BUREAU'S

HIGHER SECONDARY

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

(Class - XII)

(For Commerce Students)

(Prescribed by the Council of Higher Secondary Education, Odisha)

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FOREWORD

The Odisha State Bureau of Textbook Preparation and Production, Bhubaneswar has made a pioneer attempt to publish text books for Class-XII Commerce Stream with an excellent team of teachers in different subjects.

The present book **"Fundamentals of Management Accounting"** is meant for Higher Secondary Commerce students. This book has been written by a team of learned academicians namely Dr. Ajoy Mohanty, Dr. Upendra Nath Sahu, Dr. Banamali Panda and Dr. Sunil Kumar Jena and reviewed by former Director, Higher Education, Odisha, Prof. Dr. Gunanidhi Sahu. I would like to record my sincere gratitude to all of them for accomplishing this maiden venture in time. The main purpose of developing this text book is to provide a thorough exposure to the students of Commerce in this subject. The book, prepared according to the new syllabus prescribed by the CHSE, Odisha, shall cater to the needs of young students.

I believe that the students and teachers of commerce stream shall welcome and appreciate the book. I would also like to welcome constructive suggestions for further improvement of the book.

Sri Umakanta Tripathy
Director
Odisha State Bureau of Textbook
Preparation and Production,
Pustak Bhavan, Bhubaneswar

PREFACE

The present book entitled 'Fundaments of Management Accounting' has been written for the Twelfth (XII) Class students of Commerce stream. It has been written strictly according to the syllabus prescribed by the Council of Higher Secondary Education (CHSE), Odisha. Keeping in view the standard and requirements of the students,all possible attempts have been made to present the book in a simple, lucid and comprehensive manner. We do not claim that the book is an original one. We have taken the help of publications by many renowned authors. We express our gratitude to all of them.

Proper care has been taken to see that the students can be well-acquainted with the type of questions usually set by the CHSE, Odisha. Accordingly, large number of typical examples and illustrations have been given in each chapter. Each chapter is followed by an exercise, which contains many typical multiple choice questions, very short, short and long type questions and a number of unsolved practical problems for practice. We are confident that the students will find the book extremely helpful. We have taken utmost care to ensure that the book is complete in every respect. Despite our best possible efforts, errors still might have remained undetected inadvertently and there might have been some deficiencies as well. We shall appreciate the suggestions for improvement of the book in the next edition.

We are extremely thankful to the authorities of the CHSE, Odisha and the Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar for entrusting this work to us. We owe a deep sense of indebtedness to Prof. (Dr.) Gunanidhi Sahu, former Director of Higher Education, Odisha, who has taken pains in reviewing the manuscript thoroughly and suggested improvements to make the publication complete and perfect as far as possible. We express our sincere thanks to staff members of the Bureau, who have taken keen interest for bringing out the publication. We are also thankful to the Printers but for whose efforts, the book could not have been published in its present form.

Board of Writers

SYLLABUS

Objectives :

- To provide students an understanding of the concept, objectives, importance, limitations of Management Accounting;
- To help the students in learning concept, types, objectives and importance of financial statements along with its analysis;
- To enable students to learn the process of ratio analysis with its significance;
- To make the students able to know the concept and applications of Working Capital, and
- To help the students the concept, objectives and process of preparation of Cash Flow Statement.

Course Inputs :

Unit-I Introduction :

Meaning, Objectives, Nature & Scope-Functions, Importance & Limitations of Management Accounting, Cost Accounting Vs Management Accounting, Difference between Management Accounting and Financial Accounting, Role of Management Accountant.

Unit-II Analysis of Financial Statement:

Financial Statement: Meaning, nature, objectives and types of financial statements - Importance and limitations of financial statement (Statement of Profit & Loss, Balance Sheet and Cash Flow Statement)

Financial Statement Analysis : Meaning, Objective, Importance, Limitations and its types- Techniques or Device of Financial Analysis - Comparative Statement, Common-size Statement, Trend Analysis

Unit-III Ratio Analysis :

Ratio Analysis : Meaning and Utility of Ratio - Significance & Limitations of Ratio Analysis, Classification of Ratios - Calculation of Different Ratios : Liquidity Ratios (Current ratios, Acid Test Ratio, Absolute Liquid ratio), Activity Ratios : (Stock Turnover, Debtor Turnover, Creditor Turnover, Working Capital Turnover), Profitability Ratios (Gross Profit Ratios, Net Profit Ratio, Return on Investment, Return on Capital Employed).

Unit-IV Working Capital Management & Cash Flow Statements :

Working Capital Management: Meaning, Need, Concept, Classification of Working Capital- Sources of Working Capital- Determinants of Working Capital, Computation of Working Capital needs for Trading Concern.

Cash Flow Statement : Meaning, Objectives, Transactions affecting Cash Flow Statement, Transactions not affecting Cash Flow Statement, Difference between Cash Flow Statement & Funds Flow Statement, Process of Preparing Cash Flow Statement as per AS- 3.

Unit -IV Project work and Viva :

Suggested outlines of Project Work

- Prepare a financial Statement of any undertaking (Statement of Profit & Loss, Balance Sheet and Cash Flow Statement)
- Make a project report on Financial Statement Analysis of any undertaking.
- Calculation of different Ratios and making Ratio Analysis of any Enterprise and prepare a report.
- Prepare a report by determining the requirement of working capital for any Trading Concern.
- Prepare a Cash Flow Statement along with its analysis for any organization as per AS - 3.
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CHAPTER - 1

INTRODUCTION

STRUCTURE

1.1 INTRODUCTION

The accounting systems have developed with the development of trade, commerce and industry. The evolution of joint stock company form of business organisation has resulted in large scale production and business operations. It has also created separation of ownership and management. Thus, with the increase in the size and complexity of business, management becomes more complex day by day. To cope up with the increasing needs, the modern management needs meaningful and timely data for making decisions. Decision-making, in any business organisation, is a primary function of management which is also the most important funtion. The introduction of professionalism in management divided the organisation into functional areas, delegation of authority and decentralisation of decision-making. The decision making no more remains a matter of intuition. It requires the evolution of information system for helping management in planning and assessing the results. The accounting information are so devised and systematically developed that they become a unique tool for management decision. Management Accounting is the presentation of accounting information to the management in such a way that all the managerial functions of planning, organizing, co-ordinating, directing and controlling can be done efficiently and effectively.

1.2 MEANING OF MANAGEMENT ACCOUNTING

Management Accounting can be viewed as Management oriented accounting. Basically, it is the study of managerial aspect of financial accounting or accounting in relation to management function. It shows how the accounting function can be reoriented 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 management. It furnishes definite accounting information, past, present or future, which may be used as a basis for managerial action. Broadly, it is a kind of accounting which is required by the management at all levels in managing and administering the enterprise.

The term Management Accounting comes to light in the mid 20th century. This term was first used in 1950 by a team of accountants visiting U.S.A. under the auspices of Anglo-American council on productivity. Teaching in Management Accounting was introduced first in the different American Universities and subsequently in other countries including various Indian universities like Banaras Hindu University, etc. Therefore, it can be concluded that among all the three main branches of accounting, Management Accounting is the latest branch.

Definitions:

In ordinary language, any system of accounting, which assists management in carrying out its functions more efficiently may be termed as management accounting.

Management Accounting is concerned with the provision of financial and non-financial decision making information to managers. Robert N. Anthony has defined the term Management Accounting as, " It is concerned with accounting information that is useful to the management".

According to J. Batty, " Management Accounting is the term used to describe the accounting methods, systems and techniques which, coupled with special knowledge and ability, assist management in its task of maximizing profits or minimizing losses".

In the words of Shilling Law, "Accounting, which serves management by providing information as to the cost or profit associated with some portion of firm's total operations, is called management accounting".

According to the Institute of Chartered Accountants of England and wales. "Any form of accounting which enables a business to be conducted more efficiently can be regarded as management accounting".

According to the Institute of Chartered Accountants of India, " Such of its techniques and procedures by which accounting mainly seeks to aid the management collectively have come to be known as management accounting."

The Institute of cost and works Accountants of India defines Management Accounting as " a system of collection and presentation of relevant economic information relating to an enterprise for planning, controlling and decision making".

According to American Accounting Association "Management Accounting includes the methods and concepts necessary for effective planning for choosing among alternative business actions and for control through the evaluation and interpretation of performances."

1.3 OBJECTIVES OF MANAGEMENT ACCOUNTING

The main objective of Management Accounting is to enable management to maximize profits or minimize losses. The fundamental objective of management accounting is to assist management in their functions of formulating policies, making decisions, planning activities and controlling business operations. The important objectives of management accounting can be summarized as follows:

1. **Planning and policy formulation :** Planning is one of the primary functions of Management. It is essentially related to taking decisions for future. It involves forecasting,

setting goals, framing policies and deciding the alternative courses of action. It facilitates the preparation of statements in the light of past results and gives estimation for the future. Management Accountant performs this function in a very systematic and methodical manner.

2. **Helping in Interpretation process :** One of the main objectives of Management Accounting is to present financial information to the management. Financial information is usually of technical nature. They must be presented in such a way that it can be easily understood. The management accounting presents accounting information in an intelligible manner and explains with the help of statistical devices like charts, diagrams, graphs, index numbers etc.

3. **Enabling Decision-making:** Management Accounting, by providing right information at the right moment, enables the management to take appropriate decisions. It makes decision-making process more scientific and accurate with the help of modern techniques. Data relating to cost, revenue, price, savings and profits are collected and analysed to make sound decision.

4. **Helps in controlling operation:** Management Accounting is a useful device of managerial control. The devices like standard costing and budgetary control are helpful in controlling performance. The actual results are compared with pre-determined objectives. The management is able to find out the deviations and take necessary corrective measures. By this way, the performance of each and every individual as well as department can be controlled.

5. **Facilitating Organization:** Organization refers to establishment of relationship among different individuals in the concern. It also includes the delegation of authority and fixing of responsibility. Since management accounting gives more emphasis on cost centres, profit centres, preparation of budgets, preparation of cost control accounts, it can fix the responsibility on different individuals and departments. All these aspects are helpful in setting up effective and efficient organization framework.

6. **Reporting to Management:** One of the main objectives of management accounting is to keep the management fully informed about the latest position of the

organization. The performance of various departments is regularly communicated to the top management. This facilitates management to take proper and timely decisions.

7. **Helpful in Co-ordination:** Management accounting provides tools which are helpful in co-ordinating the activities of different departments. Budgets are important means of co-ordination.

8. **Means of Communication:** Management accounting serves as a means of communication. It provides means of communicating management plans upward and downward through the different mechanisms of organization.

9. **Uses qualitative information:** Management accounting does not restrict itself to only 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. Quality of goods, result of consumer survey, efficiency and skill of employees are some of the examples of qualitative information provided by Management Accounting for decision-making. Such information may be collected from special surveys, statistical compilations, engineering records etc.

1.4. NATURE / FEATURES AND SCOPE OF MANAGEMENT ACCOUNTING

1.4.1 Nature / Features of Management Accounting

The following are the important features of Management Accounting :

1. Based on Accounting Information: Management Accounting is mainly based on accounting information. The accounting data is used by the management for taking policy decisions. But accounting data are available in a raw form. Those must be analyzed, interpreted and presented in such a form that the management can take appropriate decision with no further or very little exercise. It provides information to the different levels of management for taking right decisions. It can only inform but it cannot prescribe. The way in which the accounting data is used depends upon the efficiency of management.

2. Cause and effect Analysis: Management Accounting attempts to examine the 'cause' and 'effect' of different accounting variables. For example, if there is a loss, the reasons for the loss are probed into. If there is a profit, the factors directly influencing the profitability are also studied. For this reason, Management Accounting may be called a 'Science'.

3. Forecasting: The management accounting is concerned with the future. The historical accounting data is presented in such a manner that it helps in planning and forecasting for the future.

4. No fixed Rules: Management Accounting has no set of rules and formats like double entry system of book keeping. Though the tools are the same, but their use differs from one concern to other. The analysis of data depends upon the person using it and the purpose for which it is needed. Every organization has its own rules for analyzing the financial data.

5. Use of special techniques and concepts: It uses special techniques and concepts to make accounting data more useful to the management. It makes a study of costs by dividing the total costs into fixed, variable and semi-variable components. The techniques usually used are standard costing, marginal costing, break even analysis, cash flow statement, working capital management, budgeting and budgetary control, etc.

6. Achieving objectives: The principal objective of management accounting is to serve the needs of management. It uses accounting information in such a way that it helps in achieving organizational objectives. Comparing actual performance with targeted figures gives an idea about the performance of various departments. It enables the manager to manage better by taking corrective measures.

7. Increasing Efficiency: The purpose of using accounting data is to increase the efficiency of the organization. Performance appraisal enables the management to pinpoint efficient and inefficient spots. By taking corrective measures, management can improve the efficiency of the firm.

8. Assists management: It assists management in carrying out its functions but does not replace it. By providing accounting information in the required form and required time, it helps management to perform its function efficiently.

9. Taking important decisions: Management Accounting supplies necessary information to the management for taking various important decisions. The historical data is studied to see its possible impact on future decisions. The implications of various decisions are also taken into account.

1.4.2 Scope of Management Accounting

The scope of management accounting is very wide and broad based. It includes a variety of aspects of business operations, such as, budgeting and forecasting, cost control procedures, inventory management, statistics, tax planning, iternal audit, etc. The main aim is to help management in its functions of planning, directing and controlling and decision-making. The following are the important areas which come within the scope of management accounting :

1. Financial accounting : Management accounting is closely related to Financial Accounting. It is the general accounting which records the financial transactions in the books of journal, posting them to ledger accounts, balancing them and prepare a Trial Balance. Then a Profit and Loss Account showing the result of business operations and a Balance Sheet depicting assets and liabilities of the business are prepared. These financial statements provide meaningful data to the management for planning the future course of action.

2. Cost accounting: Cost accounting is another branch of accounting. It provides various techniques for determining the cost of a product, job, process or service. The various tools of cost accounting system like standard costing, marginal costing, differential costing, budgetary control etc. are helpful to the management for planning and forecasting future course of action.

3. Budgeting and Forecasting: Budgeting means expressing the plans, policies and goals of the firm for a definite period in future. Budgeting requires setting of targets and comparison of actual performance with the target fixed; and the concerned departmental heads are made responsible for the achievements or failure. It enhances efficiency of the working staff. Forecasting, on the other hand, is a prediction of what will happen as a result of a given set of circumstances. Forecasting is a judgment whereas budgeting is an organizational object. At present, both budgeting and forecasting are useful to the management while making plans and policies for the organization.

4. Financial Management: Finance is the life blood of any business concern. Although Financial Management has recently emerged as a separate subject, management accounting includes the subject of financial management also. It is mainly concerned with planning and controlling of financial resources of the firm. It deals with the raising of funds and their effective utilization. It aims at using the fund in such a way that the earnings of the firm are maximized.

5. Management reporting: Clear, informative and timely reports are essential management tools for the purpose of decision making and for the fulfilment of various legal obligations. The reports are presented in the form of graphs, diagrams, index numbers or other statistical techniques so as to make them easily understandable. The management accountant sends interim reports to the management. These reports may be monthly, quarterly and half-yearly which may cover profit and loss statement, cash and funds flow statement, stock reports absentee reports etc.

6. Quantitative Techniques: Modern managers believe that the financial and economic data available for managerial decisions can be more useful when analysed with more sophisticated analysis and evaluation techniques. These techniques such as time series analysis, regression analysis and sampling techniques are commonly used for this purpose. Further, managers also use techniques like linear programming, game theory, etc in their decision making process.

7. Inflation Accounting: Inflation accounting attempts to identify certain characteristics of accounting that tend the reporting of financial results during the period of rapidly changing prices. It makes use of devices and implement appropriate methods to analyse and interpret the inflation on the financial information.

8. Tax Accounting: In the present business world, tax planning is an important part of management accounting. It comprises of calculation of income according to tax laws, filing of returns and making tax payments in due time. The management is informed about the tax burden from Central Government, State Government and local authorities.

9. Inventory Control: Inventory control is necessary for proper utilization of inventory so as to keep the cost of production under control. The management should determine different levels of stocks such as minimum level, maximum level, re-ordering level etc. for controlling costs. For proper inventory management six R.s of purchasing, i.e. right quality, right quantity, right price, right time, right place and right source should be considered.

10. Internal audit: Audit refers to verification of books of accounts prepared by the accountants. Internal audit system is applied to judge the performance of every department. The actual performance of each department and individual is compared with the pre-determined standards. In case of deviation in performance, internal audit helps management in fixing responsibility of different individuals.

11. Interpretation of Data: Analysis and interpretation of financial statements are important functions of management accounting. After analyzing the financial statements, the interpretation is made and the reports drawn from this analysis are presented to the management. Interpreting the accounting data is the principal task of management accountant.

12. Office Services: This includes undertaking of proper data processing and other office management services. It may have to deal with filing, copying, duplicating, communicating and to report about the utility of different office machineries and electronic devices.

1.5 FUNCTIONS OF MANAGEMENT ACCOUNTING

Management accounting is developed due to the need for making more and more use of accounting information for taking managerial decisions. It is the duty of a management accountant to keep all levels of management informed of their real position. So, management accounting is assigned with the functions of classifying, processing, presenting, and interpreting the data in such a way that it helps management to control and run the enterprise in an effective and efficient manner. The functions of Management Accounting are as follows-

1. **Planning and Forecasting:** Planning refers to deciding at present for unseen future. It also includes making forecasts for the future, setting the goals and deciding alternative courses of action. It helps management in planning for short-term and long-term periods. The various techniques such as budgeting, standard costing, marginal costing, funds flow statements, trend ratios and probability are useful in planning and forecasting.

2. **Modification of Data:** Management accounting serves as a vital source of data for managerial planning. The accounting data required for managerial decisions

is properly compiled, classified and modified to become useful. For example, total sales may be classified into period-wise, product-wise, customer-wise, territory-wise, etc.

3. **Financial analysis and Interpretation:** Financial analysis and interpretation is an important function of Management Accounting. Management Accounting analyses and interprets financial data in a simple way and presents it in a non-technical language. It helps the management to evaluate alternative courses of action to arrive at an appropriate decision.

4. **Facilitates communication:** Management accounting serves as an important medium of communication. The financial information with regard to an enterprise are communicated by the Management Accountant to various departments within the organization and to the outside world. He prepares reports for the benefit of different levels of management, shareholders, creditors, investors and employees of the organization.

5. **Helping in Managerial Control:** Management Accounting helps in exercising proper control over the performance of an organization as a whole. The standards of various departments and individuals are set up. The actual performance is compared wih the standards and variations are found out. The reasons behind the variations from the standard are found out. This helps the management to initiate effective control measures over the performances.

6. **Ensuring Co-ordination:** Management accounting ensures co-ordination between different departments and helps in attaining the objectives of the business. The targets and performances of different departments are communicated to the management for taking proper decisions. It helps to increase the efficiency of various sections/departments and thereby increases the profitability of the concern.

7. **Decision-making:** Management accounting furnishes accounting information required for decision making process. It is quite essential for the survival and success of the business. The decision-making process of management becomes easier when analytical information are made available to the management at the right moment.

8. **Use of qualitative information:** Management Accounting provides qualitative information along with quantitative data. For example, while preparing sales budget, not only past sales figures are taken into account but also qualitative data like skill and efficiency of the sales manager and other sales personnel are to be considered.

