

c. On the house property, there are certain charges to be paid like Municipal Taxes, Electricity charges, water charges etc. They may be paid either by the tenant or by the owner on behalf of the tenant. Who has to pay these charges is decided by the mutual agreement between the two. So, the auditor should verify whether such charges are paid by the concerned person as per the agreement

d. Landlords usually maintain a Rent Register and entries for rent received are subsequently entered in this register. He should look in to the total accommodation available for letting out and whether all of it is let out or not. If any part is shown as vacant, he should obtain a certificate to that effect from a responsible officer of the client.

e. Auditor should carefully study the rent agreement or lease deed. If the rent is colleted through an agent, account submitted by the agent should be verified. In case of heavy arrears of rent outstanding auditor should confirm the arrears from tenants with the consent of the client and enquire in to the causes for the same.

f. Many landlords collect rent for some period in advance as a security deposit. So, the auditor should see that proper adjustment is made for rent received in advance, rent deposit and regular rent received and receivable.

10.3.11 Interest and dividend received :

a. If the investments are in number of companies, investments register is maintained. In such a case dividend income is first vouched by reference to the counterfoils of dividend warrants and the interests on securities by reference to the tax deduction certificate issued by the bank.

b. Afterwards the amounts collected are traced into the investment register. The Register is carefully checked to ascertain whether any dividend has remained unrealised. If so, the auditor should enquire in to the reasons for the same.

c. Profit and loss account should show the gross amount of interest as income. So, when a tax is deducted at source a certificate is received, the tax deducted is debited to Income Tax account and credited to interest account. The auditor should verify that this has been done properly.

d. The auditor should compare the income of interest and dividend of this year with the one received last year. If there is significant change, he should enquire in to the reasons for the same.

e. The auditor should obtain a list of the securities and check whether income is received on all of them. He should physically check their existence.

f. If any securities are pledged with the bank, he should obtain a certificate from the bank about their existence with them.

g. If there are any fixed deposits with the banks, he should check interest received on them from the bank pass book and also inspect Fixed Deposit Receipts issued by the bank.

h. These days interest and dividend is directly credited to the investor’s bank account through electronic transfer. Then the auditor can check their receipt with the entries in the bank pass book directly.

10.3.12 Royalties – Income :

a. Royalty is paid when ore or oil is extracted from the earth or oil well. Royalty is also paid to the author of the book or singer etc. To check the receipt of Royalty the Auditor should examine the terms and conditions of the agreement between the parties for the payment of Royalty.

b. He should go through the correspondence with the lessee.

c. Calculation of the Royalty should be checked and the auditor should see the counter foil or carbon copy of the receipt issued to the lessee on the receipt of the Royalty.

d. Royalties due but not yet received should have been properly accounted for.

e. If any income tax is deducted at source (T.D.S.) the auditor should see that certificate of such deduction is duly received from the lessee. Further, he should verify that entries in the Royalty Account and Income Tax Account are correctly done.

10.4 AUDIT OF EXPENDITURE

10.4.1 Purchases

One of the major items of expenditure in a trading concern is purchase of goods for sale. Purchases can also be of two types namely cash purchases and credit purchases.

a. **Cash purchases should be verified** with the cash memos or the receipted invoices received from the suppliers.

b. All **credit purchase of goods are entered in** the purchase book. Along with the goods, the supplier sends invoices containing particulars of the goods like their weight, packing, price discount allowed or freight etc. paid on behalf of the client, sales tax etc. These invoices are serially numbered and kept in a separate file. Entries in the purchase book are done on the basis of these invoices. Auditor should see that all the invoices received have been properly entered in the purchase book.

c. **Secondly he should confirm that all the goods purchased are actually received** by the client. This is necessary because many a times, the invoices are sent by post and the goods are dispatched through a carrier like truck, railway etc.

d. There may be some time gap between the receipt of the two. Client should pay only for the goods which are actually received by him. So, there should be a suitable internal control over the purchases.

e. Goods are received by the store and the store keeper will verify that the goods received are as per the order placed and as per the invoice received. He must count, weigh and check the quality of the goods and if found satisfactory, then only the invoice should be forwarded to the accounts department for entry in the books and making of payment subsequently.

f. Auditor should study the internal check system prevalent in the organisation for purchases and then decide to what extent he should verify the purchases. If test check is to be adopted, how many items are to be selected for verification? Each organisation develops internal control for purchases according to its needs. It will usually depend on the number of purchase and the size of the organisation and the staff employed. If the existing internal control system is not found to be satisfactory, the auditor should, exercise greater care in vouching the purchase transactions. He should suggest suitable changes in the internal check system.

g. In a large concern, to start with the stores department sends purchase requisitions to the purchase department whenever certain goods are required. These purchase requisitions are to be sanctioned by the Head of the Department. He decides whether to purchase and how much to purchase. Purchase requisition contains details about the goods to be purchased, their quality quantity etc. After a decision to purchase is made, the purchase department invites tenders or quotations from different suppliers. Purchases manager studies these quotations and selects the best supplier and places order with him. Usually there are printed order forms which contain the terms and conditions. Copies of this order are sent to the stores department, accounts department and goods receiving from the supplier. The goods receiving department will verify the goods with the order placed – Quantity, quality packing etc. If everything is found satisfactory a goods received note is prepared and sent along with the goods to the stores department. One copy of this note is sent to purchase department and another to accounts department for payment.

h. On receiving the bill from the supplier, the accounts department verifies the amount from the purchase order and quantity with the goods received note and then the bill of the supplier is passed for payment.

i. The bill is first entered in the purchase book and the account of the supplier is credited. When payment is done to the supplier either in cash or through a cheque, entry is made in the cash book and in the supplier's account.

j. Thus a large number of persons are engaged in the purchase department. So, an effective internal control system alone will prevent frauds in the department. However, the possibility of frauds cannot be completely ruled out. E.g. Payment may be made for fraudulent invoices without delivery of goods. Selected suppliers only may be favoured by orders and Kickbacks or gifts are received from them. So, the auditor should thoroughly study the internal control system and see that purchases are duly authorised by some responsible officer and a proper procedure of purchase is strictly followed.

k. The auditor should ensure that payment is done only after the goods are received in proper condition. The invoice received should be in the name of the client only. The date of the invoice is within the period under audit.

l. Goods purchased should be used by the business and not by the officers of the company.

m. Each invoice should be ticked or stamped after checking so that the same may not be produced once again.

n. He should also see that trade discount is allowed at usual rate and as per the terms agreed upon while placing the order.

o. The auditor should not accept duplicate invoices under the pretext that some invoices are misplaced or lost. Under such circumstances, he must obtain a statement from the supplier.

p. The auditor should be more careful while vouching the purchases at the end of the year and at the beginning of the year. Because there is a possibility of showing bogus purchases at the end of the year to reduce profits and then to show them as returned at the beginning of the year. Current years purchases may be shown in the next year to increase profits. In both the cases, the accounts will not present true and fair operating results.

10.4.2 Vouching of Purchase Returns :

a. If the goods are not of the ordered quality or quantity, they may entered in a purchases return book or return outward book and along with the goods a debit note is sent to the supplier.

Auditor will see that the client follows a proper procedure for the return of the goods.

b. Purchase return book entries are verified with the carbon copies of the debit notes sent to the supplier.

c. As we have seen earlier, in large organisation, Purchase manager inspects the goods received and confirms that they are of the quality ordered. If they are not found to be as per the order, the goods are rejected. Rejection report is prepared and a copy of the same is sent to the accounts department. The suppliers account in the ledger is then debited. No such adjustment is necessary, if the supplier immediately replaces the defective goods by goods of satisfactory quality.

d. He should see that the client sends a debit note or the supplier sends a credit note and the same is properly accounted for in the books of accounts.

e. Quantity returned must be tallied with the store keeper's records. For manipulation of the year's profits, bogus purchase returns are shown in the beginning of the year or at the end of the year. Or this year's return's are shown in the next year or last year's returns are shown in this year. So, the auditor should verify returns in the beginning and the end of the year more carefully.

10.4.3 Salaries and Wages :

a. Payment of salaries and wages is usually a major item of expenditure in any organisation. So, the auditor should pay a special attention for the verification of this item.

b. There should be a proper system of internal control on this item. There are possibilities of payment of amount which were not due or excess of the amount due. There should be a strict control on the preparation of paysheets.

c. Calculations of the salaries or wages due should be done correctly by a responsible officer and then checked and rechecked by 2 or 3 other high level officers.

d. There are two systems of wage payment. Time rate system and piece rate system. If the time rate system is sued, a fixed amount is paid as salary or wages for each month. Here the preparation of wage sheets is comparatively easy. Every month the same amount is paid to an employee unless he is on leave without pay. His pay increases either when he completes his year of service or on a fixed date every year as per the terms of the contract.

e. If piece rate system is followed, we have to keep a record of not only his attendance but the work he has actually done during the month. Wages are calculated on the basis of the work actually done by him or goods produced by him. Besides salary, a worker may be paid dearness allowance, incentive bonus etc and a total gross salary is arrived at. From this there are deductions for Employee State Insurance Scheme, Professional Tax, Employees' Provident Fund, Income Tax, recovery of home loan vehicle loan fines and penalties etc. and a net amount payable to each employee is calculated. In popular parlance this is called a take home salary.

f. A copy at the paysheet or wages sheet after the calculations are checked is now a days sent to the banker who directly credits the net amount to the personal accounts of each employee in the bank.

g. As per Payment of Wages Act, employer has to pay dues to the employee every month before 10th of next month. Auditor should test check the calculations made in the wages sheets and get himself satisfied that the amount payable is calculated on proper lines.

h. Then various deductions made for Provident Fund, Income tax etc. should be credited to the respective accounts and paid to the concerned authorities in time as per provisions of concerned legislation.

i. There are possibilities of showing bogus names in the pay sheets and misappropriating the amount drawn in their names. So the auditor should see that such fraud is not committed.

j. If wages are paid on Time basis, an accurate record of attendance of the employees should be maintained. These days there are machines to record attendance of the employees, time of arrival and departure etc. Wherever possible, such machines should be used to correctly record their attendance. If piece rate system is in vogue, an accurate record of the work done by each worker should be maintained.

k. Wages sheets should be prepared by the staff which is in no way connected with the recording of attendance etc. If any employee is promoted during the month and his salary is increased, the auditor should personally verify the correspondence in this connection and re-fixation of his salary in the higher grade should be checked.

l. If there is overtime payment, which is usually drop 1½ or double the normal rate, the auditor should see that it is sanctioned by a competent authority and is justified. Auditor should compare the names in the wages sheets with the worker's register to detect inclusion of dummy workers and the workers who have left the company.

m. Auditor should compare the total amount paid as wages in this month with the amount paid as wages last month or any other month. If there is a great difference between the two, the auditor should enquire in to the causes.

n. If the client has a system of employing casual workers, the auditor should verify payment of wages to these workers more carefully as possibility of frauds here are more.

o. If the client has a Standard Costing system in his factory, the auditor should compare the actual amount paid as wages with the standard wages or budgeted wages calculated earlier and if the difference between the two is more, causes for the difference should be enquired in to.

p. If the salary sheet contains any payment of wages of a partner, it should be seen whether the amount is within the limit prescribed by the Income Tax Act. Every year business firms send an annual return of salaries and wages paid to the employees to the Income Tax Department.

q. Auditor should cross check the amount in the wages sheets with the statement sent to the Income Tax department.

r. Salaries and wages paid can be revenue or capital. Salary paid on installation of plant and machinery or on construction of a building is a capital expenditure whereas wages and salaries aid for the production of goods and administration of office are revenue expenses. Auditor should verify whether this classification of expenses in to revenue and capital is correctly done.