9. **Improving service to the Customers:** Various cost control measures prescribed by Management Accounting department help in cost reduction for different products manufactured. As a result of this the customers are supplied with qualitative products at reasonable price. Now a days, it is most essential to maintain a good customer relationship, when there is cut-throat competition in the business world.

1.6 IMPORTANCE OF MANAGEMENT ACCOUNTING

With the increase of complexities in the business world, Management Accounting is regarded as an integral part of management. The evolution of Management Accounting not only increases the efficiency of the management but also improves the efficiency of the employees. It guides and advises management at every step for better performance of the organisation. Some of the important advantages/importance of Management Accounting are as follows:

1. **Increases efficiency:** Management Accounting increases the overall efficiency of the business concern by increasing the efficiency in various business operations. The targets of different departments are fixed in advance and steps are taken to achieve the targets. The achievement of these targets becomes a tool for measuring the efficiency of the different departments.

2. **Scientific planning:** The present age is the age of planning. Management Accounting helps management in preparing scientific plans for future course of action. Management is able to plan various activities with the help of accounting information. Before making any plan the management must study and analyze the present and future activities of the business.

3. **Effective Control:** Different techniques of Management Accounting such as budgetary control and standard costing are helpful to management in exercising effective control over the business activities. The fixation of predetermined standard

enables the management to control all types of employees from top to bottom working in the organization.

4. **Measurement of Performance:** Taking the help of standard costing technique, efficiency can be measured with the comparison of actual performance with predetermined standard. It enables the management to find out deviations between standard and actual performance. By this way, the efficiency of all workers and sections can be studied.

5. **Maximising Profitability:** The profits of the enterprise are maximized with the help of Management Accounting system. The cost of production is reduced by effective methods of cost control. At the same time, the overall efficiency of the organisation increases by the application of management accounting techniques and tools. As a result the return on investment also goes up.

6. **Better Services to Customers:** The cost control measures used in Management Accounting enable the reduction of prices. The quality of products also improves because of pre-determined standards as a result of which customers are supplied with qualitative products at reasonable prices. Thus, it is possible to provide better services to the customers.

7. **Facilitates Communication and Co-ordination:** Communication is transmitting information to the insiders like subordinates and higher authorities and outsiders such as suppliers, creditors, investors, customers and so on. It is basically a two-way traffic. Management Accounting facilitates communication and co-ordination between different departments which help in attaining the objectives of business.

8. **Harmonious relationship with employees:** Management Accounting creates harmony in the relationship between the management and employees. This becomes possible by removing misunderstanding and unrest among the employees by fixing suitable targets with application of attractive incentive plans. In fixing these targets, past performance and efficiencies of the employees are taken into consideration.

9. **Minimizing wastages:** The use of management accounting techniques eliminates or minimizes various types of wastages and production defectives. Every unit of

the business enterprises tries to contribute maximum by making best use of factors of production.

10. **Saving time:** Management Accounting is concerned with the analysis and interpretation of financial statements. It selects only that information which is useful to management. By this way, it saves the valuable time of the management.

1.7 LIMITATIONS OF MANAGEMENT ACCOUNTING

Management Accounting, being comparatively a new discipline, is in the process of development. Even though it renders valuable services to the management in performing its functions, it is not free from limitations. It suffers from certain limitations, which limit its effectiveness. These limitations are as follows:

1. **Limitations of basic records:** Management accounting does not have its own independent source of information. It derives information from financial accounting, cost accounting and other records. The strength and weakness of the Management Accounting, therefore, depends upon the strength and weakness or quality of these basic records. In other words, their limitations are also the limitations of Management Accounting.

2. **Based on Historical Data:** Management accounting is based on historical data supplied by Financial Accounting and Cost Accounting. Normally, past may not be exact for uncertain future. The correctness and effectiveness of managerial decisions depend on quality of data. When data is not reliable Management Accounting will provide absurd result. It is rightly said that Financial Accounts provide only post mortem data of past activities.

3. **Lack of knowledge:** Management Accounting requires knowledge of a number of related subjects such as accounting, statistics, economics, taxation, principle of management, etc. The task of analysis and interpretation of data will be difficult if the management accountant fails to equip himself with sufficient knowledge in these fields. Deficiency in knowledge of any of these subjects limits the use of Management Accounting.

4. **Personal Bias:** In Management Accounting, there is every possibility of personal biasness in analysis and interpretation of data. Personal judgment of an interpreter may make the organization sound or otherwise. Personal prejudices and biasness affect the objectivity of decisions.

5. **Management Accounting is only a tool:** Management Accounting cannot replace the management. This is a mere tool for 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.

6. **Evolutionary stage:** Management accounting is still in a development stage and has not yet reached the perfection. The utility of Management Accounting depends upon the intelligent interpretation of the data available for managerial use. Hence, it is presumed that Management Accounting stands in evolutionary stage.

7. **Costly Installation:** The cost of installation of Management Accounting system is very high. A small business organisation cannot bear the cost of such installation. Therefore, the utility of this system is restricted only to big and complex organisation.

8. **Resistance to Change:** The installation of Management Accounting system brings some changes in the organisational set up and accounting practice. The personnel working in the organisation may resist such changes unless they are well-educated before its installation.

9. **Preference to Intuitive decision making:** Scientific decisions can be taken with the help of management accounting techniques. But majority of management accountants and top level executives prefer their past experience and intuition in making business decisions. The reason is that an intuitive decision making is very simple and easy.

10. **Broad based scope:** Management accounting has a very wide scope incorporating many disciplines. The limited knowledge and experience of management accountant may lead to prepare the data and reports which are unreliable and undependable.

1.8 DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND COST ACCOUNTING

Sl.No.	Points of Difference	Cost Accounting	Management Accounting
1.	Object	The main object of Cost Accounting is to calculate the cost of the product, job, centre or unit and effect cost control.	The main object of Management Accounting is to provide information to the management for planning, co-ordinating and decision-making the activities of the business.
2.	Nature	Cost Accounting is concerned with past and present facts and figures.	Management Accounting deals with future projections and plans, basing on the past records.
3.	Principles	Certain principles and procedures are followed in the ascertainment of cost of product or service No specific principles and procedures are followed in planning and policy making.	
4.	Data used	Only quantitative data is recorded in cost accounting.	It uses both quantitative and qualitative information
5.	Interested parties	Both external and internal parties are interested in cost accounting information	Mostly internal parties, i.e., management is interested in management accounting information.

Sl.No.	Points of Difference	Cost Accounting	Management Accounting
6.	Evolution	It has been evolved after industrial revolution as a supplementary accounting method to remove the limitations of Financial Accounting.	It has been developed since 1950 for planning, forecasting and decision making of the organization.
7.	Scope	It deals primarily with cost ascertainment which is not very wide.	The scope of Management Accounting is very wide. It includes financial accounting, cost accounting, budgeting, tax planning etc.
8.	Approach	It is historical in its approach.	It is futuristic in its approach.
9.	Installation	It can be installed without management accounting.	It needs financial and cost accounting as its base for its installation and implementation.
10.	Planning	It is concerned with short-term planning.	It is concerned with bothshort-term as well as long-term planning.
11.	Base	It provides a base for Management Accounting.	It is derived from both Cost and Financial Accounting.

1.9 DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

Sl. No.	Points of Difference	Financial Accounting	Management Accounting
1.	Object	The object is to record various transactions to find out profit and loss and financial position of the business at the end of accounting year.	The object is to help management in formulating plans and policies.
2.	Nature of Data	It makes use of data which is historical, quantitative, monetary and objective.	It uses data which is descriptive, statistical, subjective and relates to the future.
3.	Subject matter	It is concerned with assessment of results of the business as a whole.	It deals with assessing the activities of different units, departments or divisions.
4.	Users	The users are both internal and external to the organisation such as creditors bankers, shareholders, government and others.	The user is internal mainly related to the management.
5.	Legal compulsion	It is more or less compulsory or statutory for every business.	It is adopted on voluntary basis to increase the managerial efficiency.
6.	Precision	Only actual figures are recorded and there is no room for using approximate figures	The approximate figures are considered more useful than the exact figures, considering the urgency.

7.	Accounting principles	It is governed by Generally Accepted Accounting principles (GAAP) and conventions.	No set of principles are followed in Management Accounting. It differs from concern to concern and person to person.
8.	Period	The accounts are prepared for a particular period, generally for one year.	There are no specific periods for which management accounts are prepared.
9.	Publication	The financial accounts are published for the benefit of the organisation itself as well as outsiders.	The management accounts are not published and prepared for benefit of management only.
10.	Preparation	Financial accounting is prepared before preparation of management accounting	Management accounting is prepared only after preparation of financial accounting.
11.	Benefit	It provides benefits to the general public including employees and management of the organisation.	It is prepared for the benefit of the internal management of the organization.
12.	Provision of Audit	Financial accounting is audited by practicing chartered accountants.	There is no provision of audit in case of management accounting.
13.	Interde- pendence	Financial accounting system can be installed without management accounting.	Management accounting cannot be installed without proper financial accounting system.
14.	Reporting	The reporting of financial accounting is slow and time consuming.	Reporting of management accounting is very quick at regular intervals.

1.10 ROLE OF MANAGEMENT ACCOUNTANT

Any person who is entrusted with supply of accounting information to management is known as management accountant. The status or position of management accountant varies from organisation to organisation. He may be an executive in some concerns and a member of Board of Directors in some other concerns. His designation may be Controller or Chief Accountant or Management Accountant or Finance Controller or Financial Advisor, etc. Normally he occupies a key position in the organisation heading the accounting department. He is responsible for the installation, development and efficient functioning of the management accounting system. He plays an important role in gathering, compiling, reporting and interpreting the accounting information of the organisation. A noted author of Management accounting P.L. Tandon has rightly explained the position of a 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".

The primary duty of management accountant is to help management in taking correct policy decisions and improving the efficiency of the organization. The important role performed by management accountant can be summarized as follows:

1. Planning for Control: Management Accountant has to establish, co-ordinate and administer, as an integral part of management, an adequate plan for control of the operations. Such a plan would include profit planning, sales forecasts, expenses budgets, cost standards, capital investiment programmes and financing.

2. Reporting: Management Accountant has to compare actual performance with operating plans and standards. He has to report and interpret the results of operations to all levels of management and the owners of the business. This is done through the compilation of appropriate accounting and statistical records and reports.

3. Co-ordinating: Management Accountant co-ordinates all segments of management responsible for policy making and action. Such co-ordination might concern any phase of the operation of the business having to do with attainment of objectives and the effectiveness of the organisational structures and policies.

4. Motivation: Management Accountant adds value to the organization by motivating all the employees, including managers towards the organization's goals. Sometimes the goals of individuals do not match the goals of the organisation, so the role of management accountat, here, is to motivate the managers and other employees to direct their efforts towards achieving the organisational goals.

5. Management Information System: Management Accountant has a very significant role to perform in the installation, development and functioning of an efficient and effective management information system. He gathers information, breaks it down, sifts it out and classifies it into meaningful categories. He separates relevant and irrelevant information and then ranks relevant and irrelevant information and then reports the relevant information, in an intelligible form, to the management. He educates the executives about the need for collection of information and ways of using it. Apart from the top management, no one in the organisation perhaps knows more about the various information of the organisation than him. He is, therefore, sometimes described as the Chief Intelligent officer of the top management.

6. Other roles:

- Management Accountant administers tax policies and procedures. He has to supervise all matters relating to taxes.
- He supervises and co-ordinates the preparation of reports to Government agencies.
- He ensures protection of the business assets through adequate internal control and proper insurance coverage.
- He carries out continuous appraisal of economic and social forces and the Government influences and interprets their effect on the business.
- He develops and implements fraud prevention measures and internal control systems within the organization.

The roles of management accountant varies from one organisation to the other. His role depends on the size of the organisation, the type of organisation, industry and other factors. On the other hand, these factors are different from time to time. Therefore, the role of management accountants to-day is not the same as it was in the past, because of change in technology and other circumstances.

1.11 QUESTIONS

1. From the following alternatives, given under each bit, write the correct answer serially along with its serial number against each bit :

(a) Management Accounting is concerned with :

(i) preparation of Profit and Loss Account.

(ii) preparation of Balance Sheet.

(iii) accounting information useful to management.

(iv) determination of cost of producing a product.

(b) The primary goal of management accounting is to :

(i) prepare the Income statement.

(ii) record all business transactions .

(iii) determine the cost of product.

(iv) provide information for planning and decision making.

(c) The use of management accounting is :

(i) compulsory.

(ii) optional.

(iii) obligatory.

(iv) not necessary.

(d) Management accounting deals with :

(i) actual figures only.

(ii) standard figures only.

(iii) both monetary and non-monetary information.

(iv) estimated figures.

(e) One of the functions of Management accounting is :

(i) to help the management in taking decisions.

(ii) to ascertain the cost of products manufactured.

(iii) to determine profit and loss of a business.

(iv) to prepare the Balance Sheet.

(f) One of the following which is not a function of Management accounting is;

(i) planning

(ii) convening the Board meeting

(iii) decision making

(iv) analysis and interpretation

(g) One of the following who is not the user of management accounting is ;

(i) production manager

(ii) sales manager

(iii) promoter

(iv) director

(h) One of the following which is a tool of management accounting is :

(i) standard costing

(ii) budgetary control

(iii) internal audit

(iv) all of these

(i) Management accounting includes :

(i) financial accounting.

(ii) cost accounting.

(iii) reporting to management.

(iv) all of these.

(j) One of the following which is not the nature of management accounting, is;

(i) following fixed norms

(ii) forecasting

(ii) cause and effect analysis

(iii) supply of information.

[Answers:- (a) **iii,** (b) **iv,** (c) **ii,** (d) **iii,** (e) **i,** (f) **ii,** (g) **iii,** (h) **iv,** (i) **iv,** (j) **i]**

2. Express the following in one word/term each :

(i) The accounting which provides information to the management for making plans and policies.

(ii) The accounting that provides information to external and internal parties.

(iii) The accounting that is limited to cost ascertainment and cost information.

(iv) The branch of accounting which was introduced in 1950.

[Answers:- (i) Management Accounting, (ii) Financial Accounting,

(iii) Cost Accounting, (iv) Management Accounting **]**

3. Rectify the underlined portions of the following sentences :

(i) In Management accounting emphasis is given to actual figures.

(ii) Management accounting is compulsory.

(iii) Reporting of management accounting is slow.

(iv) Management accounting is governed by Generally Accepted Accounting Principles (GAAP).

[Answers:- (i) **Financial,** (ii) **optional,** (iii) **fast,** (iv) **Financial]**

4. Fill up the blanks of the following sentences :

(i) Management accounting reports are meant for ____________ use only.

(ii) Management accounting provides _____________ to management.

[Answers: (i) internal **(ii)** information **]**

5. Answer within 30 words :

(i) What do you mean by Management Accounting ?

(ii) State any two advantages of Management Accounting.

(iii) State any two limitations of Management Accounting.

(iv) Mention any two functions of Management Accounting.

(v) What is the scope of Management accounting?

(vi) Mention any two techniques used in Management Accounting

(vii) State any two characteristics of Management Accounting.

(viii) Mention any one distinction between Financial Accounting and Management Accounting.

(ix) State any one difference between Cost Accounting and Management Accounting.

(x) Define Management Accounting..

6. Answer within 50 words :

(i) What is the nature of Management Accounting ?

(ii) State any five limitations of Management Accounting.

(iii) Write any five functions of Management Accounting.

(iv) State any three points of difference between Financial Accounting and Management Accounting.

(v) Explain any three points of distinction between Cost Accounting and Management Accounting.

(vi) Who is a Management Accountant ? Explain.

7. What do you mean by Management Accounting ? what are its objectives ?

8. Describe in brief, the advantages of Management Accounting.

9. Differentiate between Management Accounting and Financial Accounting.

10. What is Management Accounting? How does it differ from Cost Accounting ?

11. Who is a Management Accountant ? Explain his duties.

CHAPTER - 2

FINANCIAL STATEMENTS

STRUCTURE

2.1 INTRODUCTION

Financial accounting is concerned with the procedure of maintaining books of accounts, classifying, summerising and periodically presenting the necessary financial information in the form of various financial statements. These financial statements are used for taking necessary and proper decisions about the allocation of economic resources and future planning. Financial Statements Provide very useful information to the parties who are interested in these. These statements are primarily used to ascertain the trading result of the business during a particular period and to find out the financial position as at the end of the same accounting period.

2.2 MEANING OF FINANCIAL STATEMENTS

Financial Statement are the means by which accounting information of a business concern is communicated to its users. It is prepared from the data taken from the books of accounts and conveys an understanding relating to financial affairs of a firm. The statements supply necessary financial information in a concise form so that the users can understand their meaning and purpose.

The financial statements generally refer to (i) the Position Statement or Balance Sheet and (ii) the Income Statement or Profit and Loss Account. Both the statements help the users/ analysts to analyse the real financial position of an enterprise. They are consiered as useful tools in the hands of the external users viz, trade creditors, investors, employees, customers, Government and public at large.

In the words of John N. Myer, "the financial statements provide a summary of accounts of a business enterprise, the balance sheet reflecting the assets, liabilities and capital as on a certain date and the income statement showing the results of operations during a certain period".

According to Smith and Asburne the financial statement is, "the end product of financial accounting in a set of financial statements prepared by the accountant of a business enterprise that purport to reveal the financial position of the enterprise, the result of its activities and an analysis of what has been done with earnings".

From the above definitions it is clear that the Financial Statements are the outcome of a suumarising process of accounting. The preparation of the statements is the end result of financial accounting and are the major sources of financial information of one business unit. In short, Financial Statements consist of a Balance Sheet which reveals the financial position on a particular date, and an Income Statement which shows the result from operations of an enterprise during a particular period.

2.3 NATURE AND OBJECTIVES OF FINANCIAL STATEMENTS

As has been stated in the earlier paragraphs financial statements reveal financial information relating to financial position of a business on a particular date and profitability of the business during a certain period. These information are very important for evaluating the finacial performance of an enterprise in the form of liquidity analysis, profitability analysis and efficiency of management, etc.

2.3.1 Nature of Financial Statements

In the light of nature/charateristics of financial statements the American Institute of Certified Public Accountants (AICPA) state "they (financial statements) reflect a combination of recorded facts, accounting conventions and personal judgement, and the judgements and conventions applied affect them materially". Thus, the nature of financial statements can be summarised in the following forms :

(a) Recorded Facts :

The transactions measured and expressed in terms of money are recorded in accounting. Financial statements are prepared on the basis of those recorded facts and figures of various accounts viz, cash balance in hand, cash at bank, purchases, sales, bills receivable, trade debtors, trade creditors fixed assets, different items of expenses and incomes, etc. These data are the result of past activities and are historical in nature. The assets purchased at different times and at different prices are recorded at their cost prices and not shown at current market prices. Hence, the financial statements do not show the current financial condition of the entity.

(b) Conventions :

Convention is the general agreement on the basis of long- standing usage or a customary practice in social or economic life. In accounting some customs or conventions are followed by the accounting community over the years while preparing financial statements. The accounting conventions followed can be expressed as :

(i) Convention of Full Disclosure :

Financial Statements are prepared on the basis of full disclosure of all significant information. It involves proper classification and narrative explanation of all relevant and material facts for clear understanding of its users. This convention gives emphasis in disclosing the true and fair view of the economic activities of an enterprise for a particular period. For example, the method of providing depreciation whether Straight line method or Reducing balance method, must be disclosed.