10.4.4 Payment of Rent :

We have studied earlier the vouching of receipt of rent. Almost a similar procedure is to be adopted to vouch payment of rent.

a. To begin with the auditor should go through the terms and conditions of the rental agreement entered with the land –lord.

b. He should pay special attention to the period of the lease, rent to be paid, manner of payment, amenities to be provided by the landlord etc.

c. These days, many landlords insist on payment of rent for a certain period like 3 or 6 months in advance. Some amount is also to be paid as a security deposit. If required Income tax (T.D.S.) and Service Tax is required to be deducted from the rent payable. Auditor should verify that the amount paid is properly accounted for in the books of account.

d. When we pay rent to the landlord he issues a receipt. Such receipts should be serially numbered and neatly kept in a separate file. Auditor will check payment of rent on the basis of such receipts.

e. Auditor should verify the correctness of the payment of rent as per the rent agreement. Income tax wherever deducted should be paid in to Government Account in time and a statement or a Return is filed with the Income Tax Authority in the prescribed form.

f. Rent paid as advance or as a deposit should not be charged to revenue.

g. If the security deposit with the landlord carries any interest, such interest received should be properly taken to profit and loss account.

h. Auditor should ensure that suitable adjustment entries have been passed for prepaid and outstanding rent, in the books of accounts.

10.4.5 Payment of Insurance Premium :

Business is generally concerned with General Insurance i.e. Fire, Marine, Accident Insurance, Fidelity Insurance, keyman Insurance, loss of profit insurance etc. These policies are usually for one year and they are to be renewed every year. Insurance premium depends upon the amount of the policy. Business these days is full of uncertainties and the business management has to decide what risks it wants to insure. As noted above now a days there are innumerable insurance policies covering different types of risks. Manager will consider the different risks it has to face in business like fire, riots etc. and the premium payable for insurance. Studying both the aspects, the management decides to insure certain risks and the amount for which the risk is to be covered.

a. Premium depends upon the amount of the policy. Auditor should verify the payment of insurance premium with the receipt received from the insurance company.

b. Auditor should verify that the Insurance premium is paid and the policy is renewed every year in time.

c. He should also consider whether the amount for which the policy is taken, adequately covers the risk involved in the particular business.

d. Now a day, there are number of Government and Private Insurance companies and their rate of premium and risks covered are different. So the management should study these different terms contained in the policies and then select the company and the policy most suitable to meet its needs.

e. Insurance premium paid is for one year. So, at the end of the year, suitable adjustment should be made in the books of accounts for prepaid insurance if any.

f. Sometimes the staff takes life insurance policies on their own lives or lives of their members of their family drop and pay premium through their employer. Employer deducts the premium from the salary payable to the member of the staff and directly pays the amount to the insurance Company. LIC calls such policies, salary saving scheme policies. This is convenient both to the staff member concerned and also to the Insurance Company. Staff member need not bother to pay the premium every month to the company and the company gets the amount regularly from the employer. Under these circumstances, the auditor should see that the premium amount is correctly recovered from the member of the staff and paid to the Insurance Company in time. Auditor should scrutinize the ledger and see that the transactions are accounted properly.

g. If no claim of loss is made during the year, Insurance Companies give some bonus or discount in the premium paid the next year. e.g. If you take an accident insurance policy for the vehicle and do not have any accident during the year. Insurance Company charges lower premium next year. Auditor should verify whether such bonus or discount has been allowed by the Insurance Company as per its rules or not.

10.4.6 Telephone Expenses :

a. To start with the auditor should obtain a list of telephones land line and mobile in the organisation.

b. Telephone charges are paid usually after the receipt of the bill from the telephone company. Auditor should verify whether the bill is in the name of the client only.

c. Telephone companies may require the customer to keep some amount with the company as security deposit. Auditor should verify the payment of deposit and payment of regular telephone charges are properly accounted for in the books of accounts.

d. Deposit with the company will be treated as an asset and shown in the Balance sheet whereas telephone charges paid are revenue expenses and taken to profit and loss account.

e. Personal Telephone bills of Directors and other executives should not be charged to the profit and loss account even though they are paid by the business on their behalf.

f. In good many companies, utility bills of the staff like telephone, electricity, water tax etc. of the staff are paid by the peons of the company to save the botheration of the members of the staff. However, amount thus paid on behalf of he members of the staff is subsequently recovered from their salary. Auditor should see that such recovery has been done. Auditor should also see that at the end of the year adjustment entries are passed for outstanding telephone and other expenses.

g. Auditor should study the internal control system specially over the use of I.S.D. calls. Profit and Loss account should contain the telephone expenses of the full year. If the telephone bill is paid through the bank, auditor should verify the same in the bank statement. If any new instrument of telephone is purchased, the bill for the same should be preferably capitalized.

10.4.7 Advertisement Expenses :

a. These days, business houses spend crores of rupees on advertisement. It's a necessary business expenditure and the auditor should see that the amount is properly spent Expenditure on advertisement should be sanctioned by the competent authority of the organisation.

b. Today there are innumerable types of advertisement and there are number of companies providing advertisement facility. A proper type of advertisement should be selected and a competent agency should be asked to conduct the advertisement campaign for the company. If the advertisement is done on right lines it will immensely benefit the business unit. If not, advertisement is a waste.

c. Auditor should verify the amount spent with the receipt received from the advertising agency.

d. He should see that the date of the receipt falls within the period of audit. It should be in the name of the client. Amount should be spent on the advertisement of the client's products only. First the advertising agency sends its bill for services and on receipt of the same, agencies account should be credited. Bill received should be kept securely in a file. When the amount is actually paid to the agency, its account should be debited and cash or bank account should be credited. If the firm has advertised its products in a New Paper, a cutting of the same should be obtained as a proof of the publication of the advertisement.

e. If the Advertisement. is done through signboards the business unit has to pay rent for the place of display of the board. Auditor should see that payment of rent is properly accounted for.

f. Usually commission is paid to the Advertising agencies at an agreed rate. Auditor should vouch payment of such commission. If there is a regular contract with the agency, auditor should go through the agreement and note down the terms and conditions agreed in the same.

g. If any advance is paid, it should be suitably adjusted when the final bill is paid. If the payment is done through a bank, auditor should verify the same with the bank statement.

h. If a large amount is spent on advertisement on a new product introduced in the market, some part of it may be treated as deferred revenue expenditure as the advertisement is likely to benefit the business for 2-3 years to come. In such cases, the auditor should verify whether the classification or division of expenditure in to capital and revenue is done on some sound principles.

i. Advertisements are usually issued through advertising agencies. These agencies not only arrange for the publication of the advertisement as per your instructions but also prepare the draft of the advertisement in an attractive language in a minimum number of words. They have number of experts in this field on their staff. They also prepare advertising films, arrange for booking advertisement time on radio or television etc. After the publication of the advertisement they prepare and send their bill. The auditor should verify the payment of this bill and the receipt received from the agency.

10.4.8 Vouching of a Cash Book :

We have studied so far vouching of 5 items of revenue or income and five items of expenses appearing in the cash book on debit and credit side respectively. Vouching of other items of income and expenses is to be done on the same lines. In addition to these items of income and expenses, cash book contains opening balance of cash on the debit side and closing balance of cash on the credit side.

a. Opening balance of cash i.e. cash on hand on 1st April is tallied with the closing balance of cash shown in the last Balance sheet as cash on hand.

b. Closing balance of cash is actually counted on the last working day in the presence of the auditor. One auditor can not remain present at the premises of all the clients on one day. So, he may attend counting of cash after 2-3 days as per his convenience and after making the adjustments for the receipts and payments made during the intervening period, cash on the last working day is found out. i.e. from the cash actually counted, receipts during the period after 31st March are deducted and expenses incurred during the period are added to find out the ash balance on the last working day. It is then tallied with the balance shown in the cash book. Another way out is to ask the client to pay all cash on hand on the last working day in to his bank account and withdraw cash necessary for his day to day activities from the bank on the next day.

10.5 SUMMARY

This chapter deals with an important function or technique vouching of audit viz. Vouching of five items of revenue and five items of expenditure are discussed in greater details as illustrations.

Vouching is an act of examining vouchers. It is done to establish the authenticity of the transaction recorded in the books of accounts. It is to trace documentary evidence. Voucher is a supporting document. Success of audit largely depends upon the efficiency with which the vouching function is carried out. It is the testing of the truth of the item in the books of accounts. Entries in the books are compared with the details in the voucher produced. Vouching confirms that all the transactions have been recorded and every transaction recorded has a supporting documentary evidence. Proper distinction has been made between capital and revenue items.

10.6 QUESTIONS

1) State the purpose of vouching.
2) How will you investigate misappropriation of cash sales?
3) How would you vouch cash purchases?
4) What do you understand by the term vouching?
5) “Vouching is the essence of Audit”. Explain.
6) How would you vouch purchase ledger and sales ledger or credit purchases and credit sales?
7) What do you mean by vouching? How would you vouch cash sales?
8) How would you vouch the following?
    a) Interest received on investments.
    b) Cash purchases of stationary
    c) Cash Sales
    d) Advertisement expenses
9) Select the appropriate option and rewrite the sentence.
    a) Which of the following document is not relevant for vouching of sales?
    i) Daily cash sales summary
    ii) Credit memos
    iii) Delivery Challans
    iv) Sales department attendance record.

b) ---------------- document is not relevant for vouching cash purchases.

i) Purchase invoice

ii) Goods inward register

iii) Attendance record of cashier

iv) Purchase order

c) Telephone charges should be examined on the basis of ------

i) Cash memo

ii) Agreement with telephone department

iii) Telephone bill

iv) All of the above

10) State whether the following statement is true or False.

While checking dividend received the auditor should check dividend warrant.

❖❖❖❖

11

AUDITING TECHNIQUE VERIFICATION

Unit Structure :

11.0 OBJECTIVES

After studying the unit the students will be able to:

- Understand another technique of auditing viz. verification
- Explain the Difference between vouching and verification
- Explain how to verify assets viz. Plant and Machinery, Account receivables, investments and inventory and
- Know how to verify liabilities like outstanding expenses, Accounts payable, secured loans and unsecured loans.

11.1 INTRODUCTION

Verification means the procedure normally carried out at the year end to confirm the ownership, valuation and existence of items at the balance sheet date. It also involves confirming that presentation in the financial statements is in accordance with laws governing the particular unit. Just examinations of the books of accounts with a view to ascertain their arithmetical accuracy is not enough. The auditor must verify that the various items appearing in the balance sheet are actually in the possession of the concern. In short, verification means proving the truth or confirmation.

11.2 DEFINITION OF VERIFICATION

Spicer and Pegler ,

"The verification of assets implies an enquiry in to the value ownership and title, existence and possession and the presence of any charge on the assets!

J.R. Batlibei,

"The auditor must satisfy himself that assets really existed at the date of the Balance sheet and were free from any charge and they have been properly valued. In verifying the liability, he has to see that all liabilities have been inserted at their proper figures and that no liability has been omitted."

Verification is a broader term and includes valuation of the assets and liabilities. The auditor has to report that the Balance – sheet exhibits a true and fair view of the state of affairs. So, he has to ascertain the correctness of value of assets and liabilities in the Balance sheet. Such examination is called verification of assets and liabilities.

Institute of Chartered Accountants opines that verification of assets should establish their:

a) Existence
b) Ownership
c) Possession
d) Freedom from encumbrances
e) Proper recording and
f) Proper valuation

In other words objectives of verification of assets involves forming an opinion on

i) Existence of the asset on the date of the Balance – Sheet. This is done by the physical examination of the asset.
ii) Evidence of ownership. For this legal and official documents are examined.
iii) Possession of assets free of any charge i.e. they are not mortgaged with anybody for obtaining a loan.
iv) Proper valuation. Assets should be valued as per accepted norms and policy of the management.
v) Proper accounting of the asset in the books of accounts.

The auditor has to report whether the management has conducted physical verification of fixed assets and stock from time to time.

11.3 DIFFERENCE BETWEEN VOUCHING AND VERIFICATION

Verification V/S Vouching:

Vouching and verification appear to be similar or same but they are not.