(ii) Convention of Materiality :

It means relative importance of an item. While financial statements are prepared, important items (material) are given due weightage and items of relatively smaller importance (immaterial) are not given due attention and are combined in a conslidated from. The items like pen, pencil, postage stamp etc, are treated as expenditure for the year in which they are purchased and not treated as fixed assets even if they continue to exist at the end of the year.

(iii) Convention of Conservatism :

Conservatism or Prudence convention gives due consideration to all possible losses and ignores all expected profits. The main theme of this convention is 'anticipate no future profit but provide for all possible losses'. The purpose of this practice is to play safe and to guard against the risks and uncertainties inherent in business activities. For the above reason closing stock is valued at cost price or market price which ever is less and provision is made for doubtful debts while preparing financial statements.

(iv) Convention of Consistency :

This doctorine states that the application of accounting rules and conventions should not be changed frequently i,e, from one year to another. The comparison of business results for different years would be meaningful and relevant if the same procedures and methods are followed continuously from year to year. For example, if a firm follows diminishing balance method of charging depreciation this year while preparing its financial statements, the same method should be followed in the subsequent years to make the comparison more meaningful. It does not mean that there cannot be any change at all. If a change is made in any year, it must be disclosed in the financial statements, as a foot note.

(c) Postulates :

The recognised assumptions and concepts which are validly accepted and do not require to be proved are called the postulates. Financial statements are prepared on the basis of universally acceptable assumptions and concepts which may be applied in all possible cases. The fundamental assumptions and concepts are going concern, stable monetary unit, realisation, business entity, money measurement, matching, accounting period, etc.

(d) Legal implications :

While preparing financial statements, legal formalities must be followed. It means, Indian companies must prepare their financial statements as per the requirements of the Indian Companies Act, 2013 or any other Act as in force at that time. As per the new act Balance Sheet and Statement of Profit and Loss are prepared in Schedule III, under section 129. The earlier practice of prepararing Statement of Profit and Loss and Balance Sheet was Schedule VI, under section 211 of Indian Companies (Amendment) Act, 1999.

(e) Personal Judgement :

It has been discussed above that the financial statements are prepared as per certain standard accounting conventions and concepts but still personal judgement of the accountant plays a very significant role while applying all those principles. For example, while valuing clossing stock different accountants may apply different methods like FIFO method, LIFO method, Average stock method. Base stock method, etc. In case of selection of depreciation method, determination of the period for writing off intangible assets, etc the personal judgement of an accountant plays an important role.

2.3.2 Objective of Financial Statements

Financial statements present the true and fair value of the state of affairs of one business enterprise. It is the source of information for the owners, creditors, customers, Government and general public about the profitability and financial position of a concern. The primary objectives of financial statements are to show the performance, financial position and changes in financial postion of a firm with the help of various statements, viz, Statement of Profit and Loss. Balance Sheet, Funds Flow Statements and Cash Flow Statement. The other significant objectives of financial statements are :

(i) To provide necessary information about the financaial activities of the business to the interested parties.

(ii) To supply information about the efficiency of the management as regards the effective utilisation of scarce resources.

(iii) To facilitate the management for future financial forecasting.

(iv) To help in evaluation of the earning capacity of the firm along with periodical earnings.

(v) To facilitate in taking decisions regarding replacement of fixed assests and expansion of the business.

(vi) To supply required data to the Government for collection of taxes and duties also for price control purposes.

(vii) To assist management in taking preventive measures fo the deviations between actual and budgeted performances.

(viii) To supply necessary information to the functional managers for internal control and formulation of over all policies.

(ix) To safeguard the interest of the shareholders who are not allowed to access the day-to-day activities of the business.

(x) To help the credit rating agencies to determine the rating of the enterprise.

2.4 IMPORTANCE OF FINANCIAL STATEMENTS

Financial statements are the result of accounting process and the mirror which reflects the financial position and oerating strength or weakness of a business. These statements are very important tools in the hand of the management for formulation of future financial policy and several other measures of a company. The importance of financial statements, in the light of its several uses by different parties are discussed as under :

a) Management – The financial statements are verymuch useful for the management to decide its future course of action. These statements help to identify the efficient and inefficient activities by which management excercises various control measures to increase the profitability as well as productivity.

(b) Creditors – Trade creditors need to be paid within a short period of time. These payments are made out of the current assets of a concern. Financial statements show the long-term as well as short-term solvency of an enterprise which the creditors of that concern are interested to know. It helps to calculate the current ratio and liquidity ratio along with other ratios for that business, Which would enable the creditors to measure the paying capacity of the concern.

(c) Bankers – Different types of loans are sanctioned by the banks to the business units. Banks are interested in regular payment of interest and timely payment of instalments of loan. It is through the financial statements, that a banker can know the earning capacity and finacial position of the borrowing organisation.

(**d) Investors –** The investors who invest their money either in shares or debentures or in any form of loans need security of their investments. A good and regular return on their investments attract them to invest more. The investors study the solvency position of the business unit from the financial statements and ascertain the possibility of paying back of loan amount, by making the analysis of the financial statements of the concern.

(e) Government – Both Central and State Government collect taxes from the business houses on the basis of information provided in financial statements. Analysis of the financial statements helps the Governement in compiling rarious statistics concerning business and also facilitates in preparing national accounts and calculating Gross Domestic Product (GDP), etc.

(f) Researchers – Financial statements are the mirror of the financial performance of an enterprise. Research scholars study the financial operations of different business units and compare the results of different firms within the industry. They prepare project reports on the basis of financial statements.

(g) Trade Associations – Trade associatations render various support services to their member units. For this purpose they analyse the financial statements of different firms and develop uniform system of accounts.

(h) Stock Exchanges – Shares and debentures (securities) of companies are purchased and sold through stock exchanges. Price of securities are determined on the basis of financial position and profit earning of different concerns. Financial statements help stock exchanges in determining the security prices.

(i) Regulatory Bodies – Various regulatory bodies like Securities Exchange Board of India (SEBI), Company Law Board, Registrar of Companies (ROC), Pollution Control

Broad, etc, have been formed to protect the interest of the investors and general public. They put an eye on the financial statements which show the funcitoning of a business.

(j) General Public – Common people also take interest to know the profitability and financial position of a business. A business unit having sound financial position generates employment oppertunities, supplies goods at reasonable price, uses the local materials and other resources and helps in social development.

2.5 LIMITATIONS OF FINANCIAL STATEMENTS

Financial statements are very much useful and relevant for a business concern. Meaningful conclusions can be drawn if these statements are prepared and analysed carefully. Since financial statements are based on accounting information, it also suffers from the limitations of accounting. Following are the main limitations of financial statements :

a) Recording of Monetary Transactions only

Financial Statements are prepared on the basis of the information compiled and supplied by accounting which is fully based on monetary transactions only. But there are many important non-monetary factors which influence the operating results and financial position of the business, are not considered because they cannot be measured in terms of money. For example, non-financial items like cerdit worthness of the business, customer relation, human resources, competitors activity, conflict between sales and production managers, personal reputation of managers, co-operation of employees with management, etc. are ignored.

b) Based on Historical cost

The assets shown in financial statements are their original cost or historical cost. The value of some fixed assets might have increased or decreased with the passage of time but are shown at their purchase price. As Balance Sheet is an index of current economic realities, but does not consider current prices, loses its significance. Similarly, the profitability shown in Income Statement may not represent the true picture of earning capacity of the concern. The increase or decrease in profit of a certain year may be due to some abnormal causes but not due to increase in efficiency. As a result,the conclusions drawn on the basis of financial statements may not show a fair picture of the business.

c) No Timely Information

Usually financial statements are prepared at the end of one accounting year. But the users of accounting information need those information at aregular time interval for taking right decisions at right time, which cannot be supplied by the financial statements.

d) Only Interim Reports

The profit or loss shown in the statement of profit and loss and financial position revealed in the balance sheet is not the exact picture of a concern rather an interim report. The true position of a business can only be ascertained when it is liquidated.

e) Effect of Personal Bias

Financial statements are analysed on the basis of information contained in themselves. Human judgement is always involved for its interpretation. The financial information cannot speak themselves and the analyst provides tongue to those data and make them speak. All the analysts and users may not see from the same angle and may not have the same opinion in respect of a particular accounting figure.

f) Use of Alternative Methods

Several methods are used for the preparation of financial statements of a concern. For example, depreciation on fixed assets is calculated by following different methods like Straight Line Method or Written Down Value Method and for valuation of closing stock of materials First in First out (FIFO) or Last in First out (LIFO) or Average Price method may be used. As a result profitability and financial position of a business for the same period become different with the application of alternative methods. The application of particular method again depends upon the personal judgement of the accountant.

g) Application of Conservatism Principle

On application of the convention of conservatism the statement of profit and loss may not diclose true income of one business, because probable losses are shown in the statement where as probable incomes and gains are ingnored. This practice leads to understatement of profit which contradicts the principle of full disclosure.

h) No Consideration of Price Level Changes

The accounting information is based on the principle of stable monetary unit, which means the value of rupee in one year remain the same in the subsequent years. But monetary units is never stable under inflation and deflation situations. This results in overstatement profit in inflation and understatement of profit in depression situations. Since price level changes are not considered in financial statements it fails to provide a clear and correct picture of the state of affairs of a business unit.

2.6 TYPES OF FINANCIAL STATEMENTS

Primarily financial statements consist of two basic components, i.e., (a) Statement of Position or, Balance Sheet (b) Income Statement or, Statement of Profit and Loss. However to make a complete set of financial statements section 2 (40) of Companies Act, 2013 prescribes three more components along with the above two. The total five components included in financial statements are :

(i) a balance sheet as at the end of the financial year,

(ii) a profit and loss account, or in the case of a company carrying on any activity not for profit, an income and expenditure account for the financial year,

(iii) cash flow statement for the financial year,

(iv) a statement of changes in equity, if applicable; and

(v) any explanatory note annexed to, or forming part of, any document referred to in sub-clause (i) to sub-clause (iv)

Considering the importance and relevance of the above components we are dicussing the first three components of financial statements in this chapter.

2.6.1 Balance Sheet

Balance Sheet is a statement of assets and liabilities of a business unit, normally prepared at the end of an accounting period. It gives a true and fair idea about the finacial position of the business concern on a particular date. More specifically, balance sheet shows all the properties (assets) that a business house possesses and the sources of those properties (liabilities and capital). The right hand side of the statement shows the assets owned by the enterprise and left hand side shows all the liabilities to the outsiders alongwith the capital of the concern. Let us look at a few definitions of balance sheet :

“Balance Sheet is a classified summary of the ledger balances remaining after closing all revenue items into the Profit and Loss Account”.– Cropper

“The Balance Sheet is a statement which reports the values owned by the enterprise and the claims of the creditors and owners against these properties.”– Howard

The American Institute of Certified Public Accountants (AICPA) defines Balance Sheet as “A tabular statement of summary of balances (debits and credits) carried forward after an actual and constructive closing of books of accounts and kept according to principles of accounting”.

From the above definitions, it is again clear that, the balance sheet shows the resources that a business unit has i.e. its assets and from where those resources come from, i.e. its liabilities and investments by owners and outsiders.

The usual practice of preparing a balance sheet by the soleproprietorship concerns and partnership firms is horizontal form (T form) which is having two sides i.e. left hand side and right hand side. The assets are shown in the right hand side which will be equal to the liabilities and capital shown in the left hand side. The arrangement of assets and liabilities which is otherwise known as ‘marshalling of assets and liabilities’ is either on the basis of (i) liquidity or (ii) permanence. On the basis of liquidity the most liquid assets like, cash in hand, cash at bank, short term investments, etc, are shown first and most fixed or permanent assets like machinery, building, land, goodwill, etc, are shown at last. In the liability side the debts to be paid in a short period like outstanding expenses, bank overdraft, bills payable, sundry creditors, etc. are shown first followed by long term liabilities and capital. When balance sheet is prepared on the basis of permanence, a reverse order of arrangement is followed. The liquidity form of balance sheet is more suitable for the banking and other financial institutions while the permanence order is widely adopted by the business units. Even the Companies Act, 1956 had also adopted the permanece order.

But, section 129 of the Indian Companies Act, 2013 has given a prescribed vertical format of balance sheet to be prepared as part- I of Schedule III. The specific proforma alongwith its accompaning notes are given below :

SCHEDULE - III

PART I – BALANCE SHEET

Name of the Company..................

Balance Sheet as at..................... (Rupees in........)

Particulars	Note No.	Figures as at the end of current reporting period	Figures as at the end of the previous reporting period
1	2	3	4
I. EQUITY AND LIABILITIES			
(1) Shareholders' funds			
(a) Share capital			
(b) Reserves and surplus			
(c) Money received against share warrants			
(2) Share application money pending allotment			
(3) Non-current liabilities			
(a) Long-term borrowings			
(b) Deferred tax liabilities (Net)			
(c) Other Long term liabilities			
(d) Long-term provisions			
(4) Current liabilities			
(a) Short -term borrowings			
(b) Trade payables			
(c) Other current liabilities			
(d) Short-term provisions			
TOTAL			

1	2	3	4
II. ASSETS			
1. Non-current assets			
(a) Fixed assets			
(i) Tangible assets			
(ii) Intangible assets			
(iii) Capital work-in-progress			
(iv) Intangible assets under development			
(b) Non-current investments			
(c) Deferred tax assets (net)			
(d) Long-term loans and advances			
(e) Other non-current assets			
(2) Current assets			
(a) Current investments			
(b) Inventories			
(c) Trade receivables			
(d) Cash and cash equivalents			
(e) Short-term loans and advances			
(f) Other current assets			
TOTAL			

Notes

GENERAL INSTRUCTIONS FOR PREPARATION OF BALANCE SHEET

1. An asset shall be classified as current when it satisfies any of the following criteria:–

(a) it is expected to be realised in, or is intended for sale or consumption in, the company's normal operating cycle;

(b) it is held primarily for the purpose of being traded;

(c) it is expected to be realised within twelve months after the reporting date; or

(d) it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.

All other assets shall be classified as non-current.

2. An operating cycle is the time between the acquisition of assets for processing and their realisation in cash or cash equivalents. Where the normal operating cycle cannot be identified, it is assumed to have a duration of twelve months.

3. A liability shall be classified as current when it satisfies any of the following criteria:–

(a) it is expected to be settled in the company's normal operating cycle;

(b) it is held primary for the purpose of being traded;

(c) it is due to be settled within twelve months after the reporting date; or

(d) the company does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date. Terms of a liability fof at least twelve months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities shall be classified as non-current.

4. A receivable shall be classified as a "trade receivable" if it is in respect of the amount due on account of goods sold or services rendered in the normal course of business.

5. A payable shall be classified as a "trade payable" if it is in respect of the amount due on account of goods purchased or services received in the normal course of business.

6. A company shall disclose the following in the notes to accounts.

A. Share Capital

For each class of share capital (different classes of preference shares to be treated separately) :

(a) the number and amount of shares authorised;

(b) the number of shares issued, subcribed and fully paid, and subscribed but not fully paid;

(c) per value per share;

(d) a reconcilation of the number of shares outstanding at the beginning and at the end of the reporting period;

(e) the rights, preferences and restrictions attaching to each class of shares including restrictions on the distribution of dividends and the repayment of capital;

(f) shares in respect of each class in the company held by its holding company or its ultimate holding company including shares held by or by subsidiaries or associates of the holding company or the ultimate holding company in aggregate;

(g) shares in the company held by each shareholder holding more than 5 percent. shares specifying the number of shares held;

(h) shares reserved for issue under options and contracts/commitments for the sale of shares/disinvestment, including the terms and amounts;

(i) for the period of five years immediately preceding the date as at which the Balance Sheet is prepared :

(A) Aggregate number and class of shares allotted as fully paid-up pursuant to contract (s) without payment being received in cash.

(B) Aggregate number and class of shares allotted as fully paid-up by way of bonus shares.

(C) Aggegate number and class of shares bought back.

(j) terms of any securities convertible into equity/preference shares issued along with the earliest date of conversion in descending order starting from the farthest such date;

(k) calls unpaid (showing aggregate value of calls unpaid by directors and officers);

(l) forfeited shares (amount originally paid-up).

B. Reserves and Surplus

(i) Reserves and surplus shall be classified as :

(a) Capital Reserves;

(b) Capital Redemption Reserve;

(c) Securities Premium Reserve;

(d) Debenture Redemption Reserve;

(e) Revaluation Reserve;

(f) Share Options Outstanding Account;

(g) Other Reserves– (specify the nature and purpose of each reserve and the amount in respect thereof);

(h) Surplus i.e., balance in Statement of Profit and Loss disclosing allocations and appropriations such as dividend, bonus shares and transfer to/ from reserves, etc;

(Additions and deductions since last balance sheet to be shown under each of the specified heads);

(ii) A reserve specifically represented by earmarked investments shall be termed as a "fund".

(iii) Debit balance of statement of profit and loss shall be shown as a negative figure under the head "Surplus". Similarly, the balance of "Reserves and Surplus", after adusting negative balance of surplus, if any, shall be shown under the read "Reserves and Surplus" even if the resulting figure is in the nagative.

C. Long-Term Borrowings

(i) Long-term borrowings shall be classified as :

(a) Bonds/debentures;

(b) Term loans :

(A) from banks.

(B) from other parties.

(c) Deferred payment liabilities;

(d) Deposits;

(e) Loans and advances from related parties;

(f) Long term maturities of finance lease obligations;

(g) Other loans and advances (specify nature).

(ii) Borrowings shall further be sub-classified as secured and unsecured. Nature of security shall be specified separately in each case.

(iii) Where loans have been guaranteed by directors or others, the aggregate amount of such loans under each head shall be disclosed.

(iv) Bonds/debentures (along with the rate of interest and particulars of redemption or conversion, as the case may be) shall be stated in descending order of maturity or conversion, starting from farthest redemption or conversion date, as the case may be. Where bonds/debentures are redeemable by instalments, the date of maturity for this purpose must be reckoned as the date on which the first instalment becomes due.

(v) Particulars of any redeemed bonds/debentures which the company has power to reissue shall be disclosed.

(vi) Terms of repayment of term loans and other loans shall be stated.

(vii) Period and amount of continuing default as on the balance sheet in repayment of loans and interest, shall be specified separately in each case.

D. Other Long-term Liabilities

Other Long-term Liabilities shall be classified as :

(a) Trade payables.

(b) Others.

E. Long-term provisions

The amounts shall be classified as :

(a) Provision for employee benefits :

(b) Others (specify nature).

F. Short-term borrowings

(i) Short-term borrowings shall be classified as :

(a) Loans repayable on demand;

(A) from banks.

(B) from other parties.

(b) Loans and advances from related parties;

(c) Deposits;

(d) Other loans and advances (specify nature).

(ii) Borrowings shall further be sub-classified as secured and unsecured. Nature of security shall be specified separately in each case.

(iii) Where loans have been guaranteed by directors or others, the aggregate amount of such loans under each head shall be disclosed.

(iv) Period and amount of default as on the balance sheet date in repayment of loans and interest, shall be specified separately in each case.