Vouching proves the accuracy of the books of accounts but the worth of the assets and liabilities is confirmed by verification. Thus there is a clear line of demarcation between the two. Vouching is to examine the correctness of the transaction in the books and verification confirms correctness of their valuation as shown in the balance sheet. Thus the auditor has not only to see that a particular asset has been actually acquired but to see that it physically exists and is owned by the client. It is to be shown in the balance sheet at a right price.

	Vouching	**Verification**
Nature of work	Examines the entries in the books of account	Examines the assets and liabilities in the balance sheet
Time	Done throughout the year	At the end of the year only
Basis	Based on documentary examination	Based on personal as well as documentary examination
Valuation	Does not include valuation	It includes valuation

Difference between the two will be more clear it we look at an example Building. If the auditor only vouches the purchase of a building he may not know whether the building is mortgaged for any loan or not. Vouching will not prove the existence of an asset. Values of assets and liabilities shown in the Balance – sheet may not be the same on the date of the balance sheet. So, to verify the existence and proper valuation, verification is necessary.

Thus, we can conclude that vouching and verification are different but equally important for proper audit.

11.4 SCOPE OF VERIFICATION

The auditor has to verify that the assets were in existence on the date of the balance sheet, they were acquired for the business purpose, proper authority has consented for their acquisition, ownership is with the client and they are not mortgaged for a loan. In other words they are free from encumbrances and are shown in the Balance sheet at proper value. Valuation of assets should be done on sound accounting principles.

Verification avoids manipulation of accounts and improper use of assets.

Procedure or Technique of verification:

1. **Inspection**:

The auditor may visit the premises of the client and physically verify the existence of the assets, second method is observation. E.g. closing stock or cash in hand on the last working day is counted by the staff of the client. The auditor may be present there at that time and observe that they are doing their job on proper lines. In the case of assets like shares and securities, mortgaged with the Bank for a loan, he may ask the concerned Bank manager to issue a certificate about their existence in his possession.

2. **Observation :**

The auditor may observe or witness the inspection of assets done by others.

3. **Confirmation :**

It means obtaining written evidence from outside parties regarding existence of assets.

11.5 VERIFICATION OF ASSETS:

Verification of assets is an important audit process. Information about the assets is collected. Their title deeds if any are inspected. The scope of the Auditor’s duty in this connection can be summarized as follows:

a) The assets were in existence on the date of the balance sheet.

b) Assets had been acquired for the purpose of the business and under a proper authority.

c) The client is the owner of these assets on that day.

d) The assets are free fro any encumbrances i.e. no loan is taken on the security of these assets or they are no mortgaged for any loan. If such loan is taken this fact should be disclosed clearly in the financial statements

e) Assets have been correctly valued taking in to account their physical condition on the date of the Balance sheet.

f) Values of different assets are correctly shown in the Balance Sheet.

Primary responsibility of verification of assets lies with the management of the business. They have full knowledge of all the assets used in the business, their utility and physical condition. So, they are in a better position to value the assets. Auditor has only to inspect the title deeds. He has only to get himself satisfied that the values shown are calculated on proper lines and are fair and reasonable.

11.6 METHODS OF VALUATION OF ASSETS:

There are two methods of valuation of assets viz. **going concern and breakup value basis.** As long as the business is in existence, the assets are valued under the first method i.e. going concern. However when the business is closed and winding up process starts, the second method is used. Going concern is one of the fundamental accounting assumptions. It is used while preparing and presenting financial statements. Where this assumption is not used, a special mention must be made of this fact in the financial statements. Wherever necessary, the auditor may seek the help of expert valuer. Auditor should make a special mention in the financial statements of the basis on which assets have been valued.

11.6.1 Methods of Valuation

The following are the various principles of valuation of assets

1. Cost Price (Going Concern Value) :

Under this method actual cost of assets are reduced by the depreciation provided. Usually this method is applied to value fixed assets.

2. Market Value :

This refers to the market value of the asset i.e. the price at which the asset is being transacted in the market. This is applied to value the current assets only when this is lower than cost of the asset. Usually market value is adopted to value items having perishable nature.

3. Scrap Value :

Assets which are useless for the enterprise may be sold as scrap in the market. The value for which such assets can be disposed of as scrap, is called as scrap value of assets.

4. Replacement Value :

This represents the value at which the existing assets can be replaced. That means the price to be paid to acquire such type of assets in the market on the date of the balance Sheet.

5. Realisable Value :

The value that can be obtained if the asset is sold in the market i.e. anticipated selling price. Usually, expenses such as commission, brokerage etc. are deducted from it.

11.6.2 Points to be considered while valuation of Assets

1. Fixed assets are acquired for the purpose of business. Revenue is earned by using these assets. Such assets are bought for use in the business and not for selling. E.g. land, building, machinery etc. All such assets (except land and goodwill) loose their value by use. Their resale value goes on decreasing by their use. Mines and quarries are notable examples. They are called wasting assets. Their value diminishes on exploitation. Other assets also loose value by their use and obsolescence. Floating assets are acquired for resale to earn profits. Goods manufactured are also for resale. Such assets are quickly convertible in to cash. E.g. Stock in trade, bills receivable, bank debts etc.

2. Fixed assets are shown in the balance sheet at cost less depreciation up to the date of the balance sheet. Cost means not only the price paid for these goods but also incidental charges to put them in working condition like installation expenses, doing necessary construction to fix the asset in the factory and doing necessary electric fitting etc. Their present market value is not taken in to account because they are not meant for sale. Thus fluctuations in their market prices are ignored. If any government grant is received on the purchase a of a particular asset this amount is deducted from their value. Grant received can also be treated as deferred income and transferred to the profit and loss account in suitable installments.

3. On wasting assets, depreciation is calculated under depletion method of depreciation. E,g. If a mine is purchased for Rs. 10 lakhs and it is expected to have 2 lakh tons of ore, if during the year 50 K (k means thousand) tons of ore is extracted, the mine will be shown in the balance sheet at Rs. 7.50 lakhs.

4. Floating assets like stock in trade. Bills receivable, sundry debtors etc. are shown at realisable value i.e. cost or market price whichever is less. Purchase price includes freight, duty and taxes paid on their purchase.

5. Investments are of two types – current investments and long term investments. Current investments are sold from time to time. So, they are shown at cost or market price whichever is less. Long-term investments are shown at cost. However their market value may be shown in the brackets for information. In other words current investments are valued as floating assets and long term investments are valued like fixed assets.

6. Verification of fixed assets consists of examination of related records and physical verification. Management is required to physically verify the fixed assets in the business as per CARO 2003. If they come across any discrepancy, they should be properly dealt with in the books of accounts (CARO – Company Auditor's Report Order issued by I.C.A.I)

7. Intangible Assets like goodwill, patent rights, know – how etc. are valued on cost basis. If they are acquired by a non – cash transaction, then the fair market value is to be taken. Auditor should see that they are shown in the Balance – sheet till they are fully written off.

8. Fictitious Assets are lump sum expenses likely to give benefit to the business for more than one year. They are written off over a period of time for which they are likely to benefit the business. They are shown as assets in the Balance – sheet till they are fully written off. E.g. Preliminary expenses, discount on issue of debentures, discount on issue of shares etc. They are called fictitious assets because they do not have any realisable value. They are shown in the balance sheet at cost less the amount written off so far to the profit and loss account. The auditor should see that a reasonable amount has been written off every year.

CHECK YOUR PROGRESS:

1. "Vouching and verification appear to be similar or same but they are not." Explain.
2. Filling in the blanks;
   a. As long as the business is in existence, the assets are valued under the------------------------.
   b. When the business is closed and winding up process starts, the assets are valued under the------------------------.
   c. Intangible Assets like goodwill, patent rights, know – how etc. are valued on cost basis.
   d. Floating assets like stock in trade. Bills receivable, sundry debtors etc. are shown at ---------------value.

e. Investments are of two types ----------------- investments and ------------------investments.

f. Current investments are valued as ---------- assets and long term investments are valued like ----------- assets.

g. The price at which the asset is being transacted in the market means ----------------------.

3. Define the following terms:
   a. Verification
   b. Valuation
   c. Inspection
   d. Confirmation
   e. Observation

11.7 VALUATION OF ASSETS :

Here the position of the Auditor is a little different because he is not supposed to be an expert in this field. He has no technical knowledge. He has to depend upon the valuation made by the Directors expert valuers, surveyors etc. to a large extent. He has to see that the assets are valued by these people on reasonable ground. Auditor can not guarantee the correctness of the valuation. But he must get himself satisfied that valuation done is fairly satisfactory. Auditor should see that the valuation is done according to certain accepted principles of accountancy. Auditor should carefully inspect the available documents to arrive at the correct value of assets. If there is any room for suspicion, the auditor should probe deep in to the matter.

The auditor is required to report about the valuation of the assets on the date of the balance sheet. However, if before the completion of audit any major event has happened regarding these assets, the auditor should take cognizance of such an event and take note of the same in his report. Many a times a foot note is added to the financial statements. Suppose the balance sheet shows the existence of a building of Rs. 10 lakhs but after the date of the balance sheet there is a fire in the premises and the same is completely destroyed. This fact should be shown as a foot note in the financial statement and included in the auditor's report. Whatever is the policy of the management regarding valuation of different assets, there should be consistency in the same. This policy should not be changed from year to year. Policy should be changed only when it is absolutely necessary and when such change is made, it should be either mentioned in the financial statements or included in the auditor's report. Auditor should mention the effect of such policy change on the profits of the concern. Auditor is expected to test check the calculation of valuation of assets.

- **Examples of valuation of certain assets.**

1. Plant and Machinery:

Business units which use number of machines in their business usually maintain a Plant Register. To begin with the auditor should ask any responsible officer of the business unit to supply him a list of plant and machinery used in the business. This list should be complete in all respects.

If a plant register is maintained, it should contain the following details about each machine used in the business.

a) A separate page or sufficient space is provided for each machine.

b) Name and description of the Machine.

c) Number or code number allotted to each machine for easy identification.

d) Name and address of the supplier.

e) Location of the plant.

f) Date of installation.

g) Purchase price, cost, plus installation and other items of expenditure to be capitalised.

h) Expected life of the Machinery. This should be estimated by a technical expert.

i) Rate of depreciation and the method of depreciation followed.

j) Amount of depreciation written off year wise.

k) Details of the amount spent on its repairs. Date of repair, parts replaced amount spent and nature of repair.

l) Any other information such as any charge created on the same etc.