G. Other current liabilities

The amounts shall be classified as :

(a) Current maturities of long-term debt;

(b) Current maturities of finace lease obligations;

(c) Interest accured but not due on borrowings;

(d) Interest accured and due on borrowings;

(e) Income received in adance;

(f) Unpaid dividends;

(g) Application money received for allotment of securities and due for refund and interest accrued thereon. Share application money includes advances towards allotment of share capital. The terms and conditions including the number of shares proposed to be issued, the amount of premium, if any, and the period before which shares shall be alloted shall be disclosed. It shall also be diclosed whether the company has sufficient authorised capital to cover the share capital amount resulting from allotment of shares out of such share application money. Further, the period for which the share application money has been pending beyond the period for allotment as mentioned in the document inviting application for shares along with the reason for such share application money being pending shall be disclosed. Share application money not exceeding the issued capital and to the extent not refundable shall be shown under the head Equity and share application money to the extent refundable, i.e. the amount in excess of subcription or in case the requirements of minimum subscription are not met, shall be separately shown under "Other current liabilities";

(h) Unpaid matured deposits and interest accured thereon;

(i) Unpaid matured debentures and interest accured thereon;

(j) Other payables (specify nature).

H. Short-term provisions

The amounts shall be classified as :

(a) Provision for employee benefits.

(b) Other (specify nature).

I. Tangible assets.

(i) Classification shall be given as :

(a) Land

(b) Buildings;

(c) Plant and Equipment;

(d) Furniture and Fixtures;

(e) Vehicles;

(f) Office equipment;

(g) Others (specify nature).

(ii) Assets under lease shall be separately specified under each class of asset.

(iii) A reconciliation of the gross and net carrying amounts of each class of assets at the beginning and end of the reporting period showing additions, disposals, acquisitions through business combinations and other adustments and the related depreciation and impairment losses/reversals shall be disclosed separately.

(iv) Where sums have been written-off on a reduction of capital or revaluation of assets or where sums have been added on revaluation of assets, every balance sheet subsequent to date of such write off, or addition shall show the reduced or increased figures as applicable and shall by way of a note also show the amount of the reduction or increase as applicable together with the date thereof for the first five years subsequent to the date of such reduction or increase.

J. Intangible assets

(i) Classification shall be given as :

(a) Goodwill;

(b) Brands/trademarks;

(c) Computer software;

(d) Mastheads and publishing titles;

(e) Mining rights;

(f) Copyrights, and patents and other intellectual property rights, services and operating rights;

(g) Recipes, formulae, models, disigns and prototypes;

(h) Licences and franchise.

(i) Others (specify nature)

(ii) A reconciliation of the gross and net carrying amounts of each class of assets at the beginning and end of the reporting period showing additions, disposals, acquisitions through business combinations and other adjustments and the related amortization and impairment losses/reversals shall be disclosed separately.

(iii) Where sums have been written-off on a reduction of capital or revaluation of assets or where sums have been added on revaluation of assets, every balance sheet subsequent to date of such write-off, or addition shall show the reduced or increased figures as applicable and shall by way of a note also show the amount of the reduction or increase as applicable together with the date thereof for the first five years subsequent to the date of such reduction or increase.

K. Non-current ivestments.

(i) Non-current investments shall be classified as trade investments and other investments and further classified as :

(a) Investment property;

(b) Investments in Equity Instruments.

(c) Investments in preference shares;

(d) Investments in Government or trust securities;

(e) Investments in debentures or bonds;

(f) Investments in Mutual Funds;

(g) Investments in partnership firms;

(h) Other non-current investments (specify nature)

Under each classification, details shall be given of names of the bodies corporate indicating separately whether such bodies are (i) subsidiaries, (ii) associates, (iii) joint ventures, or (iv) controlled special purpose entities in whom investments have been made and the nature and extent of the investment so made in each such body corporate (showing separately investments which are partly-paid). In regard to investments in the capital of partnership firms, the names of the firms (with the names of all their partners, total capital and the shares of each partner) shall be given.

(ii) Investments carried at other than at cost should be separately stated specifying the basis for valuation thereof;

(iii) The following shall also be disclosed :

(a) Aggregate amount of quoted investments and market value thereof;

(b) Aggregate amount of unquoted investments;

(c) Aggregate provision for diminution in value of investments;

L. Long-term loans and advances.

(i) Long-term loans and advances shall be classified as :

(a) Capital Advances;

(b) Security Deposits;

(c) Loans and advances to related parties (giving details thereof);

(d) Other loans and advances (specify nature).

(ii) The above shall also be separately sub-classified as :

(a) Secured, considered good;

(b) Unsecured, considered good;

(c) Doubtful.

(iii) Allowance for bad and doubtful loans and advances shall be disclosed under the relevant heads separately.

(iv) Loans and advances due by directors or other officers of the company or any of them either severally or jointly with any other persons or amount due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

M. Other non-current assets

Other non-current assets shall be classified as :

(i) Long-term Trade Receiables (including trade receivables on deferred credit terms);

(ii) Others (specify nature);

(iii) Long-term Trade Receivables, shall be sub-classified as :

(A) (a) Secured, considered good;

(B) Unsecured, considered good;

(C) Doubtful.

(b) Allowance for bad and doubtful debts shall be disclosed under the relevant heads separately.

(c) Debts due by directors or other officers of the company or any of them either severally or jointly with any other person or debts due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

N. Current Investments

(i) Current investments shall be classified as :

(a) Investments in Equity Instruments;

(b) Investments in Preference Shares;

(c) Investments in Government or trust securities;

(d) Investments in debentures or bonds;

(e) Investments in Mutual Funds;

(f) Investments in partnership firms;

(g) Other investments (specify nature).

Under each classification, details shall be given of names of the bodies corporate (indicating separately whether such bodies are : (i) subsidiaries, (ii) associates, (iii) Joint ventures, or (iv) controlled special purpose entities in whom investments have been made and the nature and extent of the investment so made in each such body corporate (showing separately investments which are partly paid). In regard to investments in the capital of partnership firms, the names of the firms (with the names of all their partners, total capital and the shares of each partner) shall be given.

(ii) The following shall also be disclosed;

(a) The basis of valuation of individual investments;

(b) Aggregate amount of quoted investments and market value thereof;

(c) Aggregate amount of unquoted investments;

(d) Aggregate provision made for diminution in value of investments.

O. Inventories

(i) Inventories shall be classified as :

(a) Raw materials;

(b) Work-in-progress;

(c) Finished goods;

(d) Stock-in-trade (in respect of goods acquired for trading);

(e) Stores and spares;

(f) Loose tools;

(g) Others (specify nature).

(ii) Goods-in-transit shall be disclosed under the relevant sub-head of inventories;

(iii) Mode of valuation shall be stated.

P. Trade Receivables

(i) Aggregate amount of Trade Receivables outstanding for a period exceeding six months from the date they are due for payment should be separately stated.

(ii) Trade receivables shall be sub-classified as :

(a) Secured, considered good;

(b) Unsecured considered good;

(c) Doubtful.

(iii) Allowance for bad and doubtful debts shall be disclosed under the relevant heads separately.

(iv) Debts due by directors of other officers of the company or any of them either severally or jointly with any other person or debts due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

Q. Cash and cash equivalents.

(i) Cash and cash equivalents shall be classified as :

(a) Balances with banks;

(b) Cheques, drafts on hand;

(c) Cash on hand;

(d) Others (specify nature).

(ii) Earmarked balance with banks (for example, for unpaid dividend) shall be separately stated.

(iii) Balances with banks to the extent held as margin money or security against the borrowings, guarantees, other commitments shall be disclosed separately.

(iv) Repatriation restrictions, if any, in respect of cash and bank balances shall be separately stated.

(v) Bank deposits with more than twelve months maturity shall be disclosed separately.

R. Short-term loans and advances

(i) Short-term loans and advances shall be classified as :

(a) Loans and advances to related parties (giving details thereof);

(b) Others (specify nature)

(ii) The above shall also be sub-classified as :

(a) Secured, considered good;

(b) Unsecured, considered good;

(c) Doubtful.

(iii) Allowance for bad and doubtful loans and advances shall be disclosed under the relevant heads separately.

(iv) Loans and advances due by director or other officers of the company or any of them either severally or jointly with any other person or amounts due by firms or private companies respectively in which any director is a partner or a director or a member shall be separately stated.

S. Other current assets (specify nature)

This is an all-inclusive heading, which incorporates current assets that do not fit into any other asset categories.

T. Contingent liabilities and commitments (to the extent not provided for)

(i) Contingent liabilities shall be classified as :

(a) Claims against the company not acknowledged as debt;

(b) Guarantees;

(c) Other money for which the company is contingently liable.

(ii) Commitments shall be classified as :

(a) Estimated amount of contracts remaining to be executed on capital account and not provided for,

(b) Uncalled liability on shares and other investments partly paid;

(c) Other commitments (specify nature)

U. The amount of dividends proposed to tbe distributed to equity and preference shareholders for the period and the related amount per share shall be disclosed separately. Arrears of fixed cumulative dividends on preference shares shall also be disclosed separately.

V. Where in respect of an issue of securities made for a specific purpose, the whole or part of the amount has not been used for the specific purpose at the balance sheet date, there shall be indicated by way of note how such unutilised amounts have been used or invested.

W. If, in the opinion of the Board, any of the assets other than fixed assets and non-current investments do not have a value on realisation in the ordinary course of business at least equal to the amount at which they are stated, the fact that the Board is of that opinion, shall be stated.

Illustration 1

Under which heads will the following items be presented on the Equity and Liabilities side of the Balance Sheet of company as per Schedule- III- Part-I of the Companies Act, 2013 ?

(i) Bills payable (ii) Debentures (iii) Unclaimed Dividend (iv) Proposed Dividend

(v) Calls-in-Arrear (vi) Sinking Fund (vii) Public Deposit (viii) Share Forfeiture Account

(ix) Calls-in-Advance (x) Provision for Provident Fund.

Solution :

Serial No.	Items	Heading	Sub-heading
i	Bills payable	Current Liabilities	Trade Payables
ii	Debentures	Non-Current Liabilities	Long-term Borrowings
iii	Unclaimed Dividend	Current Liabilities	Other Current Liabilites
iv	Proposed Dividend	Current Liabilities	Short-term Provisions
v	Calls-in-Arrear	Shareholders' Funds	It is deducted from Subscribed but fully paid Capital.
vi	Sinking Fund	Shareholders' Funds	Reserves and Surplus

Serial No.	Items	Heading	Sub-heading
vii	Public Deposit	Non-Current Liabilities	Long-termBorrowings
viii	Share Forfeiture Account	Shareholders' Funds	It is added to the Subscribed Capital
ix	Calls-in-Advance	Current Liabilities	Other Current Liabilities
x	Provision for Provident Fund	Non-Current Liabilities	Long-term Provisions

Note : Sundry Creditors and Bills Payable are termed as Trade Payables.

Illustration 2

Under which heads will the following items be presented on the Assets side of the Balance Sheet of a company ?

(i) Bills Receivable (ii) Trade Marks (iii) Prepaid Insurance (iv) Sunday Debtors (v) Good will (vi) Shares in X Ltd. (vii) Works-in-Progress (viii) Advances Recoverable in cash within operating cycle (ix) Cash at Bank (x) Computers.

Solution :

Serial No.	Items	Heading	Sub-heading
i	Bills Receivable	Current-Assets	Trade Receivables
ii	Trade Marks	Non-Current Assets	Fixed Assets; Intangible Assets
iii	Prepaid Insurance	Current Assets	Other Current Assets
iv	Sundry Debtors	Current Assets	Trade Receivables
v	Goodwill	Non-Current Assets	Fixed Assets : Intangible Assets
vi	Shares in X Ltd.	Non-Current Assets	Non-Current Investments

Serial No.	Items	Heading	Sub-heading
vii	Works-in-progress	Current Assets	Inventories
viii	Advances Reco-verable in cash within Operating Cycle	Current Assets	Short-term Loans and Advances
ix	Cash at Bank	Current Assets	Cash and Cash Equivalents
x	Computers	Non-Current Assets	Fixed Assets :Tangible Assets

Note : Sundry Debtors and Bills Receivable are termed as Trade Receivables.

Illustration 3

Under which major headings and sub-headings will the following items be shown in the Balance Sheet of a company as per schedule III- Part-I of the companies Act, 2013 ?

(a) Capital Redemption Reserve (b) Authorised Capital

(c) Preliminary Expenses (d) Net loss as shown by Statement of Profit and Loss (e) Buildings (f) Loans replayable on demand (g) Unpaid dividend (h) Outstanding Wages (i) Accrued Incomes (j) Loose Tools (k) Contingent Liabilities (l) Provision for Taxation.

Solution :

Serial No.	Items	Major head	Sub-head
a.	Capital Redemption Reserve	Shareholders' Funds	Reserves and Surplus
b.	Authorised Capital	Shareholders' Funds	Share Capital

Serial No.	Items	Major head	Sub-head
c.	Preliminary Expenses	Not shown in Balance Sheet since as per Accounting Standard 26 these expenses are to be written off in the year in which they are incurred	—
d.	Net loss shown by Statement of Profit and Loss	Shareholders' Fund	Reserves and Surplus as negative item
e.	Buildings	Non-Current Assets	Fixed Assets : Tangible Assets
f.	Loans Repayable on demand	Current Liabilities	Short-term Borrowings
g.	Unpaid dividend	Current Liabilities	Other Current Liabilities
h.	Outstanding wages	Current Liabilities	Other Current Liabilities
i.	Accured Incomes	Current Assets	Other Current Assets
j.	Loose Tools	Current Assets	Inventories
k.	Contingent Liability	Not shown in Balance Sheet. But it appears in Notes to Accounts below the Balance Sheet	—
L.	Provision for Taxation	Current Liabilities	Shor-term Provisions

2.6.2 Statement of Profit and Loss

The statement of profit and loss is the summary of all revenue items of one business. It presents the profitability of the business by summarising the revenues and expenses of a particular period. This statement is otherwise known as Income Statement or Profit and Loss Account. When it is prepared in an account form by taking all revenue expenditure and loss items in the debit side and all revenue incomes and gains in the credit side it is called as profit and loss account. But when it is prepared in a vertical form (statement form) by taking all those above mentioned items it is called income statement or statement of profit and loss. In case of sole-proprietorship and partnership business there is no prescribed form of income statement and its preparation is not also compulsory rather desirable.

In case of company form of business the preparation and presentation of the statement of profit and loss is compulsory and should give a true and fair view of the profitability. The Indian Companies Act, 2013 in its section 129 has given a prescribed vertical format of statement of profit and loss and made its presentation mandatory for all the companies and shall comply with the requirements of part II of schedule III. The specific proforma of this statement alongwith its accompanies notes are given below :

SCHEDULE - III

PART II - STATEMENT OF PROFIT AND LOSS

Name of the company.................

Profit and loss statement for the year ended...................

(Rupees in........)

	Particulars	Note No.	Figures as at the end of current reporting period	Figures as at the end of the previous reporting period
	1	2	3	4
I.	Revenue from operations		x x x	x x x
II.	Other income		x x x	x x x
III.	Total Revenue (I + II)		x x x	x x x
IV.	Expenses;			
	Cost of materials consumed			

	1	2	3	4
	Purchases of Stock-in-Trade			
	Changes in inventories of		x x x	x x x
	finished goods			
	work-in-progress and		x x x	x x x
	Stock-in-Trade		x x x	x x x
	Employee benefits expense		x x x	x x x
	Finance Costs			
	Depreciation and amortisation			
	expenses			
	Other expenses			
	Total expenses		x x x	x x x
V.	Profit before exceptional		x x x	x x x
	and extraodinary items		x x x	x x x
	and tax (III - IV)			
VI.	Exceptional items		x x x	x x x
VII.	Profit before extraordinary		x x x	x x x
	items and tax (V-VI)		x x x	x x x
VIII.	Extraordinary items		x x x	x x x
IX.	Profit before tax (VII- VIII)		x x x	x x x
X.	Tax expense			
	(1) Current tax		x x x	x x x
	(2) Deferred tax		x x x	x x x
XI.	Profit / (Loss) for the period		x x x	x x x
	from continuing operations		x x x	x x x
	(VII-VIII)			

	1	2	3	4
XII.	Profit/(Loss) from discontinuing operations		x x x	x x x
XIII.	Tax expense of discontinuing operations		x x x	x x x
XIV.	Profit/(Loss) from Discontinuing operations (after tax) (XII-XIII)		x x x	x x x
XV.	Profit/ (Loss) for the period (XI + XIV)		x x x	x x x
XVI.	Earnings per equity share :			
	(1) Basic		x x x	x xx
	(2) Diluted		x x x	x x x

GENERAL INSTRUCTIONS FOR PREPARATION OF STATEMENT OF PROFIT AND LOSS

1. The provisions of this Part shall apply to the income and expenditure account refered to in subclause (ii) of clause (40) of section 2 in like manner as they apply to a statement of profit and loss.

2. (A) In respect of a company other than a finance company revenue from operations shall disclose separately in the notes revenue from–

   (a) Sale of product;

   (b) Sale of services;

   (c) Other operating revenues;

   Less :

   (d) Excise duty.

   (B) In respect of a finance company, revenue from operations shall include revenue from–

(a) Interest; and

(b) Other financial services.

Revenue under each of the above heads shall be disclosed separately by way of notes to accounts to the extent applicable.

3. Finance Costs

Finance costs shall be classified as :

(a) Interest expense;

(b) Other borrowing costs;

(c) Applicable net gain/loss on foreign currency transactions and translation.

4. Other income

Other income shall be classified as :

(a) Interest Income (in case of a company other than a finance company);

(b) Dividend Income.

(c) Net gain/loss on sale of investments;

(d) Other non-oprating income (net of expenses directly attributable so much income).

5. Additional Information

A Company shall disclose by way of notes additional information regarding aggregate expenditure and income on the following items:–

(A) (a) Employee Benefits Expense [showing separately (i) salaries and wages,

(ii) Contribution to provident and other funds, (iii) expense on Employee Stock Option Scheme (ESOP) and Employee Stock Purchase Plan (ESPP), (iv) staff welfare expenses].

(b) Depreciation and amortisation expense;

(c) Any item of income or expenditure which exceeds one per cent of the revenue from operations or ₹ 1,00,000, whichever is higher,

(d) Interest Income;

(e) Interest expense;

(f) Dividend income;

(g) Net gain/loss on sale of investments;

(h) Adjustments to the carrying amount of investments;

(i) Net gain or loss on foreign currency transaction and translation (other than considered as finance cost);

(j) Payments to the auditor as (a) auditor, (b) for taxation matters; (c) for company law matters; (d) for management services; (e) for other services; and (f) for reimbursement of expenses;

(k) In case of Companies covered under section 135, amount of expenditure incurred on corporate social responsibility activities;

(l) Details of items of expceptional and extraordinary nature;

(m) Prior period items;

(B) (a) In the case of manufaturing companies,–

(1) Raw materials under broad heads.

(2) goods purchased under broad heads.

(b) In the case of trading companies, purchases in respect of goods traded in by the company under broad heads.

(c) In the case of companies rendering or supplying services, goss income derived from services rendered or supplied under broad heads.

(d) In the case of a company, which falls under more than one of the categories mentioned in (a), (b) and (c) above, it shall be sufficient compliance with the requirements herein if purchases, sales and consumption of raw material and the gross income from services rendered is shown under broad heads.

(e) In the case of other companies, gross income derived under broad heads;

(C) In the case of all concerns having works in progress, work-in-progress under broad heads.

(D) (a) The agregate, if material, of any amounts set aside or proposed to be set aside, to reserve, but not including provisions made to meet any specific liability, contingency or commitment known to exist at the date as to which the balance sheet is made up.

(b) The aggregate, if material, of any amounts withdrawn from such reserves.

(E) (a) The aggregate, if material, of the amounts set aside to provisions made for meeting specific liabilities, contingencies or commitments.

(b) The aggregate, if material, of the amounts withdrawn from such provisions, as no longer required.

(F) Expenditure incurred on each of the following items, separately for each item:–

(a) Consumption of stores and spare parts.;

(b) Power and fuel;

(c) Rent;

(d) Repairs to buildings;

(e) Repairs to machinery;

(f) Insurance;

(g) Rates and taxes, excluding, taxes on income;

(h) Miscellaneous expenses.

(G) (a) Dividends from subsidiary companies.

(b) Provisions for losses of subsidiary companies.

(H) The profit and loss account shall also contain by way of a note the following information, namely:–

(a) Value of imports calculated on C.I.F basis by the company during the financial year in respect of–

I. Raw materials;

II. Components and spare parts;

III. Capital goods;

(b) Expenditure in foreign currency during the financial year on account of royalty, know- how, professional and consultation fees, interest, and other matters;

(c) Total value if all imported raw materials, spare parts and components consumed during the financial year and the total value of all indigenous raw materials, spare parts and components similarly consumed and the percentage of each to the total consumption;

(d) The amount remitted during the year in foreign currencies on account of dividends with a specific mention of the total number of non-resident shareholders, the total number of shares held by them on which the dividends were due and the year to which the dividends related;

(e) Earnings in foreign exchange classified under the following heads, namely :–

  I. Export of goods calculated on F.O.B. basis;

  II. Royalty, know-how, professional and consultation fees;

  III. Interest and dividend;

  IV. Other income, indicating the nature thereof.

Note :– Broad heads shall be decided taking into account the concept of materiality and presentation of true and fair view of financial statements.

Illustration 4

Under which major head of the Statement of Profit and Loss of a company will the following items be shown ? (a) Sales (b) Interest on Term Loan (c) Interest earned (d) Sale of scarp (e) Bonus (f) Materials purchased (g) Discount on Issue of Debentures written off (h) Wages (i) Entertainment Expenses (j) Revenue from services rendered (k) Goodwill written off (l) Interest on Debentures (m) Profit on sale of Investments (n) Contribution to Superannuation fund (o) Bad debt written off (p) Refund of Income Tax.

Solution

Serial No.	**Items**	**Major Head**
a	Sales	Revenue from Operations
b.	Interest on Term Loan	Financial Costs
c.	Interest earned	Other Income
d.	Sale of Scrap	Revenue from Operations
e.	Bonus	Employee Benefits Expenses
f.	Materials Purchased	Cost of materials Purchased
g.	Discount on issue of debentures written off	Finance Costs
h.	Wages	Employee Benefits Expenses
i.	Entertainment Expenses	Other Expenses
j.	Revenue from Services Rendered	Revenue from Operations
k.	Goodwill Written off	Depreciation and Amortisation Expenses
l.	Interest on Debentures	Finance Costs
m.	Profit on Sale of Investments	Other Income
n.	Contribution to Superannuation Fund	Employee Benefits Expenses
o.	Bad debt written off	Other Expenses
P.	Refund of Income Tax	Other Income

2.6.3 Cash Flow Statement

Cash plays a singnificant role in the entire economic life of an enterprise, hence it is treated as life blood of business. Prior to enforcement of the Indian Companies Act, 2013 both Funds Flow Statement and Cash Flow Statement were prepared as a part of financial statements to see the changes in financial position of the business. Funds flow statement was prepared to explain the changes in working capital position and sources of funds and their applications. But it fails to explain the quantity of inflow and outflow of cash. Many a time profit and loss account may show a huge profit but it is not possible to pay taxes, dividends, etc. The amount may be lying as bookdebts or blocked in inventories. In such a situation profit may be good but cash position is bad.

Keeping in view the importance of cash, Institute of Chartered Accountants of India (ICAI) issued Accounting Standard–3 (AS-3) Revised which states a listed company has to prepare its cash flow statement in a prescribed format showing separately cash flow from operating activities, investing activities and financial activities. Section 2(40) of the Indian Companies Act, 2013 states that a company other than One Person Company, Small Company and Dormant Company, has to prepare and present its cash flow statement in a prescribed format as given in AS-3 (Revised) issued by the ICAI.

A Cash Flow Statement is a statement which is prepared in a prescribed format describing the acquisition of cash from different sources and the application of the same for different payments throughout the year. It deals with the inflows and outflows of cash in a business unit between two balance sheet dates. The term cash here means cash, demand deposits with banks and cash equivalents. Cash equivalents are highly liquid investments which can be readily converted in to cash without significant risk of changes in value and include treasury bills, commercial papers, money market funds, marketable securities, etc. In this statement all the sources (inflows) of cash receipts and the payments (outflows) are presented systematically. Cash flow statement helps in preparing a sound financial policy of a company. If the effect of transactions results in the increase of cash and its equivalent, it is called inflow (source) and if it results in the decrease of total cash it is termed as outflow (use) of cash.

The cash flow statement can be prepared either by direct method or indirect method. The format of cash flow statement– both Direct and Indirect methods, as prescribed by the Indian Companies Act, 2013 are given below :

Cash Flow Statement

(Direct Method)

A.	**Cash flows from Operating Activities**		
	Cash receipts from customers	*****	
	Cash paid to suppliers and employees	(*****)	
	Cash generated from operations	*****	
	Income Tax paid	(*****)	
	Cash flow before extraordinary item	*****	
	± Extra-ordinary Items	*****	
	Net cash from operating activities		*****
B.	**Cash Flows from Investing Activities**		
	Purchase of fixed assets	(*****)	
	Proceeds from sale of equipment	*****	
	Interest received	*****	
	Dividend received	*****	
	Net cash from investing activities		*****
C.	**Cash flows from Financing Activities**		
	Proceeds from issuance of share capital	*****	
	Proceeds from long-term borrowings	*****	

	Repayments of long-term borrowings	(*****)	
	Interest paid	(*****)	
	Dividend paid	(*****)	
	Net cash from financing activities		*****
	Net increase in cash and cash equivalents (A+B+C)		*****
Add	Cash and cash equivalents at begining of period		*****
	Cash and cash equivalents at end of period		*****

Cash Flow Statement

(Indirect Method)

A.	**Cash flows from Operating Activities**		
	Net profit before taxation and extraordinary items	*****	
	Adjustments for:		
	Depreciation	*****	
	Foreign exchange loss	*****	
	Interest income	*****	
	Dividend income	*****	
	Interest expense	*****	
	Operating profit before working capital changes	*****	
	Increase in sundry debtors	(*****)	
	Decrease in inventories	*****	
	Increase in bills payable	*****	
	Decrease in sundry creditors	(*****)	
	Cash generated from operations	*****	
	Income tax paid	(*****)	

	Cash flow before extra-ordinary items	*****	
	± Extra-ordinary items	*****	
	Net cash from operating activities		*****
B.	**Cash flows from Investing Activities**		
	Purchase of fixed assets	(*****)	
	Proceeds from sale of equipment	*****	
	Interest received	*****	
	Dividend received	*****	
	Net cash from investing activities		*****
C.	**Cash flows from Financing Activities**		
	Proceeds from issuance of share capital	*****	
	Proceeds from long-term borrowings	*****	
	Repayment of long-term borrowings	(*****)	
	Interest paid	(*****)	
	Dividend paid	(*****)	
	Net cash from financing activities		*****
	Net increase in cash and cash equivalents (A+B+C)		*****
Add	Cash and cash equivalents at begining of period		*****
	Cash and cash equivalents at end of period		*****

A detailed discussion on cash flow statement, including practical problems has been made in Chapter - 6

2.7 QUESTIONS

1. From the alternatives given under each bit, write the correct answer along with its serial number.

(i) Financial Statements are prepared on the basis of information collected from :

a) Customers b) Accounting records c) Local public

d) Lawyers.

(ii) The financial position of a business is revealed form:

a) Trading Account b) Profit and Loss Account

c) Trial Balance d) Balance Sheet

(iii) A Customary Practice in the field of Accounting is termed as:

a) Concept b) Convention c) Assumption d)Postulate

(iv) 'Anticipate no future Profits but provide for all possible losses' is the slogan of accounting principle.

a) Conservatism b) Materiality c) Full disclosure d) Consistency

(v) The value of fixed assets is shown at purchase price even after use for several years is known as:

a) Opportunity Cost b) Marginal Cost c) Historical Cost d) Direct Cost

(vi) As per Companies Act, 2013, Balance Sheet of a Company is prepared in:

a) Schedule I b) Schedule II c) Schedule III d) Schedule VI

(vii) With the enactment of Companies Act, 2013 the statement which is not a part of financial statements is:

a) Funds Flow Statement b) Cash Flow Statement

c) Statement of Profit and Loss (d) Statement of Changes in Equity.

(viii) In a Balance Sheet the item which is not a part of shareholders fund is:

a) Share Capital b) Reserves and Surplus

c) Sundry Debtors d) Money received against share warrants.

(ix) In a Statement of Profit and Loss, manufacturing expenses is shown under the head:

a) Cost of materials consumed b) Employees benefit expenses c) Finance Cost d) Other expenses.

(x) Cash Flow Statement depicts the :

a) Source and application of funds b) Profitability

c) Source and use of Cash d) Financial Position

(xi) Financial Statements are based on:

a) Estimates of facts b) Recorded facts

c) Anticipated facts d) Budgeted facts.

[Answers:– (i) b, (ii) d, (iii) b, (iv) a, (v) c, (vi) c, (vii) a, (viii) c, (ix) d, (x) c, (xi) b.]

2. Answer the following questions in one word/ term each:

(a) Which statement shows the financial position of a business ?

(b) Which accounting principle considers the relative importance of items ?

(c) State in which schedule the Statement of Profit and Loss is prepared ?

(d) Name the liabilities payable in one accounting year.

(e) Under which category of asset does the computer software come?

(f) Which statement is prepared as per the requirement of AS-3 (Revised) ?

(g) Under which head in the Statement of Profit and Loss the dividend income is recorded ?

(h) Name the component which was earlier considered as a part but not considered as a part of financial statement as per Companies Act, 2013.

(i) What is the number of major heads of the assets side of a Company's Balance Sheet ?

(j) What is the number of major heads of the Equity and Liabilities side of a Company's Balance Sheet ?

[Answers: (a) Balance Sheet, (b) Materiality, (c) Schedule III, (d) Current liabilities, (e) Intangible asset, (f) Cash flow statement, (g) Other income, (h) Funds flow statement, (i) Two, (j) Four.]

3. Correct the underlined portions of the following sentences:

   (a) Investment made for purchase of land and building comes under current asset.

   (b) In a business trade payables include sundry debtors.

   (c) Financial Statements convey market information to different interested parties.

   (d) Earning Capacity of a company is known from its Cash flow statement.

   (e) A major Part of other income is revenue from sale of products and services.

   (f) Income Statement shows the sources of funds and its applications.

   (g) Financial Statements are the end reports of a business unit.

   (h) Fixed assets of a business are shown at its market price in the Balance Sheet.

   [Answers: (a) Fixed, (b) Receivables, (c) Financial, (d) Profit and Loss, (e) Operating, (f) Funds Flow, (g) Interim, (h) Cost.]

4. Fill in the blanks with most appropriate words:

   (a) Cash is treated as ______ blood of a business.

   (b) A Company is required to publish its ______ statement every year.

   (c) On the basis of ______ facts financial statements are prepared.

   (d) A cash flow statement shows the ______ and outflow of cash and cash equivalents.

   (e) The impact of ______ transactions are ingnored in accounting.

   (f) Money received against share warrants are shown as ______ fund in a Balance Sheet.

   (g) Trade marks and Copyrights are the ______ assets.

   (h) Writing off ______ fixed asset is termed as depreciation.

   (i) Carriage and Freight are shown under the head ______ expenses in a Statement of Profit and Loss.

(j) Prepaid expense is treated as ______ asset.

[Answers: (a) Life, (b) Financial, (c) Recorded, (d) Inflow, (e) Non-monetary, (f) Shareholders, (g) Intangible, (h) Tangible, (i) Other, (j) Current.]

5. Answer the following questions in one sentence each :

(a) State two main components of financial statements.

(b) Why are all possible losses in business provided for ?

(c) What is meant by intangible asset ?

(d) Write any one objective of financial statements.

(e) What type of information does a cash flow statement show ?

(f) Write one example of contingent liability.

(g) How is the debit balance of Profit and Loss Account shown in a Company Balance Sheet ?

6. Answer the following questions within 30 words each:

(a) What it meant by statement of position ?

(b) Name the parties who are interested in financial statements.

(c) What do you mean by revenue from operations ?

(d) Name the different activities shown in a cash flow statement as per its prescribed format.

(e) How is cost of materials consumed calculated ?

(f) Name the types of companies those are exempted from preparing cash flow statement as per Companies Act, 2013.

(g) How is share application money pending allotment treated in financial statements ?

7. Answer the following questions within 50 words each :

(a) What legal formalities should be maintained while preparing financial statements ?

(b) Explain the convention of ‘conservatism’.

(c) Why is principles of 'Consistency' followed while preparing financial statements ?

(d) What are the items included under the head 'other income' in a statement of profit and loss ?

(e) What is a Balance Sheet ?

(f) What are the Components of financial statements as per the Companies Act, 2013 ?

(g) Discuss the meaning of Cash Flow Statement.

(h) Why are general public interested in financial statements of a Company ?

(i) Distinguish between Statement of Profit and Loss and Balance Sheet.

(j) Distinguish between Balance Sheet and Cash Flow Statement.

8. What do you mean by financial statements ? Discuss various objectives of financial statements.

9. Explain the charateristics of financial statements.

10. What is a Statement of Profit and Loss ? Draw a proforma of the statement as given in schedule-III.

11. Explain different accounting conventions upon which financial statements are based.

12. State how financial statements are beneficial to its different users.

13. Briefly discuss the limitations of financial statements.

14. What is a Balance Sheet ? Distinguish between Balance Sheet and statement of Profit and Loss.

15. Prepare a format of Balance Sheet as required under the Companies Act, 2013.

16. What is the meaning of Cash Flow Statement ? Distinguish Cash Flow Statement from Balance Sheet.

17. Under which heads are the following items shown in the Balance Sheet of a Company ?

(a) patents and Trade marks (b) Income Received in Advance

(c) Stores and Spare Parts (d) Motor vehicles

(e) Government Securities (f) Balance of Statements of Profit and Loss (g) Loans of ₹ 1,00.000 payable after five years (h) Short-term deposits payable on demand (i) Land and Buildings (j) Trade payables (k) Bonds (l) Mortgage Loan (m) Interest on Calls-in-Advance (n) Live Stock (o) Advance from Customers (p) Commission Received in Advance.

[Ans:– (a) Non-Current Assets under Fixed Assets : Intangible Assets

(b) Current Liabilities under Other Current Liablities

(c) Current Assets under Inventories.

(d) Non-Current Assets under Fixed Assets : Tangible Assets.

(e) Non-Current Assets under Non-Current Investments

(f) Shareholders' Funds under Reserves and Surplus

(g) Non-Current Liabilities under Long-term Borrowings

(h) Current Liabilites under Short-term Borrowings

(i) Non-Current Assets under Fixed Assets : Tangible Assets

(j) Current Liabilities under Trade payables

(k) Non-Current Liabilities under Long-term Borrowings

(l) Non-Current Liabilities under Long-term Borrowings

(m) Current Liabilities under Other Current Liabilities

(n) Non-Current Assets under Fixed Assets : Tangible Assets

(o) Current Liabilities under Other Current Liabilities

(p) Current Liabilities under Other Current Liabilities **]**

18. State the major head under which the following items are shown in the Statement of Profit and Loss of a Company:

(a) Sale of services (b) Bank Charges (c) Carriage outword (d) Medical Expenes (e) Loss on Issue of Debentures written off (f) Lease Rent (g) Gain on sale of Investments (h) Audit fees (i) Premium payable on redemption of debentures written off (j) Interest paid on cash credit (k) Leave Encashment Expenses (l) Staff welfare Expenses (m) Sale of Miscellaneous items (n) Depreciation on Machinery (o) Rent of Warehouse (p) Contribution to Gratuity Fund

[Ans :– (a) Revenue from operations

(b) Other Expenses

(c) Other Expenses

(d) Employee Benefit Expenses

(e) Finance Costs

(f) Other Expenses

(g) Other Income

(h) Other Expenses

(i) Finance Costs

(j) Finance Costs

(k) Employee Benefit Expenses

(l) Employee Benefit Expenses

(m) Other Income

(n) Depreciation and Amortisation Expenses

(o) Other Expenses

(p) Employee Benefit Expenses **]**

CHAPTER-3

FINANCIAL STATEMENT ANALYSIS

Structure :

3.1 INTRODUCTION

It has already been discussed earlier in Chapter -2 that financial statements present the relevant financial information relating to expenses, incomes, assets, liabilities , taxes, equities, reserves and surpluses, dividend, amount of inflow and outflow of cash of a business unit in absolute figures. They practically do not help to take immediate steps or decisions about the financial affairs. Although financial statements are prepared primarily for decision making, but these statements are not an end in themselves. More over financial statements are not so meaningful to the external users because they require information relating to liquidity position, solvency position, profitability position of a company. Meaningful conclusion can be drawn and will be much more helpful for taking financial decisions if the absolute figures presented in financial statements be analyzed by the application of various techniques. These techniques are designed as per the requirements of different users.

3.2 MEANING OF FINANCIAL STATEMENT ANALYSIS

Financial statement analysis refers to the study of relationship among various financial factors of a business which are disclosed in financial statements. In other words, it is the process of determining financial strength and weaknesses of an enterprise by establishing the relationship between the different items presented in Balance Sheet and Statement of Profit and Loss. The analysis establishes the relationship between various factors disclosed in a single set of statement and also study the trend of these factors by comparing the financial statements of different periods.

Definitions

In the words of Metcalf and Titrad, “Analyzing financial statements is 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”.

According to Myers, “ Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statements, and a study of the trend of these factors as shown in a series of statements.”

As per the statement of Kennedy and Mcmuller, “The analysis and interpretation of financial statements is essential to bring out the mystery behind the figures in financial statements. Financial statement analysis is an attempt to determine the significance and meaning of the future earnigs, ability to pay interest and debt maturities (both current and long – term) and profitability of a sound dividend policy.”

From the above definitions it is clear that , financial statement analysis is the process of reviewing and analyzing a company’s financial statements to make better economic decisions. It is the study of relationship between different components of financial statements to have a better understanding about the position and performance of one business. It help the users to take right economic and investment decisions. With the help of this analysis, analysts / managers assess the financial health (i.e. strength and weakness) of an enterprise.

3.3 OBJECTIVES AND IMPORTANCE OF THE ANALYSIS

Analysis of financial statements helps to take various decisions at various places of an enterprise. In a competitive market financial statement analysis facilitates in forecasting for the future and preparing the budgets. In the light of its usefulness and relevance the objectives and importance of financial statement analysis are discussed below:

3.3.1 Objectives of Financial Statement Analysis

The Primary objective of the financial statement analysis is to provide a clear picture and understanding about the financial position and profitability of a concern. It is also used by various interested parties for various purposes. However, the significant objectives of financial statement analysis are:

(a) To ascertain the short – term liquidity position of the business concern.

(b) To evaluate the long – term solvency position of an enterprise.

(c) To assess the earning capacity (profitability) of one business unit for the purpose of inter- firm comparison.