- **Auditors duty**

a) The auditor should verify the asset by comparing the schedule with the details in the plant register. The machinery purchased during the year should be vouched by reference to the invoices and other relevant vouchers. If any machinery is sold during the year, auditor should verify that the sale has been properly accounted for in the books of accounts. Profit or loss on sale of the Machinery should be duly recorded.

b) If any plant is located or installed in a foreign country, the auditor should require that the engineer concerned should furnish a certificate reporting whether the plant is working efficiently or not. Such report should be compared with the details in the Plant Register or schedule of plant.

c) At the end of the year a statement is prepared from the Plant Register showing opening balance, sale and addition there to during the year in respect of various items of machinery and plant. Its total is then reconciled with the balance in the General Ledger.

d) It any new machinery is purchased it is as usual vouched with the invoice and receipt of money issued by the supplier. However, it any part of the Machinery is manufactured in the factory of the client, the auditor should verify whether correct amount spent on material, Labour etc. is allocated to the machinery account. In addition drop the auditor may ask any senior engineer of the client to certify the correctness of the value of the machinery. If any machinery or part of it is sold, scrapped or destroyed, the auditor should ascertain the correctness of profit or loss arising therefrom.

e) Though it is the duty of the management to ensure that the fixed assets are in existence, the auditor should periodically physically examine the different machines in the premises. Such verification may be done every three years or five years depending upon the size of the organistion.

f) Plant and machinery is a fixed asset and is valued in the Balance Sheet at cost less depreciation. There are different methods of depreciation in use and a business concern can choose any method that is found suitable to it. However Income Tax department adopts written down value method only for calculating taxable income. So using the same method will be more convenient as adjustment in the books of accounts are not necessary. Any method adopted, should be consistently used because the amount of depreciation under different methods is different and find profit will also be different. If the method of depreciation is changed in any year, this fact should be clearly mentioned on the financial statements and the report of the Auditor. If any year the plant and Machinery is revalued the depreciation should be calculated on the revised value and not on the historical value.

g) Large concerns maintain a special Plant Register which contains full information about each machinery like its cost date of purchase, amount spent on repairs, name and address of the supplier etc. Thus the Register contains full history of each plant. As and when any plant is to be replaced, this information helps the management to select the supplier for the new machine.

h) Under Indian Companies Act it is mandatory for the limited companies to maintain a Register of Fixed Assets.

i) Auditor should get himself satisfied that adequate amount of depreciation is provided on plant and machinery. He may take here the help of a technical expert to estimate the number of years for which the machinery is likely to work satisfactorily.

j) Sale and acquisition of plant and machinery should be done only by a duly authorised person. Auditor should verify from the available documents that the plant and machinery is owned by the client and is not mortgaged with any financial institution for a loan. If it is found to be mortgaged, auditor should verify the relevant documents and see that the fact of this charge created is clearly disclosed in the financial statements. Present market value of the machine should not be taken in to account.

k) **Machinery under Hire Purchase Scheme :**If the client has acquired plant and machinery on Hire Purchase Scheme the auditor should inspect the Hire Purchase Agreement and terms of payment. He should further confirm that the instalments are being paid regularly as per the agreement. Usually the title of the machinery is passed on to the purchaser only after the last instalments is paid. However, it depends upon the agreement between the concerned parties. So the auditor should look particularly for this clause in the agreement. Hire purchase instalments paid include interest. Auditor should see that only part of the cash value of the machine paid is capitalised. Interest paid is taken to profit and loss account. However, deprecation should be calculated on the entire cost price of the asset and not merely o the part of the cash price paid. If any machinery is taken on hire it should no be shown in the balance sheet.

l) **Imported Machinery :**If the machinery is imported, the auditor should see the agreement with the foreign supplier. He should also see whether the client has received import licence and permission of the Reserve Bank for the remittance of the price of the machine.

2. Fixtures and Fittings :

Fixture is an asset fixed to land or building and forms part of the machine. Fittings are fitted on the wall like electric fittings. Cost of fixtures and fittings are added to the cost of the machine.

3. Accounts Receivables :

Accounts Receivables or Book Debts are usually the amounts recoverable from customers to whom goods have been sold or services have been rendered. In addition they also include other claims which a business may carry as an asset in its balance sheet. Advances or loans are separately dealt with.

- **Procedure for verification of debtors**

Exact procedure to be followed is decided by the auditor on the basis of his past experience. The usual procedure for verification of debtors is as follows

1. Examination of Records :

a. The auditor should carry out an examination of the relevant records personally. He should find out accuracy, validity and recoverability of every debt. Auditor may not go deep in to the matter if there is an efficient internal control system.

b. Before starting his work, the auditor may ask the accountant to prepare a schedule of sundry debtors on the date of the Balance Sheet. The auditor should verify items in this schedule with the balances in the personal accounts in the ledger.

c. Subsequent realisation of these book debts should be verified wherever possible. Correspondence if any conducted with the customers should also be looked in to.

d. While examining the schedule of debtors with the accounts in the ledger auditor should pay special attention to long overdue balances.

e. Terms of credit should be studied.

f. He must verify in greater details the accounts of persons who have repeatedly not paid their dues within the credit period allowed.

g. The auditor should also see whether the customer has stopped purchasing goods regularly from the client.

h. Special attention should be paid where though some amount is being regularly received but the outstanding amount is increasing.

i. Some customers may have paid current bills regularly but they have either not paid or paid fully some past bills. Auditor should enquire in to the causes.

j. Cheques received or bills accepted are dishonored on many occasions. The debt may be under litigation or arbitration. The debtor has closed down his business or become insolvent. There is a law of limitation under which you can not go the court against the party if the debt is more than 3 years old and there is no correspondence or reminder during these three years. Auditor should find out if there are any such time barred debts in the schedule.

k. Auditor should scrutinize the accounts which are written of as bad debts or where excessive discounts have been allowed.

l. Client may have made a claim for compensation for loss suffered with an insurance company or he might have applied to the Government for Export Incentive. Such claims should be shown in the books only if they are likely to be realised. So, the auditor should conduct a proper enquiry in the matter and see that only realisable amount is shown in the books of accounts and Balance Sheet.

2. Direct Confirmation Procedure :

To confirm the correctness of the amount due from different customers:

a. The auditor should send to each one of the customer, copy of his personal account in the ledger. In this account there are entries about the goods sold to the person from time to time and the amount received from him are recorded. Final balance due from him on the date of the Balance sheet is also shown. The customer is requested to confirm the correctness of the balance by sending a letter directly to the auditor.

b. If any receipt of money or return of goods from the customer are not found accounted for, the customer will immediately bring this fact to the notice of the auditor and the auditor can look in to the matter. However, such method of directly sending letters and getting confirmation from the customers, can only be adopted by the auditor after getting permission from the client. Such permission of the client is mandatory, because after all the auditor is an outsider. He can not interfere in the relationship between the client and his customer without obtaining his consent. It should be remembered here that most of the customers will not take the trouble of sending a letter if the account is correct. They will come forward only if the balance shown against their name is incorrect. So, the auditor will presume that where no reply is received from the customer, his account is correct. This is supposed to be the best method of ascertaining correctness of the debtors balances.

c. Sometimes, the client may ask the auditor not to write for confirmation of balances to some of the customers. Then the auditor should enquire in to the reasons for such a request from the client. Here the auditor has two options. He may either request the customer to reply only if there is any discrepancy (negative form) or everybody is requested to reply whether the balance is correct or not (positive form).

d. If the internal control system is effective and the outstanding balances are small, the auditor may use negative option. However, if the internal control is not effective or large balances are outstanding, he may use a positive system.

e. The success of this system is finally dependent upon the response the auditor receives from the customers. People by and large are lethargic and do not readily reply to such enquiries.

f. Some auditors, instead of sending letters to all debtors, send letters only to selected few. In selecting customers, usually those with large balances and with credit balances are invariably selected customers account may show credit balance (1) if the amount received is recorded twice or (2) advance is received against future order. In other words, the auditor adopts a test check.

g. If discrepancies are noticed in some accounts, the auditor will conduct further enquiry and find out the causes of such discrepancies.

3. Analytical review procedures :

Analytical review procedure may be adopted. It involves following steps.

a) Closing balances of the debtors are compared with corresponding figures of the last year.
b) Actual sales and debtors balances may be compared with the figures of budgeted sales and debtors balances.
c) Relationship between actual and budgeted debtors and sales figures may be studied.
d) Current year's aging figures may be compared with aging figures of the previous year. Aging figures means balance of the debtors which are outstanding for a long period.
e) If the ratio of debtors in other units in the same industry are available, they may be compared with the figures of this unit.

Methods suggested above are only illustrative. The auditor may decide exact procedure to be used in every unit based on his professional experience and judgement.

- **Disclosure :**

The auditor should satisfy himself that the debtors are properly disclosed in the financial statements. If there are any legal provisions applicable to a particular type of units regarding disclosure, the auditor should see that these legal requirements are complied with e.g. Indian Companies Act. Contains following provisions. Debtors are to be classified as follows :

a) Debtors considered good and fully secure.
b) Debts considered good for which company holds no security other than the debtor's personal security.
c) Debts considered doubtful. Etc.
Debtors outstanding more than six months and other debtors are also shown separately in the balance sheet.

- **Objectives of Verification of Book – Debts :**

a) To establish accuracy.
b) To establish validity as claims
c) To establish collectability and their realisable value.
d) Fair disclosure in the financial statements in accordance with legal provisions.

- **Auditor's Duty;**

a. Auditor should be satisfied about the adequacy of the reserve for potential bad debts. What percentage of the debts should be provided as Reserve for doubtful debts (R.D.D.) is to be decided by the Management; still it is the duty of the Auditor to get himself satisfied that adequate provision has been made by the management for this purpose. If he is not satisfied he should ask the client to make further provision and if he refuses to do, the auditor should write about this in his report. The auditor will be held responsible, if he fails to verify the adequacy or otherwise of the provision made and report it to the management.

b. In the case of Hire purchase debt, installments yet to be received should not be shown as book debts because the Hire Purchaser has a right to return the article purchased under this scheme at any time and stop payment of further installments. However, installments due by the date of the Balance sheet should be shown as debts.

c. Similarly the auditor should also see that the book debts balances do not include goods sent out on sale or return basis or goods sent on consignment basis.

d. Whenever there are credit balances in debtor's account the same should not be deducted from other debtors debit balance. Such credit balance is to be shown on the liability side of the Balance Sheet separately.

e. Decision about transferring an account to bad debts account should be taken only by a highly responsible officer. Because there is a possibility of the amount received from a customer being misappropriated and his balance is transferred to bad debts account. Auditor should verify that before transferring a balance to bad debts account, all out efforts have been made to recover the same. Time barred debts or debts due from the parties who are declared as insolvent should invariably be transferred to bad debts account as their recovery is hardly possible.

f. The auditor should obtain a letter from the management containing a clear confirmation regarding recovery of debtors and their classification for Balance Sheet purposes.

4. Investments :

Investments may be in Share certificate, Government Bond certificate, Government Loan certificate, Debenture Certificate, Mutual Fund Certificate or statement etc. Extra or idle funds with the concern may be invested in shares, bonds, debentures etc.

- **There are two types of investments:**

a. Trading Investments or current investments: Trading investments are regularly bought and sold to earn profits from the changes in their prices. In such cases investments are treated as current assets and valued accordingly at cost or market price whichever is lower.

b. Long term or other investments. On the other hand if the investment are a long term investments bought for earning interest or dividend on them, they are classified as fixed assets and valued at their historical cost i.e. the cost at which they were purchased. However for the purpose of giving information to the reader, market price of such investment is shown in the bracket in the inner column.

Thus investments may be fixed assets or current assets depending upon the purpose for which they are bought.

- **Auditors Duty**

a. If a large amount is found invested in different types of securities, the auditor may ask any responsible officer of the client to provide him an exhaustive list of such investments. Just like a Plant Register many concern maintain an Investment Register giving full details of each scrip like its face value, purchase price, rate of interest date on which interest is due, date of their maturity name and address of the company, the date on which the interest is actually received and so on.

b. The auditor should physically inspect the investment certificate as per this register. These days usually the investments are not maintained in physical form because all transactions on the stock exchange are done usually through Demat accounts. If the investments are in demat form, the auditor should ask the depository participant (popularly known as D.P.) to supply a copy of the demat account of the client with him and verify the existence of the investment.

c. If the investments are in a physical form, the auditor should complete their verification at one stretch so that the same certificates may not be produced twice.

d. If the number of such certificate is very large, if may not be possible to complete verification in one sitting. In such a case, the auditor should keep the verified certificates separately under his control or custody.

e. Sometimes such certificate are with the trustees. Then the auditor should inspect the trust deed and see whether such an action is permitted by the trust deed. Securities may also be kept with the bankers for safe custody. Then the auditor should get a list of investments with them from the trustees or bankers.

f. Client may have taken a loan from the bank on the security of such certificates. In that case also the certificates are with the bankers. So, the auditor should enquire whether the certificate are deposited with the bankers for safe custody or as a security against any loan. If any loan is taken, the auditor should further enquire whether the loan is taken for the purpose of the business and properly accounted for in the books of account. Here there is a possibility that top executives of the client, might have used the certificates to obtain a loan for their personal purpose. When any loan is taken against the security of investments, this fact should be clearly disclosed in the financial statements.

g. If the investments are of non-trading investments or investments of a permanent nature, they are to be shown in the Balance Sheet as fixed assets and valued at their historical cost. However, here also their market price on the date of the balance sheet is shown in the inner column in a bracket for the information of those who read these financial statements.

h. The auditor should also ask the client to supply a list of securities bought and sold during the year under audit. Decision about the purchase or sale of investments should only be taken by top authorities. Auditor should verify whether their consent has been duly obtained. Acquisition and disposal of shares and other securities are done through the brokers on the stock exchange. The auditor should verify these transactions with the contract note, bill of cost etc sent by the brokers. Investments can be purchased or sold cum interest / dividend or ex-interest / dividend. Auditor should verify that such transactions are properly accounted for in the books of account. If the amount of purchases and sales is substantial, the auditor should check the price paid and received with the stock exchange quotations of those respective days. Expenditure incurred on account of transfer fees stamp duty etc. are included in the cost of the investments.

i. Dividend declared during the year under audit or before completion of the audit but for the period covered by the audit is treated as the income of the same year though not actually received.

j. Auditor should be satisfied that there is a valid evidence of their ownership and custody of the investments and they should be properly classified in the Balance Sheet as current and long term investments.

k. If there is any right issue, auditor should verify whether the client has subscribed for them fully or sold the right.

l. If the client holds any partly paid shares, the auditor should see that the uncalled amount on these shares is shown in the balance sheet as a contingent liability. If any investments are held in the name of persons other than the client, the auditor should confirm their ownership.