(d) To estimate the future profit of a firm by studying the trend of profit over the years.

(e) To ascertain the operational efficiency of the employees and managers.

(f) To evaluate the efficiency of the business as regards the proper utilisation of financial and other resources.

(g) To determine the working capital position and its effective utilization.

(h) To indentify various economic as well as non – economic factors and their effect on the performance of the firm.

(i) To make a comparative study of different factors and components for a particular period and over a period of time.

(j) To measure the growth and development of the business.

(k) To facilitate the forecasting for the future.

(l) To help in formulating a sound financial policy and its proper execution.

3.3.2 Importance of Financial Statement Analysis

Financial statement analysis is an important means of assessing past performance of an enterprise, thereby gaining an understanding of the financial health of the business and enabling more effective decision making. Past performance is often considered as a good indicator of future performance. Since decision makers are always concerned with the future, they always emphasise upon the analysis of financial statements. The importance of the financial statement analysis from the view point of its various stakeholders are discussed below :

(a) It provides meaningful information to the share holders to take decisions whether to hold company's share or to sell them out.

(b) It helps the management of a business concern for formulating plans and policies for the future.

(c) It supplies relevant information to the bankers and other financiers in taking decisions as to whether to extend their loans to the company.

(d) It becomes highly beneficial for the prospective investors in taking right investment decisions.

(e) It enables the government to collect the taxes and duties due from the business houses.

(f) It facilitates the regulatory bodies/ authorities to determine the legality of company's fiscal decisions and following of correct accounting procedures.

(g) It helps in determining the liquidity position of a company and ability to pay off its short – term obligations.

(h) It identifies the reasons for change in profitability and financial position of a firm over different periods.

(i) It shows the profit margin and determines the ability to withstand in competition and adverse conditions.

(j) It supplies valuable information to trade associations which render various support services to member units.

(k) It facilitates the researchers to compile the performances of different firms to prepare project reports.

3.4 LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

Despite the several uses and importance of financial statement analysis it is not free from criticisms on different points. Since the analysis is based on the information provided by the financial statements, it also suffers from the same inherent limitations of financial statements as discussed in previous chapter. Financial information might be window – dressed which would lead to wrong conclusions. The main limitation of financial statement analysis are as follows:

(a) Financial Accounting is historical in nature and therefore , the financial statements are based on past data which does not consider price level changes. Hence the conclusions based on such data may not be much meaningful and significant for future decisions.

(b) Use of different methods for valuation of inventory and charging of depreciation give different results for an organization for different periods, and for another but similar organization, which makes comparison meaning less.

(c) In case of inter- firm comparison, it may be stated that no two firms are alike in age, capital investment, technology adopted, size and production capacity. Hence, comparison may not be relevant.

(d) Changes in accounting procedure by a business unit may often make the financial analysis useless.

(e) Analysis and interpretation of financial statements involve judgment of analysts and analysis may have different opinions for the same accounting figure.

(f) Since financial statements are normally prepared at the end of one accounting period its analysis is also done only thereafter. But a dynamic market needs the analysis at a regular time interval.

(g) Financial statement analysis fails to provide qualitative information such as customers’ satisfaction management skill, labour relation ,etc.

(h) Conclusions from the analysis are not sure indication of bad and good management. They merely convey certain observations upon which final decisions should not be taken without further investigation.

The limitations mentioned above about the financial statement analysis make it clear that the analysis is a means to an end but not an end in itself. The users and analysts must understand the limitations while analyzing the financial statement and taking decisions.

3.5 TYPES OF FINANCIAL STATEMENT ANALYSIS

Financial Statements are primarily prepared for decision – making of an enterprise. These statements are not end in themselves. The financial information relating to expenses, incomes, assets, liabilities equity, reserves, taxes, dividends etc. which are presented in absolute figures may not help the management to take immediate steps or decisions about the economic affairs. Moreover, they are not also so meanirgful to the external users. The information need to be analysed for establishing a relationship between various components presented in the Balance Sheet and statement of Profit and Loss. The analysis made by its different users for different purposes. Financial statement analysis can be classified into different categories on the basis of (a) types of users (b) method of operation as presented below :

TYPES OF FINANCIAL STATEMENT ANALYSIS

- **On the basis of types of users**
  - Internal Analysis
  - External Analysis
- **on the basis of method of the operation**
  - Dynamic / Horizontal Analysis
  - Static / Vertical Analysis

(a) On the basis of the need of the users this can be divided as (i) Internal Analysis (ii) External Analysis .

(i) Internal Analysis :

This analysis is done by the management and persons who have access to the accounting records of a concern. Management of a company desires to know its financial health and operational efficiency. Executives and employees of the organisation as well as the Government agencies conduct the analysis because of their access to books of accounts. Such analysis is dependable and reliable one. It discovers the weakness of a business which enables the authorites to take proper remedial steps to overcome such weakness and for suggesting proper course of action for the future.

(ii) External Analysis :

The analysis conducted by the persons who do not have access to the books of accounts of the business is known as external analysis. They are the outsiders, viz. creditors, bankers, investors, general public, etc. They do not have also any right to inspect the books of accounts, method of accounting , etc. They are to depend completely on the published annual report of the company as well as on the reports of directors and auditors. External analysis, thus serves only a limited purpose. However, the emphasis given on the reporting of financial statements in the Companies Act, 2013 and also in accounting standards helps the external users to get more detailed information through audited published accounts.

(b) On the basis of method of operation the financial statements are analysed as (i) Dynamic or Horizontal Analysis and (ii) Static or Vertical Analysis.

(i) Dynamic or Horizontal Analysis :

This analysis of financial statement refers to comparison of financial information of a company for several years. The financial data of various years are presented horizontally over a number of columns and compared with a base year or standard year. Since this analysis is based on the data of several years and is able to show a trend of the company's performance, it is called dynamic analysis. Under this analysis, one year's financial figure is presented in one column to focus on items that have changed significantly during the period under review. Comparative financial statements and Trend Analysis are two devices which come under the horizontal analysis.

(ii) Static or Vertical Analysis:

Vertical analysis refers to the study of relationship between various items contained in the financial statements of one accounting period. This analysis considers financial figures of current year without recognizing the past and future data and hence called static analysis. Practically, it presents the structural relationship of different items contained in the financial statements. Accounting ratios and Common size financial statements are the two devices / techniques coming under this types of analysis.

3.6 TECHNIQUES /DEVICES OF FINANCIAL STATEMENT ANALYSIS

The method used for analysis and interpretation of the financial performance of an enterprise, evaluation of business risks etc. are called the techniques or, tools or devices of financial statement analysis. There are a number of tools or techniques, which are used to study the relationship among the items of financial statements. The following methods are generally used to throw light on the financial health of the business:

1. Comparative Statement
2. Common Size Statement
3. Trend Analysis
4. Ratio Analysis
5. Working Capital Analysis
6. Cash-flow Statement

The first three methods are discussed in this chapter. Remaining methods have been discussed in details under Chapter- 4,5,and 6 respectively in the present book.

3.6.1 Comparative Statement

Comparative Statement is a tool for comparison of financial statements (Statement of Profit and Loss and Balance Sheet) between two or more years in the same firm or between two competitive firms in the same industry. It means that the method by which one firm's performance is compared with that of another firm, particularly when technology, product features, method of production and general operating conditions are the same, or a comparison of financial performance of one firm, for two or more than two years.

A comparative statement covering a period of more than one year becomes more meaningful and significant for a business than that of analysis for a single year only. This method of analyzing financial statements compares the financial statements of different firms for the same accounting year and hence, known as inter-firm comparison. Comparative financial statement analysis is also known as Horizontal Analysis as financial data of different years are presented horizontally over a number of columns for comparison. The comparative statement shows the followings :

(i) Financial data in absolute figures for more than one year of a firm or , for more than one firm for one year.

(ii) Changes (either increase or decrease) in absolute figures.

(iii) Increase or decrease in percentages.

(iv) Interpretation of the changes.

Objectives of Comparative Statements.

(i) To Judge the financial strengths and weaknesses of an enterprise.

(ii) To assess the liquidity , solvency and profitability position of a firm.

(iii) To measure the progress / growth of the business .

(iv) To enable the management for taking future decisions

(v) To facilitate in inter firm comparison.

(vi) To indicate the trend and direction of financial position and operating results.

(vii) To enhance the relevance and usefulness of financial statements .

Comparative statement is of two types: (A) Comparative Balance Sheet and (B) Comparative Statement of Profit and Loss.

(A) Comparative Balance Sheet

Comparative Balance Sheet is a statement which shows the assets and liabilities of different periods or of different firms for comparison and finding out the changes in absolute figures as well as in percentage. According to R.A. Foulke," it is the study of the trend of the same items, group of items and computed items in two or more balance sheets of the same business enterprise on different dates." A single Balance Sheet exhibits the financial position at a particular date where as comparison of Balance Sheets helps in drawing meaningful and significant conclusion about the financial status.

Format of Comparative Balance Sheet

Particulars	Previous Year	Current Year	Change in Absolute Figure	Percentage Change
I. Equity and Liabilities	₹	₹	₹	%
1. Shareholder's Funds				
(a) Share Capital	.....	.....	.....	.....
(b) Reserves and surplus	.....	.....	.....	.....
(c) Money received against Share warrants	.....	.....	.....	.....
	.....	.....	.....	.....
2. Non-Current Liabilities				
(a) Long-term borrowings	.....	.....	.....	.....
(b) Deferred tax liabilities	.....	.....	.....	.....
(c) Other long-term liabilities	.....	.....	.....	.....
(d) Long-term provisions	.....	.....	.....	.....
	.....	.....	.....	.....

Particulars	Previous Year	Current Year	Change in Absolute Figure	Percentage Change
3. Current Liabilities				
(a) Short-term borrowings	.....	.....	.....	.....
(b) Trade Payables	.....	.....	.....	.....
(c) Other Current liabilities	.....	.....	.....	.....
(d) Short-term provisions	.....	.....	.....	.....
	.....	.....	.....	.....
I. Total Equity and Liabilities (1+2+3)	.....	.....	.....	.....
II. **Assets**				
1. Non-Current Assets				
(a) Fixed assets	.....	.....	.....	.....
(b) Non-Current investments	.....	.....	.....	.....
(c) Deferred tax assets	.....	.....	.....	.....
(d) Long term loans and advances	.....	.....	.....	.....
(e) Other non Current assets	.....	.....	.....	.....
	.....	.....	.....	.....
2. Curent Assets				
(a) Current investments	.....	.....	.....	.....
(b) Inventories	.....	.....	.....	.....
(c) Trade receivables	.....	.....	.....	.....
(d) Cash and Cash equivalents	.....	.....	.....	.....
(e) Short term loans and advances	.....	.....	.....	.....
(f) Other current assets	.....	.....	.....	.....
	.....	.....	.....	.....
II. Total Assets (1+2)	.....	.....	.....	.....

The following illustrations explain the procedure for preparation of comparative balance sheets:

Illustration 1

Prepare a comparative Balance Sheet from the Balance Sheets of X Ltd. :

Balance Sheets of X Ltd. as at 31st March

Particulars		2016	2017
I.	Epuity and Liabilities :	₹	₹
	Share Capital	1,00,000	1,50,000
	Reserves and surplus	1,00,000	1,00,000
	Long- term loan	20,000	80,000
	Current liabilities	30,000	50,000
	Total	2,50,000	3,80,000
II.	Assets :		
	Fixed Assets	1,20,000	1,80,000
	Non- current Investments	80,000	1,20,000
	Current Assets	50,000	80,000
	Total	2,50,000	3,80,000

Solution :

Comparative Balance Sheet of X Ltd. as on 31st march , 2016 and 2017

Particulars	2016	2017	Absolute Change	Percentage Change
I. Equity and Liabilities :	₹	₹	₹	%
1. Share holders fund				
(a) share capital	1,00,000	1,50,000	50,000	50.00
(b)Reserves and surplus	1,00,000	1,00,000		
	2,00,000	2,50,000	50,000	25.00
2. Non Current Liabilities :				
Long –term loan	20,000	80,000	60,000	300
3. Current Liabilities	30,000	50,000	20,000	66.67
Total (1+2+3)	2,50,000	3,80,000	1,30,000	52.00
II. Assets				
1. Non-current Assets				
(a) Fixed assets	1,20,000	1,80,000	60,000	50.00
(b) Non-current Investments	80,000	1,20,000	40,000	50.00
	2,00,000	3,00,000	1,00,000	50.00
2. Current Assets :	50,000	80,000	30,000	60.00
Total (1+2)	2,50,000	3,80,000	1,30,000	52.00
Working capital (CA-CL)	20,000	30,000	10,000	50.00

Interpretation:

(i) The position of assets is increased by 52% of which current assets increased by 60%.

(ii) Although share capital is increased by 50% there has been no change in reserves and surplus.

(iii) Working capital position is increased by 50%.

(iv) The long-term liability position is increased to a large extent i.e. 300%.

(v) The over all financial position of the company is satisfactory.

Illustration 2

Following Balance Sheets are presented by Oriclean Ltd. as on 31st March, 2016 and 31st March, 2017. Prepare a Comparative Balance sheet and comments on the financial position.

	Particulars	31.03.2016	31.03.2017
		₹	₹
I.	Equity and Liabilities :		
	Share capital	2,50,000	2,50,000
	Profit and Loss Account	40,000	50,000
	Reserve	60,000	60,000
	10% Debentures	50,000	40,000
	Long –term(secured) loans	30,000	35,000
	Outstanding Expenses	10,000	5,000
	Creditors	50,000	40,000
	Total	4,90,00	4,80,000
II.	Assets :		
	Plant and Machinery	2,00,000	1,80,000
	Furniture & Fittings	90,000	1,20,000
	Investments	80,000	70,000
	Closing Inventories	50,000	60,000
	Debtors	40,000	15,000
	Prepaid Expenses	10,000	13,000
	Cash at Bank	20,000	22,000
	Total	4,90,000	4,80,000

Solution:

Comparative Balance Sheet of Oriclean Ltd. as on 31st March,2016 and 2017

Particulars	As on 31.03.2016	As on 31.03.2017	Absolute change	Percentage change
	₹	₹	₹	₹
I. Equity and Liabilities :				
1. Shareholders' funds :				
(a) Share capital	2,50,000	2,50,000	—	—
(b) Profit and Loss Statement	40,000	50,000	10,000	25.00
(c) Reserve	60,000	60,000	—	—
	3,50,000	3,60,000	10,000	2.86
2. Non-current Liabilities :				
(a) 10% Debentures	50,000	40,000	(-)10,000	(-)20.00
(b) Long –term (secured) Loans	30,000	35,000	5,000	16.67
	80,000	75,000	(-)5,000	(-)6.25
3. Current Liabilities :				
(a) Outstanding Expenses	10,000	5,000	(-)5,000	(-)50.00
(b) Creditors	50,000	40,000	(-)10,000	(-)20.00
	60,000	45,000	(-)15,000	(-)25.00
Total of Equity & Liabilities (1+2+3)	4,90,000	4,80,000	(-)10,000	(-) 2.04

II. Assets :				
1. Non-current Assets :				
(a) Plant & Machinery	2,00,000	1,80,000	(-)20,000	(-) 10.00
(b) Furniture & Fittings	90,000	1,20,000	30,000	33.33
(c) Investments	80,000	70,000	(-) 10,000	(-) 12.50
	3,70,000	3,70,000	—	—
2. Current Assets :				
(a) Closing Inventories	50,000	60,000	10,000	20.00
(b) Debtors	40,000	15,000	(-)25,000	(-)62.50
(c) Cash at Bank	20,000	22,000	2,000	10.00
(d) Other Current Assets (prepaid expenses)	10,000	13,000	3,000	30,000
	120,000	1,10,000	(-)10,000	(-)8.33
Total Assets (1+2)	4,90,000	4,80,000	(-)10,000	(-)2.04
Working Capital (CA-CL)	60,000	65,000	5,000	8.33

Interpretation :

(i) The over all position of assets is decreased by 2.04% which is only due to decrease in current assets. There is no charge in non – current assets but the current assets decreases by 8.33%.

(ii) Shareholders' fund is increased by only 2.86%.

(iii) Current and non-current liabilities both decreased by 25% and 6.25% respectively.

(iv) Working capital although increased by 8.33% but its proportion is very less in comparison to total capital.

(v) Decrease in long-term funds by 6.25% shows that they were not efficiently utilized.

(vi) Increase in inventory and prepaid expenses by 20% and 30% respectively reveals that current assets management is not properly done.

(vii) The over all financial position of the company is not found to be satisfactory and hence, the rate of growth is very low.

(B) Comparative Statement of Profit and Loss

Statement of profit and loss presents the results of the operations of a business i.e., net profit or net loss. A comparative statement of profit and loss , gives an idea about the progress of the concern over a period of time. Incomes from operations along with other incomes and expenses are presented in absolutes figures for two or more years. Changes taking place in those figures in terms of absolutes figures as well as in percentage, are calculated to draw a meaningful conclusion. The changed figures are presented side by side so that it will be helpful for analysis by the analyst.

Format of Comparative Satement of Profit and Loss –

Comparative Statement of Profit and Loss for the periods ended...

Particulars	Previous Year	Current Year	Absolute Change	Percentage Change
	₹	₹	₹	%
1. Revenue from operations	....	....	....	....
2. Other income	....	....	....	....
3. Total Revenue (1+2)	....	....	....	....
4. Expenses				
(a) Cost of material consumed	....	....	....	....
(b) Purchases of stock-in-trade	....	....	....	....
(c) Change in inventories (opening stock-closing stock)	....	....	....	....

Particulars	Previous Year	Current Year	Absolute Change	Percentage Change
	₹	₹	₹	%
(d) Employees benefit expenses	....	....	....	....
(e) Finance cost	....	....	....	....
(f) Depreciation and amortisaion expenses	....	....	....	....
(g) Other expenses	....	....	....	....
Total expenses	....	....	....	....
5. Profit before exceptional and extra ordinary items (3-4)	....	....	....	....
6. Exceptional and extraordinary items	....	....	....	....
7. Profit / (Loss) before Tax (5-6)	....	....	....	....
8. Tax expenses	....	....	....	....
9. Profit /(Loss) from Continuing operations (7-8)	....	....	....	....
10. Profit/(Loss) and Tax of discontinuing operations	....	....	....	....
11. Profit/(Loss) for the period (9 ± 10)	....	....	....	....
12. Earning per Share	....	....	....	....

The following illustrations explain the procedure of preparing comparative statement of profit and loss :

Illustration 3

From the following information of Magma Ltd. prepare a comparative statement of profit and loss for the year ended 31st March.2016 and 2017. Number of Equity shares for the year ended 31st March, 2016 and 2017 are 8,000 and10,000 respectively.

Statement of Profit and Loss for the year ended 31st March

Particulars	**2016**	**2017**
	₹	₹
Revenue from operation(sales)	2,00,000	2,40,000
Other incomes	10,000	15,000
1. Total Revenue	2,10,000	2,55,000
Expenses :		
(a) Material consumed	70,000	90,000
(b) Employees benefit expenses	12,000	15,000
(c) Finance cost	20,000	18,000
(d) Depreciation and amortization expenses	12,000	10,000
(e) Other expenses	8,000	10,000
2. Total expenses	1,22,000	1,43,000
Profit before exceptional and extra ordinary items (1-2)	88,000	1,12,000
Exceptional and extraordinary items	–	–
Profit before tax.	88,000	1,12,000
Less Tax expenses (provision@50%)	44,000	56,0000
Profit for the year	44,000	56,000
Earning per equity share		
	44,000 / 8,000 Shares = 5.50	56,000 / 10,000 Shares = 5.60

Solution :

Magma Ltd.
Comparative Statement of Profit and Loss
for the year ended 31st March

Particulars	2016	2017	Absolute Change	Percentage Change
	₹	₹	₹	%
Revenue from operation (Sale)	2,00,000	2,40,000	40,000	20.00
Other incomes	10,000	15,000	5,000	50.00
Total Revenue	2,10,000	2,55,000	45,000	21.43
1. Expenses :				
(a) Materials Consumed	70,000	90,000	20,000	28.57
(b) Employees benefit expenses	12,000	15,000	3,000	25.00
(c) Finance cost	20,000	18,000	-(2,000)	-(10.00)
(d) Depreciation and amortization Expenses	12,000	10,000	-(2,000)	-(16.67)
(e) Other expenses	8,000	10,000	2,000	25.00
2. Total Expenses	1,22,000	143,000	21,000	17.21
Profit before exceptional and extra ordinary items (1-2)	88,000	1,12,000	24,000	27.27
Exceptional and extra ordinary items	–	–	–	–
Profit before Tax	88,000	1,12,000	24,000	27.27
Less Tax expenses (50% provision)	44,000	56,000	12,000	27.27
Profit for the year	44,000	56,000	12,000	27.27
Earning per equity share	5.50	5.60	0.10	1.82

Interpretation:

(i) Total revenue has increased by 21.43% of which sales revenue has an increase of 20% and other income by 50%

(ii) Total expenses have increased by 17.21% which is less than the increase in revenue percentage, i.e., 21.43, but material consumption increases by 28.57% followed by employees' benefit expenses and other expenses by 25% each.

(iii) Finance cost and Depreciation expenses show a decrease of 10% and 16.67%, respectively.

(iv) Profitability position of the company has increased by 27.27% along with an increase in earning pre share by 1.82%.

(v) The overall profitability position of the company is satisfactory.

Illustration 4

From the following statement of profit and loss of Galaxy Ltd for the year ended 31st December, 2015 and 2016, Prepare comparative statement of profit and loss for the above period. The Equity share capital of both the years are ₹ 10,00,000 and ₹ 12,00,000 respectively @₹ 100 per share.

Statement of Profit and Loss for the year ended 31st March, 2015 and 2016

Particulars	**2015**	**2016**
	₹	₹
Revenue from operations (sales)	20,00,000	24,00,000
Add other Incomes (Rent and Discount)	1,00,000	1,20,000
Total Revenue	21,00,000	25,20,000
Less : Expenses :		
(a) Purchase of material	8,00,000	10,00,000
(b) Change in Inventories (Opening stock – Closing Stock)	(-)1,00,000	(-)1,00,000

(c) Employees benefit expenses (Wages & Salaries)	1,00,000	1,20,000
(d) Finance cost (Interest)	3,00,000	3,00,000
(e) Depreciation & Amortisation expenses	2,00,000	2,00,000
(f) Other expenses	2,00,000	3,00,000
2. Total Expenses	15,00,000	18,20,000
Profit before exceptional, extraordinary items and tax	6,00,000	7,00,000
Less Exceptional and extra ordinary items	–	–
Profit before tax	6,00,000	7,00,000
Less Tax Expenses (provision @50%)	3,00,000	3,50,000
Profit for the year	3,00,000	3,50,000
Earning per equity share	$\frac{3,00,000}{10,000}$	$\frac{3,50,000}{12,000}$
	= 30.00	= 29.17

Solution :

Comparative Statement of Profit & Loss of Galaxy Ltd.

for the year ended 31st Dec, 2015 and 2016

Particulars	2015	2016	Absolute Change	Percentage Change
	₹	₹	₹	%
Revenue from operation (sales)	20,00,000	24,00,000	4,00,000	20.00
Other incomes (Rent & Discount)	1,00,000	1,20,000	20,000	20.00
1. Total Revenue	21,00,000	25,20,000	4,20,000	20.00
Expenses :				
(a) Purchase of material	8,00,000	10,00,000	2,00,000	25.00

(b) Change in Inventories				
(Opening Stock – Closing stock)	(-)1,00,000	(-)1,00,000	–	–
(c) Employees benefit expenses	1,00,000	1,20,000	20,000	20.00
(d) Finance cost	3,00,000	3,00,000	–	–
(e) Depreciation & Amortisation expenses	2,00,000	2,00,000	–	–
(f) Other expenses	2,00,000	3,00,000	1,00,000	50.00
2. Total Expenses	15,00,000	18,20,000	3,20,000	21.33
Profit before exceptional, extraordinary items and tax (1-2)	6,00,000	7,00,000	1,00,000	16.67
Less exceptional and extraordinary items	–	–	–	–
Profit before tax	6,00,000	7,00,000	1,00,000	16.67
Less tax expenses (provision @50%)	3,00,000	3,50,000	50,000	16.67
Profit for the year	3,00,000	3,50,000	50,000	16.67
Earnings per Equity share	30.00	29.17	(-)0.83	(-)2.77

Interpretation

(i) Total revenue is increased by 20% of which both sales revenue and revenue from other sources increased in same proportion i.e. 20% each.

(ii) Purchase of materials is increased by 25% which is more than the percentage increase in sales revenue.

(iii) Employees benefit expenses as regards to wages and salaries increased in same proportion with the revenue from sales i.e., 20%.

(iv) Other expenses shows a high increase of 50% which plays a major role in reducing the percentage of profit on sales.

(v) Finance cost and Depreciation etc. are not changed in Comparison to the previous year.

(vi) Position of closing inventory in both the years shows a negative figure of ₹ 1,00,000 each, which indicate closing stock is more than the opening stock by ₹ 1,00,000.

(vii) Earning per equity share is decreased by 2.77% which may discourage the prospective investors.

(viii) The company has to focus on inventory management and steps should be taken to control the other expenses.

(ix) However, the operational result of the company may be considered as good.

3.6.2 Common-Size Statement

Financial Statements presented in absolute figures are not easily understandable and comparable and therefore, that much useful to any body. Items of financial statements, when converted and presented in a common form, become comparable and understandable even to a common man. Common- size Statement presents the individual items both in absolute figures and its percentage to their respective total. It is the vertical presentation of financial data for different years indicating the percentage share of each individual component to its category total, hence, called vertical analysis. For example, the total assets in a Balance Sheet is taken as 100 percent and each item of the assets is converted into percentage of total assets. Likewise each component of liabilities is expressed as a percentage of the total liabilities and equities. In the statement of profit and loss also the items of expenses are converted into percentage share of the total sales revenue. The limitations of comparative statements, where changes in items of different periods could not be compared with their respective totals, have been taken care of under this technique of financial statement analysis.

The Common-Size Statement Comprises of :

(i) Individual items of Balance Sheet and Statement of Profit and Loss for two or more successive years in absolute figures.

(ii) Percentage of each component of financial statements to its respective totals.

Objectives of Common-Size Statement

The Primary objective of this analysis is to understand the percentage share of each individual component coming under the broad head total sales, total assets and total liabilities. The other major objectives, of this technique are.

(i) To help the users of financial statements to know the proportion of different items in different years.

(ii) To enable the management to compare the financial performance at a glance.

(iii) To facilitate the analysts to find out a trend for time series analysis.

(iv) To ascertain the structural relationship between the equities and outsiders' liabilities of an enterprise.

(v) To compare the items of financial statements of different sizes.

(vi) To help the users in determination of short-term as well as long-term solvency position.

Types of Common-Size Statement

Common-Size Statements are of two types:

(A) Common-Size Balance Sheet.

(B) Common-Size Statement of Profit and Loss.

The details of the above two statements along with techniques of preparation are discussed below :

(A) Common-Size Balance Sheet

It is a statement of all individual components of assets and liabilities expressed in terms of percentage share of total assets and liabilities of a Balance Sheet. It indicates the relationship between each individual asset with the total assets and each individual liability to total liabilities. The variation or change in the percentage figure of each individual asset and liability to the respective total of assets and liabilities help the management for comparison. The management may take appropriate measures for such unfavorable changes in different items. Common-Size Balance Sheet can also be used to compare the business units of different sizes.

Illustration 5

From the following information, prepare a Common-Size Balance Sheet:

		31st March 2015 ₹	**31st March 2016** ₹
I.	Equity and Liabilities :		
1.	Shareholders' Fund		
(a)	Equity Share Capital	60,000	60,000
(b)	Reserves and Surplus	10,000	20,000
2.	Non-Current Liabilities	15,000	30,000
3.	Current Liabilities	15,000	20,000
		1,00,000	1,30,000
II.	Assets:		
1.	Non-Current Assets		
(a)	Fixed Assets	50,000	70,000
(b)	Non-current Investments	20,000	20,000
2.	Current Assets	30,000	40,000
		1,00,000	1,30,000

Solution :

Common –Size Balance Sheet

	As on 31st March, 2015		As on 31st March, 2016	
	Amount ₹	%	Amount ₹	%
I. Equity and liabilities :				
1. Share holders Fund:				
(a) Equity share capital	60,000	60	60,000	46.15
(b) Reserves and Surplus	10,000	10	20,000	15.38
2. Non-current Liabilities	15,000	15	30,000	23.09
3. Current Liabilities	15,000	15	20,000	15.38
	1,00,000	100	1,30,000	100.00
II. Assets :				
1. Non-Current Assets:				
(a) Fixed Assets	50,000	50	70,000	53.85
(b) Non-current Investments	20,000	20	20,000	15.38
2. Current Assets	30,000	30	40,000	30.77
	1,00,000	100	1,30,000	100.00

Illustration 6

The summary of Balance Sheet data in respect of A Ltd. and B Ltd
as on 31st March,2017 is as under :

	A. Ltd.	B. Ltd.
	₹	₹
Buildings	1,00,000	4,50,000
Machinery	3,00,000	7,50,000
Retained earnings	50,000	33,000
Share Capital	4,50,000	14,50,000
Debtors	1,15,000	1,60,000
Stocks	60,000	2,17,000
Cash	15,000	8,000
Creditors	91,000	1,00,000
Liability for expenses	9,000	17,000
Current investments	10,000	15,000

Prepare Common-Size Balance Sheets.

Solution :

Common-Size Balance Sheet of A. Ltd. and B. Ltd. as on 31st March , 2017

	A. Ltd	%	B. Ltd	%
I. Equity and Liabilities:	₹		₹	
1. Shareholders' fund				
(a) Share capital	4,50,000	75.00	14,50,000	90.60
(b) Reserves and surplus	50,000	8.30	33,000	2.10
2. Non-Current Liabilities	–	–	–	–

3. Current Liabilities :				
(a) Creditors (Trade Payables)	91,000	15.20	1,00,000	6.30
(b) Liability for expenses	9,000	1.50	17,000	1.00
Total	6,00,000	100.00	16,00,000	100.00
II. Assets :				
1. Non-Current Assets :				
(a) Fixed Assets				
Building	1,00,000	16.70	4,50,00	28.10
Machinery	3,00,000	50.00	7,50,000	46.90
(b) Non-current Investments	–	–	–	–
2. Current Assets:				
(a) Debtors (Trade Receivables)	1,15,000	19.10	1,60,000	10.00
(b) Inventories (stock)	60,000	10.00	2,17,000	13.60
(c) Current investments	10,000	1.70	15,000	0.90
(d) Cash and Cash equivalents	15,000	2.50	8,000	0.50
Total	6,00,000	100.00	16,00,000	100.00

(B) Common-Size Statement of Profit and Loss

It has already been stated above that in the common size statement all individual items are expressed in terms of percentage of total. Common-size statement of profit and loss reveals the proportional relationship of each individual components of cost or expenses to the sale revenue. In this statement sales is taken as 100 percent and each item is expressed in terms of percentage of total sales. Increase in the volume of sales will lead normally to increase in selling expenses but not necessarily the administrative and financial expenses. But substantial increase in sales may lead to increase in administrative and financial expenses. So this statement establishes the proportional relationship between sales and other items of statement of profit and loss and evaluates the operational efficiency of a business. Analysis of this information also helps the management for comparison of individual components with the industry average and helps to take necessary steps for improvement. Comprison of items for different periods and of different companies facilitate the management for taking financial decisions.

Illustration 7

From the following information of Galaxy Ltd. for the year ending 31st March 2014 and 2015, prepare Common-Size Statement of Profit and Loss:

	31st March 2014	**31st March , 2015**
	₹	₹
Sales	1,20,000	1,50,000
Materials consumed	60,000	70,000
Wages	20,000	25,000
Depreciation	5,000	6,000
Office and Administrative expenses	15,000	15,000
Selling expenses	10,000	12,000
Interest on debentures	3,000	3,000
Income Tax	5,000	6,000
Profit on Sale of Land and Building	10,000	25,000

Solution:

Common-Size Statement of Profit and Loss of Galaxy Ltd. for the year ending....

	31st March, 2014	%	31st March, 2015	%
	₹		₹	
1. Revenue from sales	1,20,000	100.00	1,50,000	100.00
2. Other income (Profit on sale of Land and Building)	10,000	8.33	25,000	16.67
A. Total Revenue	1,30,000	108.33	1,75,000	116.67
3. Expenses				
(a) Cost of materials consumed	60,000	50.00	70,000	46.67
(b) Employees benefit expenses	20,000	16.67	25,000	16.67
(c) Finance cost (Interest on debenture)	3,000	2.50	3,000	2.00
(d) Depreciation	5,000	4.17	6,000	4.00
(e) Other expenses (Office & Administrative)	25,000	20.83	27,000	18.00
B. Total expenses	1,13,000	94.17	1,31,000	87.34
4. Profit before exceptional and extraordinary items and tax (A-B)	17,000	14.17	44,000	29.33
5. Exceptional and extra ordinary items	–	–	–	–
6. Profit before Tax.	17,000	14.17	44,000	29.33
7. Income Tax.	5,000	4.17	6,000	4.00
8. Profit for the year	12,000	10.00	38,000	25.33

Illustration 8

The following income statements were presented by Hindal Co. Ltd. and Jindal Co. Ltd for the year ending 31st March, 2017. You are required to prepare common size statement of profit and loss assuming income tax @ 50%.

	Hindal Co. Ltd.		Jindal Co.Ltd.	
	₹		₹	
Sales	10,00,000		15,00,000	
Interest Income	50,000	10,50,000	30,000	15,30,000
Expenses:				
Consumption of materials	4,50,000		6,00,000	
Salaries and wages	1,50,000		2,00,000	
Office and Administrative expenses	50,000		60,000	
Selling and Distribution expenses	60,000		80,000	
Interest	20,000	7,30,000	30,000	9,70,000
Net profit before tax		3,20,000		5,60,000

Solution:

Common-size Statement Profit and Loss for the period ended 31st March, 2017

	Hindal Co. Ltd		Jindal Co. Ltd.	
	Amount	**%**	**Amount**	**%**
	₹		₹	
1. Revenue form sales	10,00,000	100	15,00,000	100.00
2. Other Income	50,000	5	30,000	2.00
A. Total Revenue	10,50,000	105	15,30,000	102
3. Expenses :				
(a) Materials Consumed	4,50,000	45	6,00,000	40.00
(b) Salaries and wages	1,50,000	15	2,00,000	13.33
(c) Office and Administrative Expenses	50,000	5	60,000	4.00
(d) Selling and Distribution Expenses	60,000	6	80,000	5.34
(e) Interest	20,000	2	30,000	2.00
B. Total Expenses	7,30,000	73	9,70,000	64.67
4. Profit before exceptional and extra ordinary items (A-B)	3,20,000	32	5,60,000	37.33
5. Exeptional and extra ordinary items	–	–	–	–
6. Profit before Tax	3,20,000	32	5,60,000	37.33
7. Income Tax @50%	1,60,000	16	2,80,000	18.665
8. Profit for the year	1,60,000	16	2,80,000	18.665

3.6.3 Trend Analysis

Comparative financial statements made for a few consecutive years in terms of percentage trend is known as trend analysis. It is a time series analysis of data which is very significant and meaningful for preparation of budgets and forecasting the future activities. Under this analysis the information for a number of years is taken up and one year, normally the first year is taken as the base year. The figures of the first year are taken as 100 and trend percentage for subsequent years are calculated to establish the percentage relationship that each item bears to the same item of base year. This method shows the direction of change either upward or down ward in comparison with the figures of base year.

Steps of Trend Analysis

Trend analysis requires the following steps:

(i) Select a base year.

(ii) Consider the figures of base year as 100 percent.

(iii) Calculate the percentage of each individual item of each year and compare it with the same item of the base year.

Objectives of Trend Analysis

(i) Trend analysis is very much helpful for measuring the trend of profitability over the years.

(ii) It helps in measuring the liquidity position of the enterprise to meet the short – term obligations.

(iii) It also facilitates to measure the long-term solvency to protect the interest of investors and helps the management to understand the long-term solvency.

(iv) Trend Analysis helps in making inter-firm comparison between two or more firms.

(v) It discloses the financial position and it is useful for making comparative analysis of data.

The following illustrations explain the procedure for preparation of trend analysis :

Illustration 9

Form the following information calculate the trend percentages taking 2005 as the base year:

Years	2005	2006	2007	2008	2009
Purchase (₹)	40,000	48,000	42,000	50,000	46,000
Sales (₹)	60,000	75,000	72,000	80,000	70,000

Solution :

Statement showing Trend Percentage

	Absolute Figures					Trend Percentage				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	₹	₹	₹	₹	₹	%	%	%	%	%
Purchases	40,000	48,000	42,000	50,000	46,000	100	120	105	125	115
Sales	60,000	75,000	72,000	80,000	70,000	100	125	120	133	117

Illustration 10

From the following particulars presented by Moonlight Ltd. compute the trend percentage by taking 2008 as the base year.

Year	**Sales**	**Inventory**	**Gross Profit**
	₹	₹	₹
2008	10,000	5,000	2500
2009	15,000	7,000	3750
2010	22,000	9,000	6000
2011	25,000	10,000	7,000
2012	40,000	12,500	10,000

Solution : Books of Moonlight Ltd.

Statement Showing Trend Percentage

	Sales		Inventory		Gross Profit	
Year	**Amount ₹**	**Trend Percentage**	**Amount ₹**	**Trend Percentage**	**Amount ₹**	**Trend Percentage**
2008	10,000	100	5,000	100	2,500	100
2009	15,000	150	7,000	140	3,750	150
2010	22,000	220	9,000	180	6,000	240
2011	25,000	250	10,000	200	7,000	280
2012	40,000	400	12,000	250	10,000	400

In the above illustration the first year, i.e., 2008 is taken as base year. But any subsequent year can also be taken as base year which should be selected very carefully. In spite of several uses of trend analysis, it became useless at the time of price level changes. It is also difficult to follow consistent accounting principles particularly when the trend is continuously changing.

3.7 QUESTIONS

1. From the alternatives given under each bit, write the correct answer along with its serial number, against each bit:

(i) Financial statements present the relevant financial information in terms of:

(a) Ratio (b)Percentage (c) Absolute figure (d) Average value.

(ii) Normally financial statements are prepared at end of :

(a) One month (b) One year (c) Two years (d) Two months

(iii) Division of financial statement analysis as Internal Analysis and External Analysis is done on the basis of :

(a) Working capital requirement (b) Profitability

(c) Sales Volume (d) Need of the users

(iv) Comparison of different year's financial data with a base year is termed as:

(a) Dynamic analysis (b) Static analysis (c) Trend analysis (d) Multiple analysis

(v) Inter firm comparison means, comparison of financial statements of :

(a) One firm for different years

(b) One industry with some other industries for many years.