5. Inventory or Stock in Trade :

Valuation of stock in trade has a great impact on the determination of the annual profits. Incorrect treatment of stock, would affect the profits of not only this year but also of next year. So, it is an important duty of the auditor to verify the existence of the stock in trade at the end of the year and that the same has been valued correctly on a consistent basis. Over or under valuation of the inventory will lead to manipulation of accounts.

- **Auditor's Duty**

a. The precise duties of the auditor in connection with the verification of the stock are no where defined. So, it can be included in the general responsibility of the auditor. In a well known English case of Kingston Cotton Mills Co. Ltd. (1886) the judge observed that it is no part of his duty to take stock. He can rely on some skilled person to enable him to value closing stock at its proper value in the Balance Sheet.

b. Valuation of closing stock involves a lengthy process of physical inspection of variety of stock counting or weighting the same and then valuing. Again it is to be done on the last working day and at one stretch. The auditor is justified in believing in the tried servants of the company in whom confidence is placed by the company. He is entitled to assume that they are honest. However, he has to take reasonable care. The auditor is neither a stock taker nor a valuer. He will be guilty of negligence if he fails to take notice of all available evidence from which it could be reasonably concluded that the stock is properly valued.

c. Thus, to take stock is not the duty of the auditor. He can rely on the statements and reports made available to him by the client. Of course there should be no room for suspicion. He can rely on the certificate issued by the management about the value of the closing stock. Auditor would be failing in his duty if he does not take reasonable care of verifying the correctness of the statements of the stock provided to him.

d. Auditor has to see whether the stock has been valued after following a reasonably correct procedure. It is the responsibility of the management to determine the quantity and the value of the inventory. Management should verify that stock included in the statement actually exists on the last working day. A suitable procedure should be followed for this purpose. Management's responsibility in this respect, is in no way reduced even if the auditor is personally present on the day of stock counting.

- **Procedure for verification of inventory :**

The exact procedure to be followed in each case is decided by the auditor on the basis of his professional experience and judgement.

a. Examination of records :

Business units usually maintain detailed stock records in the form of stock ledgers. Receipt, issue and balance of each major item of stock is recorded in the ledger or register. The extent of examination of different records available depends upon the facts and circumstances in each case.

b. Attendance at Stock Taking :

Physical verification of inventories is the responsibility of the management. But it is better if the auditor is personally present at the time of stock taking. The auditor would study the internal control system followed in the firm in this connection and then decide how much time he should spend on personal attendance. He can study the method of stock taking and suggest any changes in the same if he feels necessary.

There are two methods of stock taking (1) Periodical Stock taking and (2) Perpetual stock taking. Under the first system, stock taking procedure is carried out periodically usually only once at the end of the year. Under the second method stock taking or physical verification is carried out throughout the year. Different items are counted at different time. In some concerns, both the systems are used. Perpetual inventory system is used for some items whereas periodical counting is done for others. Auditor will study the system followed by the client and express his opinion abut the same. Anyway he should be satisfied that whatever method is adopted the valuation of the stock is correct. Auditor may conduct test check and get satisfied that the system is satisfactory. High value stock should be selected for test checking. Physical condition of the stock should also be observed. As far as possible, there should be no movement of stock during the period of physical verification. Goods purchased but not received but accounted for should be included in the stock whereas goods sold and accounted for but not actually dispatched, should be excluded.

It is the Auditor’s duty to see that

a) Adequate stock records are maintained.
b) Satisfactory procedure is followed for physical verification.
c) Material differences if any between the book records and physical count are investigated.

Defective, damaged, obsolete, slow moving items should be identified and dealt with separately. They are to be valued at their present realisable amount.

c. Confirmation from third parties :

If significant stocks are held by third parties, the auditor should enquire into the reasons for the same and obtain a written confirmation from such third party about the stocks held. Eg. Stocking unsold with the consignee.

d. Valuation and Disclosure :

It is the duty of the auditor to see that the inventory is valued on proper basis. It should be according to normal and accepted principles. Chartered Accountants Institute has issued certain guide lines in this connection. The auditor should examine the basis on which valuation has been done. He should look in to the stock sheets and purchase invoices of the stock. Proportionate overhead expenses may be added to the cost. The auditor may reconcile the financial figures with the figures in the cost accounts. If standard costing system is in vogue, he may study the causes of variances where the variations are abnormal. Defective, damaged and obsolete stock should be valued separately at their reaslisable value.

Inventories should be properly disclosed in the financial statements. Where there are any legal provisions in connection with the disclosure of the stock, the auditor should see that they have been complied with.

e. Analytical Review Procedure :

In addition to the procedure discussed so far, analytical review may also be undertaken.

1) Quantity of opening stock, purchases, production, sales and closing stock figures may be studied.
2) This year's closing stock figures may be compared with the figures of the last year.
3) Sales of this year in quantity and price may be compared with their corresponding figures of the last year.
4) Gross profit of this year may be compared with the Gross Profit of the last year.
5) Different ratios of this year in connection of stock may be compared with those of the last year.
6) Ratios of this unit may also be compared with the ratios of the other units in the same industry if the relevant figures are available.

6. Work in Progress :

In a manufacturing concern the stock may consist of completed units and units in process or work in progress. Hence in arriving at the closing stock figure the auditor should include the cost of work in progress in cost of completed units. The auditor should see that the work in progress is valued on proper lines. Cost of work in progress should include cost of raw material used plus labour and overhead charges incurred on the same.

When we say cost a question may be asked cost of which date. Normally FIFO (First in First Out) system is followed and the closing stock is valued under this method. In other words it will be the cost at which the latest purchases have been made, as earlier purchases are supposed to be sold or used.

11.8 AUDIT OF LIABILITIES

Liabilities are the financial obligations of an enterprise. Like loans, trade creditors, instalments payable under Hire purchase agreements etc. Am important feature of the liabilities is that they are represented by documentary evidence. Liabilities originate from third parties which deal with the client.

Verification of liabilities is as important if not more, than the verification of assets. If any liability is omitted or under or over stated, the balance sheet would not show a true and fair view of the state of affairs of the concern. E.g. If liability for payment of any expenditure is omitted, the profit and loss account will not show the correct profit earned by the concern. Moreover as the outstanding expense is not shown in the balance sheet and it will not show the correct financial position of the concern. On the other hand it any fictitious liability is included, profits shown will be lower and the financial position revealed by the Balance sheet will be found to be misleading. So, the Auditor should carefully verify that the liabilities stated in the Balance sheet on the last working day are in fact payable and all liabilities payable have been accounted for. The auditor may ask any responsible officer to certify that all liabilities have been included in the books of account and all contingent liabilities are also shown as a foot note in the Balance Sheet.

- **Verification of some liabilities by the Auditor.**

1. Outstanding Expenses :

Auditor's Duty

a. To begin with the auditor should ask the Chief Accountant or any other responsible officer dealing with the accounts of the client to supply him a list of outstanding expenses classified by nature of expenses.

b. Further, he should be asked to certify that all the outstanding expenses have been included in the current year's accounts.

c. The amount paid on various accounts should be verified from the entries in the cash book. All unpaid expenses on the date of the Balance sheet should be included in such a list.

d. Auditor should compare this year's outstanding expenses with those of the last year. If there is a major difference between the two, he should enquire in to the reasons for the same.

e. He should examine the documentary evidence supporting the outstanding expenses. Usual outstanding expenses are last month's salary and wages, rent, legal expenses, audit fees etc.

2. Accounts Payable / Sundry Creditors :

a. The first task of the Auditor is to ask for a schedule of creditors. The same should be checked with the balances in the ledger accounts and statement of accounts received from the creditors

b. Purchase ledger should be checked with the books in the original entry, invoices, credit notes etc.

c. If there is a system of allowing discount by the suppliers, the auditor should confirm that the usual discount has been allowed in the invoices.

d. If the creditor allows cash discount for prompt payment of dues, the auditor should see that all efforts are made by the client to pay the suppliers within the prescribed time to earn necessary discount.

e. Auditor should see that all purchases during the year are accounted for. Special attention should be given to purchases in the last month of the year as they are likely to be bogus.

f. For manipulation of accounts, bogus purchases are shown in the last month to reduce profits and they are shown as returned at the beginning of the next month.

g. If any debt is found unpaid for a long time, the auditor should enquire into the causes for the same. It is just possible that instead of paying the amount to the creditor, it might have been misappropriated.

h. Sundry creditors are verified on the lines of the sundry debtors. A copy of the statement of account of each creditor may be sent to him and the supplier may be asked to confirm the correctness of the same directly to the auditor. Of course before doing this, the auditor should take necessary permission of the client.

i. Auditors should verify that the goods returned are genuine. Similarly, he should check some invoices and see that the goods shown in the invoice are actually received by the client. If control accounts are maintained, the auditor should check that the total of the schedule of creditors tallies with the control accounts. He should examine the correspondence and other documentary evidence and satisfy himself about the validity, accuracy and completeness of the creditors.

j. If any advance is received for the services to be rendered, this amount received should not be taken as income but shown in the balance sheet as a current liability, (Income received in advance).

k. As stated earlier the auditor should pay special attention to long standing items in the schedule of the creditors.

l. He should look in to claims for short supplies, poor quality, discount commission etc.

m. Similarly he should look in to the correctness of any transfers from one account to another. He should look into the causes of such transfers.

n. At the end of the year, he should see whether any more adjustments are necessary to be made. Any unusual payments made at the end of the year should be thoroughly scrutinized.

He should also see whether these entries have been reversed in the next year.

o. Finally, he should get himself satisfied that no material liability at the end of the year is omitted internationally or through oversight.

3. Secured Loans and Unsecured Loans :

Loans and borrowings form an important part in any business. No businessman carries on his business using only his own funds. Even in the Tata group of companies, Tata family hardly owns 5% of the capital. Thus almost all business units have to take loans for running their business. Loans are of two types – secured loans and unsecured loans. Both the types of loans have many things in common. So, let us consider them together.

a. To start with, the auditor should examine the partnership deed or Memorandum of Association to find out the powers of the client to borrow money.

b. There are no restrictions on the sole proprietor regarding the amount to be borrowed. He can borrow as much as he needs. However, as his assets and repaying capacity is limited, he cannot borrow on a very large scale. His capacity to repay, puts a limit on the amount he can borrow.

c. Amount borrowed should be within the permissible limit. The auditor should examine the loan agreement and note down the terms on which the money is borrowed, like rate of interest to be paid, security to be offered, period of the loan, method of repayment etc.

d. He should verify the cash received from the entry in the cash book and a duplicate of receipt passed on to the lender.

e. In case of bank overdraft, he should scrutinize the agreement with the bank.

f. If any security is offered against the loan, he should enquire into the details of the security given. This fact should be clearly disclosed in the balance sheet.

g. The auditor should find out whether there was a real need for such loan and the terms of the loan are reasonable and not against the interest of the client.

h. He should also see that the loan taken is used for the very purpose for which it was taken. If any property is mortgaged, the mortgage deed should be registered with the Government Authorities.

i. Interest and installments paid on the loan should be verified with the receipt issued by the lender. Such payment should be according to the time schedule agreed in the agreement. If such installments are not paid in time as agreed to, it will affect the goodwill and credit worthiness of the client in the market.

j. With the permission of his client, he should confirm the balance of the unpaid loans directly from the lenders.

k. In the case of a bank overdraft, a certificate of balance may be obtained from the bank. If any interest is outstanding on the date of the balance sheet, the auditor should see that the same is shown in the Balance Sheet. The rate of interest agreed to be paid on the loan should be reasonable taking in to account the prevailing market rate.

l. Loans in business are for large amounts. So they are normally secured. If any loans are unsecured, there will be no charge on any assets of the concern.

We have discussed above verification of 4 assets and 4 liabilities as illustrations. All other assets and liabilities are also to be verified almost on the same lines.

11.9 SUMMARY

The procedure of verification is carried on at the end of the year. The purpose of verification is to verify ownership, valuation and existence of different assets and liabilities, at the end of the year. Merely checking the entries in the books of accounts is not enough. The auditor should confirm that these assets and liabilities do really exist on the date of the balance sheet.

Verification is an enquiry in to the valuation, ownership, title and existence and possession of assets and liabilities. It also checks whether there is any charge on the assets.

As per the instructions of the institute of Chartered Accountants CARO (Company Auditor’s Report Order) it is the duty of the management to verify the existence of fixed assets from time to time. Auditor has to state in his report whether the management has done this or not.

There is a lot of difference between vouching and verification. In vouching entries in the books are checked. This process can be carried out throughout the year. Documentary evidences are verified. Verification examines assets and liabilities shown in the balance sheet at the end of the year. It includes valuation. However, vouching and verification are equally important for audit.

11.10 QUESTIONS

1. Write a short note on objectives of verification.
2. State the importance of verification and valuation of stock from the point of view of an auditor.
3. What are the steps to be taken by the auditor in verification of stock?
4. How would you verify.
   a) Plant and Machinery
   b) Accounts receivable
   c) Investments
   d) Inventory
   e) Outstanding expenses
   f) Accounts payable
   g) Secured loans
   h) Unsecured loans
5. What are the points to be considered by the auditor during verification?
6. What is verification? How does it differ from vouching?
7. Write a short note on objectives of verification of assets and liabilities.
8. Select most appropriate option and rewrite the following sentences.

a. Debtors are valued at
   i) Book value
   ii) Decided by the customer
   iii) Realisable value
   iv) As per articles of Association

b. Stock of goods on consignment should be valued at -----------
   i) Invoice price
   ii) Cost plus proportionate expenses
   iii) Cost or realisable value whichever is less
   iv) None of the above

c. ---------------- asset which is not subject to physical verification.
   i) Cash
   ii) Debtors
   iii) Stock
   iv) Furniture

9. True or false
   a) Verification protects against misuse of assets.
   b) Mortgage means a charge on the immovable property to secure a debt.
   c) A method of valuation of assets should not be consistent.

❖❖❖❖

Question Paper Pattern
T.Y.B. Com.
w.e.f. 2015-2016

Maximum Marks: 100

Questions to be Set: 06

Duration: 03 Hrs.

For Management Accounting and Auditing

Q-1	Objective Questions **(10 marks for each subject)**	
	A) Sub Questions to be asked 12 and to be answered any 10 **(Management Accounting)**	10 Marks
	(*Multiple choice / True or False / Match the columns/Fill in the blanks)	10 Marks
	B) Sub Questions to be asked 12 and to be answered any 10 **(Auditing)**	
	(*Multiple choice / True or False / Match the columns/Fill in the blanks)	
Q-2	Full Length Practical Question **(Management Accounting)**	15 Marks
	OR	
Q-2	Full Length Practical Question **(Management Accounting)**	15 Marks
Q-3	Full Length Practical Question **(Management Accounting)**	15 Marks
	OR	
Q-3	Full Length Practical Question **(Management Accounting)**	15 Marks
Q-4	Full Length Question **(Auditing)**	15 Marks
	OR	
Q-4	Full Length Question **(Auditing)**	15 Marks
Q-5	Full Length Question **(Auditing)**	15 Marks
	OR	
Q-5	Full Length Question **(Auditing)**	15 Marks
	(10 marks for each subject)	
Q-6	A) Theory questions **(Management Accounting)**	10 Marks
	B) Theory questions **(Auditing)**	10 Marks
	OR	
Q-6	Short Notes	
	A) To be asked 03 and to be answered any 02 **(Management Accounting)**	10 Marks
	B) To be asked 03 and to be answered any 02 **(Auditing)**	10 Marks

Note: Practical question of 15 marks may be divided into two sub questions of 7/8 and 10/5 Marks.

T.Y.B.Com {April – 2016}
Accounts Group (REVISED) (Paper - V)
Financial Accounting & Auditing
Introduction to Management Accounting & Introduction to Accounting

QP Code : 17583

(Revised Course – New Pattern)
(3 Hours) **[Total Marks: 100**

N.B.: 1. **Working Notes** should form part of your answer.
2. Proper **presentation** and **neatness** is essential.
3. Use of **simple calculator** is allowed.

Q.No. 1.A. Multiple choice question (**Any Ten**) **(10)**

1. Assets that are expected to be converted into cash in the normal course of business ________________.
a) Tangible assets b) Current assets
c) Fixed assets d) Depreciable assets

2. An asset which does not have a physical identity________________________.
a) Fixed assets b) Wasting assets
c) Intangible assets d) Current assets

3. Following is not a Quick Liability____________________________.
a) Unclaimed dividend b) Public deposits
c) Bank overdraft d) Advance received

4. Net profit ratio is_________________________________.
a) Balance – sheet ratio b) Reverse statement ratio
c) Composite ratio d) None of the above

5. Standard current ratio is_____________________________.
a) 2:1 b) 1:1
c) 65% d) 1.33

6. What ratio indicates the relationship between shareholders fund and outsider's fund? ________________________.
a) Proprietary ratio b) Operating ratio
c) debt-equity ratio d) none of these.

7. The minimum amount of working capital required to enable the concern to operate at the lowest level of activity______________________________.
a) Negative working capital b) Positive working capital
c) Permanent working capital d) Seasonal working capital

8. The purchase and sale of fixed assets & investments______________________________.
a) Investing activity b) Operating activity
c) Financing activity d) None of these.

9. Payment of dividends would be shown in the cash-flow statements as ________________.
a) Operating cash-flow b) Investing cash-flow
c) Financing cash-flow d) Cash or cash equivalents

[TURN OVER

10. Redemption of debentures by converting them into equity shar`40,000_____________.

a) Cash outflow b) Cash inflow
c) none of the above d) Both

11. The total current assets without deducting the currentliabilities____________________.

a) Gross working capital b) Net working capital
c) Permanent working capital d) Temporary working capital

12. __________________ with ensure high return on investment.

a) Adequate working capital b) Surplus working capital
c) Shortage working capital d) none of these.

Q.No. 1.B. State whether the following are True or False (Any Ten). **(10)**

1. Auditor's duty is to detect and prevent frauds.
2. Window dressing is provided in the company law.
3. Before preparing an audit programme the auditor should obtain knowledge about a new clients business.
4. There is no risk involved in Audit-Sampling.
5. It is the responsibility of the management to establish internal control system.
6. Vouching decides authenticity of the transaction.
7. Purchase invoice is the voucher for purchases.
8. Fixed assets should be shown at market value.
9. The auditor should confirm that the asset is legally owned by the Co.
10. Auditor has to see that patent rights are alive.
11. Agreement of a trial balance indicated that the books are error-free.
12. Compensation error affect the trial balance

Q.No. 2. Following are the comparative balance sheet of Morgan Company: **(15)**

Liabilities	**2014 ₹**	**2015 ₹**	**Assets**	**2014 ₹**	**2015 ₹**
Share Capital	70,000	74,000	Goodwill	10,000	5,000
Debentures	12,000	6,000	Land	20,000	30,000
Trade Creditors	10,360	11,840	Stock-in-Trade	49,200	42,700
Provision for Doubtful Debts	700	800	Trade Debtors (good)	14,900	17,700
Profit & Loss	10,040	10,560	Cash	9,000	7,800
	1,03,100	**1,03,200**		**1,03,100**	**1,03,200**

1. Dividends were paid totaling ₹3,500
2. Land was purchased for ₹10,000 and amount provided for the amortization of goodwill totaled ₹5,000
3. Debenture loan was repaid ₹6,000

You are required to prepare cash flow statement using Indirect Method.

OR

[TURN OVER

Q.No. 2. A)Workout Trend percentage for the following Balance sheet. (08)

	Particulars	2013 ₹	2014 ₹	2015 ₹
I	**SOURCES OF FUNDS**			
1	Owners Fund			
	Capital Account	3,00,000	3,40,000	4,00,000
	Reserve Fund	1,00,000	1,00,000	1,00,000
	(1)	**4,00,000**	**4,40,000**	**5,00,000**
2	**Loan Fund**			
	Secured Loans	50,000	60,000	60,000
	Unsecured Loans	1,40,000	1,80,000	1,60,000
	(2)	1,90,000	2,40,000	2,20,000
	Funds Available (1 + 2)	**5,90,000**	**6,80,000**	**7,20,000**
II	**APPLICATION OF FUNDS**			
1	**Fixed Assets**	2,80,000	3,60,000	4,00,000
2	**Working Capital**			
A	**Current Assets**			
	Accounts receivables	1,40,000	1,60,000	2,00,000
	Loans and Advances	60,000	80,000	1,00,000
	Cash And Bank	20,000	20,000	20,000
	Stock	1,35,000	1,50,000	1,60,000
	(A)	**3,55,000**	**4,10,000**	**4,80,000**
B	**Current Liabilities**			
	Accounts payables(B)	45,000	90,000	1,60,000
	(A + B)	3,10,000	3,20,000	3,20,000
	Funds Employed (1 + 2)	**5,90,000**	**6,80,000**	**7,20,000**

Q.No. 2. B) Prepare Comparative Income Statements: (07)

Particulars	2014	2015
Net Sales	1,90,000	2,00,000
Less: Cost of Goods Sold		
(a) Opening Stock	44,000	40,000
(b) Purchases	84,000	72,000
(c) Wages	40,000	36,000
(d) Factory Expenses	32,000	28,000
	2,00,000	**1,76,000**
(e) Less: Closing Stock	46,000	44,000
	1,54,000	**1,32,000**
Gross Profit (1 – 2)	36,000	68,000
Less : Operating Expenses		
(a) Establishment Expenses	8,000	6,000
(b) Management Expenses	2,000	2,000
(c) Selling Expenses	6,000	10,000
	16,000	18,000
Operating Profit Before Interest	20,000	50,000
Less : Interest	6,000	8,000
Net Profit After Interest	**14,000**	**42,000**
Net Non-Operating Income		
(a) Non-operating Income		
Interest Received	20,000	---
Less : (b) Non-operating Expenses		
Loss on Sales of Assets	2,000	2,000
	18,000	2,000
Net Profit Before Tax	32,000	40,000
Less : Income Tax	22,000	24,000
Net Profit After Tax trf. To Reserve	**10,000**	**16,000**

Q.No. 3. From the following Profit and LossAccounts and Balance Sheets of Glimmer Ltd. calculate following ratios: (1) Current Ratio (2) Proprietory Ratio (3) Liquid Ratio
(4) Cost of Sales Ratio (5) Administrative exp. to sales ratio
(6) Selling expenses to sales ratio (15)

Balance Sheet

Liabilities	2015 ₹	Assets	2015 ₹
Capital of ₹10 each	70,000	Fixed Assets	90,000
Reserves	80,000	Current Assets	1,10,000
Secured Loans	22,000	Loans and Advances	52,000
Current Liabilities	26,000		
Provisions	54,000		
	2,52,000		2,52,000

Profit and Loss Account for the Year Ended....

Particulars	2015 ₹	Particulars	2015 ₹
To Opening Stock	44,000	By Sales	2,10,000
To Purchases	84,000	By Closing Stock	46,000
To Wages	40,000		
To Factory Expenses	32,000		
To Administrative			
Expenses	8,000		
To Selling Expenses	6,000		
To Managerial			
Remuneration	2,000		
To Tfd. To Reserve	2,000		
To Income Tax	22,000		
To Proposed Dividend	6,000		
To Balance C/fd.	10,000		
	2,56,000		**2,56,000**

OR

Q.No. 3. You are required to prepare a statement showing the working capital required to finance the level of activity of 6,000 Units per year from the following information : (15)

1. Raw materials are in stock on an average for 2 months.
2. Materials are in process on an average for half a month.
3. Finished goods are in stock on an average for one month.
4. Credit allowed by the suppliers is $1_{1/2}$ months of purchase of raw materials and credit allowed to the customers is $2_{1/2}$ months.
5. Lag in payment of wages and overheads is one month.
6. Maintain 10% as margin of safety.
7. Activities are spread evenly throughout the year.

Cost per Unit:

Raw material	₹ 10
Wages	₹ 5
Total cost	₹ 30

Profit is 20% on selling price.

Q.No. 4. How would you vouch the following. (15)
a) Advertising b) Wages c) Rental Income.

OR

Q.No. 4. a) Explain different types of errors (8)
b) Distinguish between Auditing and Investigation (7)

Q.No. 5. a) What are the factors to be considered which framing an audit programme ? (7)
b) Explain note book and What are its contents? (8)

OR

Q.No. 5. How would you verify the following. (15)
a) Stock b) Investment c) Secured Loan.

Q.No. 6. A) Discuss factors affecting working capital. (10)
B) Explain the following concept (10)
i) Going concept ii) Materiality concept

OR

[TURN OVER

Q.No. 6. A) Short notes (**any two**) (10)

1. Common – size statement
2. Current ratio
3. Permanent working capital

B) Short notes (**any two**) (10)

1. Audit sample
2. True & fair view
3. Error of Principle

(मराठी रूपांतर)

(3 तास) **(एकूण गुण : १००)**

सूचना : (१) कृती नोंदीचा तुमच्या उत्तरात समावेश करा.
(२) योग्य सादरीकरण व नीटनेटकेपणा आवश्यक आहे.
(३) साधे गणकयंत्र वापरावे.

१. (अ) योग्य पर्याय निवडून गाळलेल्या जागा भरून संपूर्ण वाक्य पुन्हा लिहा. (कोणतेही दहा) १०

(१) सामान्य व्यापारात रोखीत बदलणाऱ्या संपत्तीस काय म्हणतात?
(अ) भौतिक संपत्ती/मालमत्ता (ब) चल/चालू संपत्ती
(क) स्थिर मालमत्ता (ड) घसारायुक्त मालमत्ता

(२) अशी संपत्ती/मालमत्ता ज्याला भौतिक अस्तित्व नसते.
(अ) स्थिर संपत्ती (ब) ऱ्हास पावणारी संपत्ती
(क) अमूर्त संपत्ती (ड) चालू संपत्ती

(३) ही तरल देयता नाही
(अ) न नेलेला लाभांश (ब) स्वीकृत ठेवी
(क) बँक अधि कर्ष (ड) अग्रीम प्राप्त

(४) निव्वळ नफा अनुपात हा...... आहे.
(अ) ताळेबंद अनुपात (ब) नफा-तोटा खाते अनुपात
(क) मिश्र अनुपात (ड) वरीलपैकी कोणतेही नाही

(५) प्रमाणभूत/प्रमाणबद्ध चालू अनुपात
(अ) २:१ (ब) १:१
(क) ६५% (ड) १.३३

(६) भागधारकांचा निधी व बाहेरच्यांचा निधी मधील संबंध कोणता अनुपात दाखवतो?
(अ) स्वामीत्व अनुपात (ब) कार्यवाहीन अनुपात
(क) कर्ज भांडवल अनुपात (ड) वरीलपैकी नाही

[TURN OVER

(७) न्युनतम व्यवसाय स्तरावर लागणारे कमीत कमी खेळते भांडवल
- (अ) नकारात्मक खेळते भांडवल (ब) सकारात्मक खेळते भांडवल
- (क) कायम खेळते भांडवल (ड) मोसमी खेळते भांडवल

(८) स्थिर संपत्ती व गुंतवणूकीची खरेदी व विक्री
- (अ) गुंतवणूक क्रिया (ब) कार्यवाहिन क्रिया
- (क) वित्तीय क्रिया (ड) वरीलपैकी कोणतेही नाही

(९) रोख प्रवाह पत्रकामध्ये लाभांशाचे वाटप कसे दाखवले जाईल?
- (अ) कार्यवाहिन रोख प्रवाह (ब) गुंतवणूक रोख प्रवाह
- (क) वित्तीय रोख प्रवाह (ड) रोख व रोख समतुल्य

(१०) सामान्य भाग भांडवलामध्ये परावर्तित करून कर्ज रोख्यांची परतफेड
- (अ) रोख जावक (ब) रोख आवक
- (क) कोणतेही नाही (ड) दोन्ही

(११) एकूण चालू मालमत्ता (ढोबळ) चालू देय वजा न करता राहते.
- (अ) ढोबळ खेळते भांडवल (ब) निव्वळ खेळते भांडवल
- (क) कायम खेळते भांडवल (ड) तात्पुरते खेळते भांडवल

(१२) ....मुळे गुंतवणुकीवरील अधिक परतावा मिळतो.
- (अ) पुरेसे खेळते भांडवल (ब) अधिक खेळते भांडवल
- (क) तुटीचे खेळते भांडवल (ड) वरीलपैकी कोणतेही नाही

(ब) खालील विधाने **चूक** की **बरोबर** ते लिहा (कोणतेही **दहा**) १०

(१) अफरातफरींचा शोध घेणे व आळा घालणे हे हिशेबतपासणीसाचे कर्तव्य आहे.

(२) हिशेबातील खोटेपणा (Window dressing) हे कंपनी कायद्या अंतर्भूत आहे.

(३) हिशेब तपासणीचा कार्यक्रम बनवण्याआधी नवीन ग्राहकाच्या व्यापाराची माहिती घेणे हिशेब तपासनीसास आवश्यक आहे.

(४) हिशेब तपासणी नमुन्यात काहीही धोके नाहीत.

(५) अंतर्गत नियंत्रण प्रणाली बनवणे ही व्यवस्थापनाची जबाबादारी आहे.

(६) प्रमाणन व्यवहाराची सत्यता व अधिकृतता निश्चित करतो.

(७) खरेदी बीजक (Invoice) ही खरेदीची पावती आहे.

(८) स्थिर मालमत्ता बाजारभावाप्रमाणे प्रकट केली जाते.
(९) हिशेबतपासणीसाने मालमत्तेची मालकी व मालकी हक्काची खात्री केली पाहिजे.
(१०) हिशेबतपासणीसाने स्वमित्व अधिकार कार्यरत असल्याची खात्री केली पाहिजे.
(११) तेरीज पत्रक जुळण्याने पुस्तके बिनचूक असल्याचे दर्शविते.
(१२) भरपाईच्या चुकांमुळे तेरीजपत्रक जुळत नाही.

२. खाली मॉर्गन कंपनीचा तुलनात्मक ताळेबंद दिला आहे. १५

देयता	२०१४	२०१५	संपत्ती	२०१४	२०१५
भाग भांडवल	७०,०००	७४०००	नावलौकिक	१०,०००	५,०००
कर्जरोखे	१२,०००	६०००	जमीन	२०,०००	३०,०००
देणी/धनको	१०३६०	११८४०	मालसाठा	४९,२००	४२७००
संशयित ऋणकोची तरतूद	७००	८००	ऋणको (निव्वळ)	१४,९००	१७,०००
नफा तोटा खाते	१०,०४०	१०५६०	निव्वळ रोख	९,०००	७,८००
	१,०३,१००	१,०३,२००		१,०३,१००	१,०३,२००

(१) लाभांश वाटप रु. ३,५००
(२) जमीन रु. १०,००० ला खरेदी केली. नावलौकिक खर्च रु. ५००० काढून टाकला.
(३) कर्ज रोखे परतफेड रु. ६,०००/-
रोख प्रवाह पत्रक (अप्रत्यक्ष-पद्धतीने) तयार करा.

किंवा

[TURN OVER

२. (अ) खालील ताळेबंदाकरिता कलदर्शक पत्रक तयार करा. ८

तपशील	२०१३ ₹	२०१४ ₹	२०१५ ₹
मालकांचा निधी (१) **निधीचा स्त्रोत**			
भांडवल खाते	३.००,०००	३,४०,०००	४,००,०००
सामान्य निधी	१,००,०००	१,००,०००	१,००,०००
(१)	४,००,०००	४,४०,०००	५,००,०००
(२) **कर्ज निधी**			
तारण कर्ज	५०,०००	६०,०००	६०,०००
बिन तारण कर्ज	१,४०,०००	१,८०,०००	१,६०,०००
(२)	१,९०,०००	२,४०,०००	२,२०,०००
एकूण निधी (१+२)	५,९०,०००	६,८०,०००	७,२०,०००
II] निधीचा उपयोग (१) स्थिर संपत्ती	२,८०,०००	३,६०,०००	४,००,०००
(२) खेळते भांडवल			
(अ) चालू मालमत्ता			
ऋणको	१,४०,०००	१,६०,०००	२,००,०००
कर्ज/अग्रीम	६०,०००	८०,०००	१,००,०००
रोख व बँक	२०,०००	२०,०००	२०,०००
मालसाठा	१,३५,०००	१,५०,०००	१,६०,०००
(अ)	३,५५,०००	४,१०,०००	४,८०,०००
(ब) चालू देणी			
धनको (ब)	४५,०००	९०,०००	१,६०,०००
(अ+ब)	३,१०,०००	३,२०,०००	३,२०,०००
एकूण निधी (१+२)	५,९०,०००	६,८०,०००	७,२०,०००

२. (ब) तुलनात्मक उत्पन्नाचे प्रारूप तयार करा. ७

तपशील	२०१४	२०१५
निव्वळ विक्री	१,९०,०००	२,००,०००
वजा विकलेल्या मालाचा खर्च.		
(अ) आरंभीचा मालसाठा	४४,०००	४०,०००
(ब) खरेदी	८४,०००	७२,०००
(क) मंजुरी	४०,०००	३६,०००
(ड) कारखाना खर्च	३२,०००	२८,०००
	२,००,०००	१,७६,०००
(इ) वजा : अखेरचा मालसाठा	४६,०००	४४,०००
	१,५४,०००	१,३२,०००
ढोबळ नफा	३६,०००	६८,०००
वजा कार्यवाहिन खर्च		
(अ) कार्यालय खर्च	८,०००	६,०००
(ब) व्यवस्थापन खर्च	२,०००	२,०००
(क) विक्री खर्च	६,०००	१०,०००
	१६,०००	१८,०००
कार्यवाहिन नफा (व्याजाआधी)	२०,०००	५०,०००
वजा : व्याज	६,०००	८०००
निव्वळ नफा (व्याजानंतर)	१४,०००	४२,०००
निव्वळ अकार्यवाहिन उत्पन्न		
(अ) अकार्यवाहिन उत्पन्न व्याज प्राप्त	२०,०००	-
वजा : (ब) अकार्यवाहिन खर्च मालमत्ता विक्रीवरील तोटा	२,०००	२,०००
	१८,०००	(२,०००)
करपूर्व निव्वळ नफा	३२,०००	४०,०००
वजा :- आयकर	२२,०००	२४,०००
कर पश्चात निव्वळ		
नफा निधीमध्ये पाठवलेला	१०,०००	१६,०००

३. खालील दिलेल्या ग्लिमर लिमिटेडच्या नफा तोटा खाते व ताळेबंदावरून खालील अनुपात काढा. १५

(१) चालू अनुपात
(२) स्वामित्व अनुपात
(३) तरल अनुपात
(४) विक्रीचा खर्च अनुपात
(५) प्रशासकीय खर्च/विक्री अनुपात
(६) विक्री खर्च / विक्री अनुपात

ताळेबंद (२०१५)

देयता	रु.	मालमत्ता	रु.
प्रत्येकी रु. १० चे भाग भांडवल	७०,०००	स्थिर मालमत्ता	९०,०००
निधी	८०,०००	चालू मालमत्ता	१,१०,०००
तारण कर्ज	२२,०००	कर्ज व अग्रिम	५२,०००
चालू देणी	२६,०००		
तरतूद	५४,०००		
	२,५२,०००		२,५२,०००

नफा -तोटा खाते (२०१५)

तपशील	रु.	तपशील	रु.
आरंभीचा मालसाठा	४४,०००	विक्री	२,१०,०००
खरेदी	८४,०००	अखेरचा मालसाठा	४६,०००
मजुरी	४०,०००		
कारखाना खर्च	३२,०००		
प्रशासकीय खर्च	८,०००		
विक्री खर्च	६,०००		
व्यवस्थापपकांचे वेतन	२,०००		
निधीत पाठवले	२,०००		
आयकर	२२,०००		
प्रस्तावित लाभांश	६,०००		
निव्वळ नफा	१०,०००		
	२,५६,०००		२,५६,०००

किंवा

३. ६००० नग प्रतिवर्षाला लागणाऱ्या खेळतं भांडवल पत्रक बनवा.

(१) कच्चा माल सरासरी २ महिन्यांचा असेल.
(२) माल प्रक्रियेचा कालावधी सरासरी अर्धा महिना.
(३) तयार मालसाठा सरासरी एक महिना.
(४) पुरवठादार दिड महिन्यांची उधारीची सवलत देतात व ग्राहकांना अडीच महिन्यांची उधारीची सवलत दिली जाते.
(५) मजूरी व उपरी परिव्यय एक महिन्याच्या अंतराने दिली जाते.
(६) १०% सुरक्षा तरतूद ठेवावी.
(७) उत्पादन व विक्री वर्षभर समप्रमाणात असेल

परिव्यय पत्रक	प्रति नग
तपशील	(रु)
कच्चा माल	१०
मजूरी	०५
एकूण खर्च	३०

नफा विक्री मुल्यावर २०%

४. (अ) खालील खात्याचे प्रमाणन कसे कराल? १५

(अ) जाहिरात
(ब) मजूरी
(क) भाडे उत्पन्न

किंवा

४. (अ) विविध प्रकारच्या चुका स्पष्ट करा. ८
(ब) लेखा परिक्षण व अनुसंधान यातील फरक स्पष्ट करा. ७

५. (अ) हिशेब तपासणी कार्यक्रम बनवताना कुठल्या गोष्टींचा विचार केला जातो? ७
(ब) हिशेब तपासणी नोंदवही म्हणजे काय ते स्पष्ट करा व त्यात काय नोंदी असतात ते लिहा. ८

किंवा

५. खालील गोष्टींचे सत्यापन कसे कराल? १५

(अ) मालसाठा
(ब) गुंतवणूक
(क) तारण कर्ज

६. (अ) खेळते भांडवल कुठल्या गोष्टींवर अवलंबून असते ते स्पष्ट करा. १०

(ब) खालील संकल्पना स्पष्ट करा. १०

(अ) सातत्य

(ब) तारतम्यता

६. (अ) संक्षिप्त टिपा लिहा. (फक्त **दोन**) १०

(१) सामान्य आकार पत्रक

(२) चालू अनुपात

(३) कायम खेळते भांडवल

(ब) संक्षिप्त टिपा लिहा. (फक्त **दोन**) १०

(१) हिशेब तपासणीचा नमुना

(२) योग्य व खरे मत

(३) तात्विक चुका

T.Y.B.Com {April – 2016}
Accounts Group (OLD) (Paper - V)
Financial Accounting & Auditing
Introduction to Management Accounting

QP Code : 17580

Revised Course- Old pattern
3 hours Total Marks: 100

N.B.:
1. Question No. 1 & 2 are compulsory and carry 20 marks and 16 marks respectively.
2. Attempt any four questions from the rest, carrying 16 marks each.
3. Working notes should form part of your answer.
4. Proper presentation and neatness is essential.
5. Use of simple calculator is allowed.

Q1. Prepare an estimate of working capital as at the end of the year from the following particulars: 20 Marks

Budgeted Sales for the year	:	Rs.1200000
Ratio between Cash & Credit Sales	:	1 : 5
Debtors Turnover Ratio	:	73 days
Creditors Turnover Ratio	:	30 days
Estimated Gross Profit	:	30% on Sales
Proprietary Ratio to Fixed Assets	:	0.80
Operating Ratio	:	90%
Direct Expenses Ratio	:	75%
Stock Turnover Ratio	:	5 times
Lag in payment of Expenses (except wages)	:	36.5 days
Net Profit to Proprietor's Fund Ratio	:	10%
Liquid Ratio	:	2.5 : 1

Closing Stock will be Rs.20000/- more than the opening stock.

Q2. (a) State whether the following statements are True or False: 08 marks

- Current Ratio determines Short term solvency
- Trend statements are Horizontal analysis
- The capital required to ensure the effective use of fixed assets and support the normal operations of the business is known as Permanent working capital.
- Income earned from activities other than normal business is Non operating Income.
- Public Deposits accepted are Unsecured Loans.
- As per MIS tactical decisions are taken by Middle Level Managers.
- In Pay back period method, the annual cash inflow means the Net profit after tax plus depreciation.
- Reserves & surplus and Fictitious Assets are added and deducted respectively to determine Shareholders funds.

[TURN OVER

(b) Fill in the Blanks: 08 marks

- Underwriting commission is a __________ asset.
- Redemption of Debentures is a cash flow from ___________ activities.
- *Gross working capital = Total current ___________.*
- Margin of Safety is _____ to net current assets to get working capital.
- The project with _________ pay-back period should be accepted.
- Cost of goods sold is divided by average stock to get __________ ratio.
- MIS plays an ________ role in business.
- In common size income statement ________ is considered equal to 100.

Q3. From the following particulars relating to XYZ Co. Ltd. Prepare a Comparative Income statement & offer your comments. 16 marks

Particulars	2010 (Rs)	2011 (Rs)
Sales	58000	65200
Cost of Goods sold	47600	49200
Administration Expenses	1016	1000
Selling Expenses	1840	1920
Non operating Expenses	140	155
Non Operating Income	96	644
Sales Returns	2000	1200
Tax Rate	43.75%	43.75%

Q4. A & B are partners of a Firm carrying on business. 16 marks

a) Their position as on 31st December, 2009,2010 & 2011 are as follows:

Liabilities	31/12/11 Rs.	31/12/10 Rs.	31/12/09 Rs.	Assets	31/12/11 Rs.	31/12/10 Rs.	31/12/09 Rs.
Partners Capitals	400000	340000	300000	Fixed Assets	400000	360000	280000
General Reserve	100000	100000	100000	**Current Assets:**			
Secured Loans	60000	60000	50000	Stock	160000	150000	135000
Unsecured Loans	160000	180000	140000	Debtors	200000	160000	140000
Sundry Creditors	160000	90000	45000	Loans & Advances	100000	80000	60000
				Cash & Bank Balances	20000	20000	20000
	880000	**770000**	**635000**		**880000**	**770000**	**635000**

[TURN OVER

b) Summarised Income Statement for the year ended:

Particulars	**31/12/2011 Rs.**	**31/12/2010 Rs.**	**31/12/2009 Rs.**
Income			
Sales	4000000	3600000	3000000
Less: Cost of Sales	2800000	2400000	2000000
Gross Profit	1200000	1200000	1000000
Less: Expenses	800000	800000	700000
Net Profit	400000	400000	300000

Work out trend percentages after converting into vertical statements & offer your comments.

Q5. A Company's Shareholders' Equity is Rs.1 lac. Following are the ratios relating to the Balance Sheet. 16 marks

1. Current debts to total debts : 0.40
2. Total debts to owners' equity : 0.60
3. Fixed assets to owners' equity : 0.60
4. Total assets turnover : 2 times
5. Inventory turnover : 8 times

From the above information prepare the Balance Sheet of the company.

Q6. From the following information pertaining to Amitabh Ltd. Prepare a statement showing the working capital requirements: 16 marks

Budgeted Sales	Rs.260000 per annum
Analysis of Sales (per unit) :	
Raw materials	Rs. 3
Direct Labour	Rs. 4
Overheads	Rs. 2
Total Cost	Rs. 9
Profit	Rs. 1
Sale Price	Rs.10

It is estimated that:

1. Raw materials remain in stock for three weeks and finished goods for two weeks.
2. Factory processing takes three weeks.
3. Suppliers allow five weeks credit.
4. Customers are allowed eight weeks credit.
5. Assume the production and overheads accrue evenly throughout the year.

[TURN OVER

Q7. Prepare Cash Flow statement from the following Balance sheets as on 31st December, 2011 & 31st December, 2012 of Apoorva Limited. 16 marks

(Figures in lacs)

Liabilities	**2011 Rs.**	**2012 Rs.**	*Assets*	**2011 Rs.**	**2012 Rs.**
Share Capital	5000	6000	Fixed Assets	12500	14000
General Reserves	1125	1250	Less: Depreciation Provision	2500	3000
Retained earnings	550	625		10000	11000
10% Debentures	2500	2000	Stock	2000	2250
Bank Loan	1000	1250	Debtors	1500	1250
Creditors	3300	2760	Bank Balance	550	700
Outstanding Expenses	50	150	Prepaid Expenses	25	35
Provision for tax	700	1300	Preliminary Expenses	150	100
	14225	**15335**		**14225**	**15335**

Statement of Income & Reconciliation of retained earnings for the year ended 31st December, 2012

	Rs.	**Rs.**
Net sales		19750
Less: Cost of goods sold		15750
Gross Profit		4000
Sundry expenses	950	
Depreciation	500	
Preliminary Exp. Written off	50	1500
Net Profit		2500
Less: Provision for tax		1300
		1200
Less: Transfer to General Reserve	125	
Dividend Paid	1000	1125
		75
Add : Retained Earnings		550
Retained Earnings on 31/12/2012		625

[TURN OVER

Q8. Amul Enterprises wants to introduce a new product well estimated sales life of five years. The manufacturing equipment will cost Rs.500000/- with scrap value of Rs.30000/- at the end of five years. The working capital requirement is Rs.40000/-, which will be released after five years. 16 Marks

The annual cash inflow and P.V. factor @10% are:

Year	1	2	3	4	5
P.V. Factor	0.909	0.826	0.751	0.683	0.621
Cash Inflow(Rs.)	250000	300000	375000	360000	225000

The depreciation to be charged under straight line method is Rs.100000/-.
Tax applicable @40%.
Evaluate the proposal under various alternatives.

Q9. Write Short notes on any four of the following: 16 marks

a. Liquid Ratio.
b. Permanent working capital.
c. Capital Investment Process.
d. Management Reporting System & Computer.
e. Common size statement.