(c) Different firms for many years

(d) Different firms for same accounting year

(vi) A Comparative statement presents the changes of financial data in terms of :

(a) Absolute figures only (b) Percentage only

(c) Ratio and Percentage (d) Absolute figures and percentage

(vii) A statement of profit and loss which shows the percentage of individual item of incomes and expenses to their respective totals is known as:

(a) Common Size Balance Sheet

(b) Common Size Statement of Profit &Loss

(c) Comparative Balance Sheet

(d) Comparative Statement of Profit &Loss.

(viii) In a trend analysis generally first year data is taken as :

(a) Current year

(b) Previous year

(c) Base year

(d) Normal year

(ix) presentation of financial data for number of years along with its upward or downward direction percentage is known as:

(a) Trend analysis (c) Common size Statement

(b) Cash flow Statement (d) Funds flow Statement

(x) The item which is not considered as a technique of financial statement analysis is :

(a) Trend analysis

(b) Ratio analysis

(c) Security analysis

(d) Cash flow statement.

[Ans- (i) c, (ii) b, (iii) d, (iv) a, (v)d, (vi) d, (vii) b, (viii)c, (ix) a, (x) c.]

2. Answer the following questions in one word / term each :

(a) Name the statement which reveals the financial position of an enterprise.

(b) What does a statement of profit and loss show?

(c) Which important factor is not considered in financial statement analysis ?

(d) What is the name of the financial statement analysis which is conducted by the outsiders ?

(e) The analysis which considers the financial information of one year only is known as.

(f) Name the statement which shows the change of financial data in absolute figures as well as in percentage.

(g) What is the other name of Horizontal Analysis?

[Ans :- (a) Balance Sheet, (b) Net Profit / Loss, (c) Non-monetary, (d) External analysis, (e) Static or Vertical analysis, (f) Comparative Statement, (g) Dynamic analysis.]

3. Fill in the blanks of the following sentences with appropriate words:

(a) Financial Statement analysis shows the ______ and weaknesses of an enterprise.

(b) A Balance Sheet depicts ______ position of a business.

(c) Non- monetary factors are ________ in financial statement analysis.

(d) Financial Statement analysis is a _______ to an end, but not an end in itself.

(e) The analysis of financial statements made by the management is known as ______ analysis.

(f) The other name of _______ analysis is Dynamic analysis.

(g) In trend analysis generally ________ year is taken as the base year.

(h) In a _______ statement each component is expressed as a percentage of concerned total.

[Ans:- (a)strength, (b) financial, (c) ignored, (d) means, (e) Internal, (f) Horizontal, (g) first, (h) Common-size.]

4. Correct the underlined portions of the following sentences ;

(a) Financial statements show lthe financial position and manpower of a concern

(b) Future profit of a business can be estimated from static analysis.

(c) Financial statements are prepared on the basis of geographical data which does not consider price level changes.

(d) Different methods of charging depreciation in financial statement give same result.

(e) Financial statements do not consider quantitative information.

(f) On the basis of method of operation, financial statement analysis is divided as horizontal and technical analysis.

(g) In a trend analysis the figure of the middle year is taken as 100.

(h) Comparative financial statement presents the changes of financial data both in approximate figures and percentage.

[Ans:- Profitability, (b) Trend, (c) Historical, (d) Different, (e) Qualitative, (f) Vertical, (g) Base, (h) Absolute.]

5. Answer the following questions within 30 words each :

(a) Name the techniques used for analysis of financial statements.

(b) What is meant by Horizontal Analysis ?

(c) Why the horizontal analysis is called as dynamic analysis ?

(d) Write any two advantages of comparative statement.

(e) What are the important factors which are ignored while financial statements are prepared?

(f) Define financial statement analysis .

(g) What are the basic objectives of financial statement analysis ?

(h) State the meaning external analysis.

(i) What does a trend analysis reveal ?

(j) What is meant by inter- firm comparison ?

(k) Write a short note on common size Balance Sheet.

(l) State any two advantages of common size statement.

6. Answer the following questions within 50words each :

(a) Distinguish between Horizontal and Vertical analysis.

(b) How do you classify financial statement analysis ?

(c) Write the objectives of preparing common size statement.

(d) State the limitations (any five) of financial statement analysis ?

(e) Why is the preparation of financial statement analysis important?

(f) Make a distinction between External and Internal analysis.

(g) Discuss the procedure of preparing comparative statement.

(h) State the merits of common size statement.

(i) Explain how trend percentage is calculated in trend analysis?

(j) What are the objectives of comparative statement?

7. What is comparative Balance Sheet? State how is it prepared?

8. “Financial Statements suffer from a number of limitations. Discuss.

9. What is financial statement analysis? Discuss its objectives.

10. Define financial statement analysis. Explain various types of financial statement analysis.

11. Discuss the utility and significance of financial statement analysis to the management and other interested parties.

12. Explain the usefulness of trend analysis in interpretation of the profitability of a concern.

13. What is common size statement ? How is common size statement of profit and loss prepared ?

14. From the following balance sheets of Ajay Publication Ltd. as on 31st March, 2012 and 31st March, 2013, prepare a comparative balance sheet and comment on the solvency and working capital position :

	Particulars	31st March 2015 ₹	31st March 2016 ₹
I.	Equity and Liabilities :		
1.	Shareholders' Fund		
(a)	Share Capital	3,00,000	3,50,000
(b)	Reserves and Surplus	1,00,000	1,10,000
2.	Non-Current Liabilities		
(a)	Long-term borrowings	50,000	40,000
(b)	Provision for tax (Long-term)	40,000	60,000
3.	Current Liabilities		
(a)	Trade Payables	45,000	50,000
(b)	Short-term bank loun	15,000	20,000
		5,50,000	6,30,000

II.	Assets:		
1.	Non-Current Assets :		
(a)	Fixed Assets		
	(i) Tangible Assets	2,50,000	2,80,000
	(ii) Intangible Assets - (Goodwill)	50,000	1,00,000
(b)	Non Current Investment	30,000	40,000
2.	Current Assets :		
(a)	Inventories	80,000	90,000
(b)	Trade Receivables	90,000	85,000
(c)	Cash balance at bank	35,000	25,000
(d)	Other current assets	15,000	10,000
		5,50,000	6,30,000

15. The Statement of Profit and Loss of Ruchi Ltd. for the period ending 31st March, 2015 and 2016 are presented as follows :

	Particulars	31st March 2015	31st March 2016
		₹	₹
1.	Revenue from operations	5,60,000	6,00,000
2.	Other income	15,000	18,000
3.	Total Revenue	5,75,000	6,18,000
4.	Expenses :		
(a)	Purchases	2,80,000	3,00,000
(b)	Changes in inventories	25,000	30,000
(c)	Employces benefit expenses	80,000	95,000

(d)	Finance Cost	–	–
(e)	Depreciation and Amortisation expenses	25,000	28,000
(f)	Other expenses	45,000	40,000
5.	Total expenses	4,55,000	4,93,000
Profit before exceptional and extra ordinary items (3-5)		1,20,000	1,25,000
Less exceptional and extra ordinary items		–	–
	Profit before Tax	1,20,000	1,25,000
Less Tax expenses (50%)		60,000	62,500
	Profit for the year	60,000	62,500
Earnings per Equity Share		60,000 / 30,000	62,500 / 30,000
		= 2.00	= 2.08

You are required to prepare a comparative statement of profit and loss for the above period.

16. From the following balance sheets of V. K. Ltd. and M. P. Ltd. for the period ended on 31.3.2014, prepare a common-size balance sheet :

	Particulars	V. K. Ltd. ₹	M. P. Ltd. ₹
I.	Equity and Liabilities :		
1.	Shareholders' Fund :		
(a)	Share Capital	2,00,000	4,00,000
(b)	Reserves and Surplus	1,26,500	1,36,500
2.	Non-Current Liabilities :		
(a)	Long-term borrowings	1,00,000	–
3.	Current Liabilities :		
(a)	Trade Payables	2,63,500	2,65,700
(b)	Short-term provisions	10,000	10,800
	Total	7,00,000	8,13,000
II.	Assets:		
1.	Non-Current Assets :		
(a)	Fixed Assets		
	(i) Tangible Assets	2,40,000	4,50,000
	(ii) Intangible	30,000	20,000
(b)	Non Current Investment	1,00,000	1,00,000
2.	Current Assets :		
(a)	Debtors	1,00,000	1,10,000
(b)	Stock	1,66,000	70,000
(c)	Cash and Cash Equivalents	58,000	56,000
(d)	Other current assets (Prepaid Insurance)	6,000	7,000
		7,00,000	8,13,000

17. From the given statement of profit and loss of X Ltd. and Y Ltd. for the year ended 31st March, 2017, prepare a common size statement of profit and loss :

	Particulars	X. Ltd. ₹	Y. Ltd. ₹
	Revenue from operations (Sales)	5,80,000	7,20,000
	Add other Income	20,000	30,000
1.	Total Revenue	6,00,000	7,50,000
Expenses :			
(a)	Cost of materials consumed	–	–
(b)	Purchases	2,40,000	3,00,000
(c)	Changes in Inventories (opening stock – closing stock)	(10,000)	(14,000)
(d)	Employee's benefit expenses	48,000	70,000
(e)	Finance cost	15,000	–
(f)	Depreciation and Amortisation expenses	30,000	60,000
(g)	Other Expenses	20,000	45,000
2.	Total expenses	3,43,000	4,61,000
Profit before exceptional and extra ordinary items (1-2)		2,57,000	2,89,000
Less exceptional and extra ordinary items		–	–
	Profit before Tax	2,57,000	2,89,000
Less Tax expenses (Provision 50%)		1,28,500	1,44,500
	Profit for the year	1,28,500	1,44,500
Earnings per equity Share		1,28,500 ÷ 30,000 = 4.28	1,44,500 ÷ 50,000 = 2.89

18. From the following particulars presented by AB Infra Ltd., prepare a trend analysis assuming the 1st year as the base year.

Year	Sales	Inventory	Profit before tax
	₹	₹	₹
2010	2,50,000	30,000	60,000
2011	2,80,000	36,000	72,000
2012	3,20,000	33,000	70,000
2013	3,00,000	40,000	65,000
2015	2,90,000	42,000	66,000

CHAPTER - 4

RATIO ANALYSIS

STRUCTURE

RATIO ANALYSIS

4.1 INTRODUCTION

Profit and Loss Account and Balance Sheet are considerd to be end products of the entire accounting exercise undertaken by a business firm. While the Profit and Loss Account presents the overall operating results, the Balance Seet states the financial position of the firm at the year end. They are summary statements and are packed with historical data. In their face, they reveal very little. To bring out more and more information from them, which are required by different stakeholders of the business, they must be studied and analysed properly. A host of tools and techniques like – Common size statement, Comparative statement, Funds flow and Cash flow statement, Trend analysis, Ratio analysis, etc. are used for the purpose. These techniques are usually designed by accounting experts to dig out hidden essential information from the deep inside of the financial statements.

In this chapter an attempt has been made to introduce the students about the fundamentals of Ratio Analysis, which is a very simple and widely used technique meant for analysing financial statements.

4.2. MEANING AND UTILITY OF RATIOS

Ratio can be defined as a simple arithmetical expression of the relationship between two variables. In the words of Wixon, Kell and Bedford in their Accountant's Handbook, "ratio is an expression of the quantitative relationship between two numbers". Simply, it is a way of expressing one variable in terms of another variable, just by dividing one by the other. For example, the ratio of advertising expenses to total sales is, advertisement expenses divided by sales. The result of such division can be expressed as a pure ratio like 1:2 or number of times like 2 times, 3times, or as a percentages like 10%, 20%, etc.

Ratios are calculated for making meaningful comparison between any two or more related phenomenon. Comparison between unrelated variables or calculation of their ratios are meaningless and bogus. For example, ratio of goodwill to office overheads or direct materials, conveys no meaning at all. Therefore, only related items or variables are used for calculation of ratios. Different items of the financial statements, keeping in view their relationship, are used to find out ratios which are likely to reveal some important information.

'Ratio Analysis' is considered as an important tool in the kit of the business manager. It helps him in identifying problems related to sales, purchases, credit, profit, finance, etc. that might be ailing the business. It is just like the diagnostic tools used by a physician to pin point the disease and find out its cause. Thus, once the problem or malaise is diagnosed, remedial measures can be taken, medicines be prescribed or surgical operations be made and so on. Different accounting ratios, thus, help a business manager in identifying business problems and finding out an early solution for them. It must be remembered that a ratio is only an indicative tool, and not a confirmatory test. To have better results, it must be read along with other indicators. Moreover, instead of a single ratio two or more ratios may be considered for better diagnosis of a problem.

4.3 SIGNIFICANCE OF RATIO ANALYSIS

Ratio analysis is a very popular and powerful tool used for financial statement analysis. Modern business managers at different levels of management, make use of it for managerial decision-making and control. Other stakeholders in the business like investors, creditors, employees, the Government, credit rating agancies, etc. also make use of this tool to study and evaluate their speific interest in the business. Therefore, the significance of ratio analysis can be studied from the view points of different parties involved in business as follows :

- Management
- Owners\Shareholders\ Investors
- Creditors / Bankers
- Employees
- Government

Management

Accounting ratios help the management in carrying out different managerial functions as follows:

- **Decision-making**

Decision-making is the primary and most important function of management. Accounting ratios provide necessary inputs to managers for making proper business decisions.

- **Planning and Forecasting**

Planning is deciding in advance What to do? How to do ? When to do?, etc. Successful planning in the field of business requires certain financial as will as non-financial information. Ratio analysis of the financial statements provide the managers necessary financial information for the purpose.

- **Communicating**

Ratios help in conveying the right message, in a precise and definite form, to various users of financial statements. It adds value to information given in financial statements and thereby help the management to communicate in a meaningful manner.

- **Co-ordinating**

Better communication leads to better coordination. Effective communication of strength and weakness of the organisation brings better understanding among different individual /group / departments. which help in achieving the organisation's goal.

- **Controlling**

Ratios bring out the ills and weaknesses to the fore and help the managers in controlling the different activities in time. On the basis of study of ratios the management can take precautionary as well as corrective measures and guide the organisation on its way to achieve its objectives.

Owners/ Shareholders / Investors

Owners, being the providers of capital to the business, are always interested in a secured, high and steady return on their investment. They like to see their money, invested in better quality assets, that appreciate and remain secured. They are not usually concerned with the day-to-day operational problems of the business like the managers. They are more interested in long-term solvency of the firm than short-term liquidity. What is the ratio of return on capital employed?, What is the ratio of debt to equity ? and What is earning per share?, etc. are more important for the owners and investors to decide whether to make more investments or not. Analysis of proper ratios helps them know all these things.

Creditors / Bankers

Creditors of the firm are always interested to know whether the firm is capable of paying back their dues in time. Short-term creditors are normally paid out of the current assets of the firm. If current assets are sufficient to meet the current liabilities then the creditors feel secured and extend credit to the business without any hesitation . Different liquidity ratios like current ratio, acid test ratio and absolute liquidity ratio help the creditors in studying their interest in the organisation.

Employees

Employees are always interested in the profitability of the organisation. The monetary and non-monetary benefits the employees get, is always associated with the volume of profits of the concern. How much profit the firm is making ?, What is the contribution of the workers ? and other financial information, the workers are required to know to put forth their demand for a wage hike before the management . Different profitability ratios calculated from the financial statements help the workers as well as management in negotiating for a fair wage.

Government

Government, being the ultimate regulator and facilitator of business activities in a country, make use of different financial ratios for policy making in the field of industry trade and commerce.

For a fair assessment of tax, the Income Tax Act, 1961 requires that a corporate assessee shall provide some accounting ratios like gross profit turnover, net profit turnover, stock turnover, materials consumed to finished goods, etc. For the purpose of tax audit, accounting ratios for different years are usually compared by the auditors.

4.4 LIMITATIONS OF RATIO ANALYSIS

Accounting ratios are no doubt a powerful tool in the hands of business managers but they have some limitations too. Following are the limitations of Ratio Analysis :

Limited use of a single ratio

Use of a single ratio without reference to other related ratios may lead to erroneous conclusion. Therefore, combined effect of related ratios must be considered before arrinving at any conclusion or decision.

Inherent Limitations of Accounting

As financial statements are prepared using historical data, their analysis is akin to a postmortem analysis which is conducted after everything is over as in case of death of a living being, hence, have very little use. Budgeting, standard costing, trend analysis are often more useful to management than ratios obtained by analysis of past data.

Lack of adequate standard

Lack of universally accepted standards for calculation of ratios make their use limited. While making comparison among firms or industries, sufficient precautions are needed.

Change of Accounting Procedure

Change or variation in accounting procedure by firms, sometimes make ratio analysis misleading. For example, when the inventory valuation method is changed from LIFO to FIFO or vice versa with an intention to under value / over value the closing stock, the stock turnover ratio and gross profit ratio will not reflect the true picture.

Change in business environment

Due to changes in different environmental factors like economic policy, industrial policy, exim policy, etc. the financial results of all business are affected. Therefore, while making dicsion, ratios and percentages must be considered with these factors in mind.

Window Dressing

Sometimes financial statements are window dressed by shrewed businessmen to present a rosy picture of the business. For common man. it is very difficult to identify such traps. Ratio calculated from such statements are sure to lead in wrong direction.

Personal Bias

Interpretation of a ratio depends mainly on the person concerned. Same ratio may be interpreted in different manner by different persons. Thus, interpretation of a ratio is prone to personal bias.

Difficulty in Comparison

Difference in size, accounting procedure followed and nature of business, make it difficult for the ratios to be compared between firms or industries. They need to be used with precaution.

From the above discussions, it can be concluded that ratios are only guidelines for the analyst. While using them many other factors like internal and external business environment , price level changes and other relevant information must be studied properly.

4.5 CLASSIFICATION OF RATIOS

Accounting ratios used for different purposes by different parties, can be classified in three ways, viz-

A. Classification according to sources

B. Classification according to purpose

C. Classification according to importance

A. On the basis of source

On the basis of their source, ratios can be grouped as

(i) Balance Sheet Ratios

(ii) Revenue Statement Ratios and

(iii) Balance Sheet and Revenue Statement Ratios or Mixed Ratios or Inter-Statement Ratios.

Balance Sheet ratios are those which establish relationship between two items or group of items from the balance sheet. These ratios are also known as financial ratios. Current ratio, Liquid ratio, Proprietary ratio, Capital gearing ratio, Stock-Working Capital ratio, etc. are balance sheet ratios.

Revenue Statement ratios are those which deal with the relationship between two items or group of items from the Revenue Statement or Profit and Loss Account. These ratios are also known as operating ratios. Examples of such operating ratios are Gross Profit Ratio, Net Profit Ratio, Stock-Turnover Ratio, Expense Ratios, etc.

Balance Sheet and Revenue Statement ratios deal with relationship between items of Balance Sheet on the one hand and items of the Revenue Statement on the other. These ratios are also known as Mixed or Composite or Inter-Statement ratios. Few examples of such ratios are – Return on Equity ratio, Return on Capital employed, Capital Turnover ratio, Turnover of Fixed assets, Debtors Turnover, Total Assets Turnover, etc.

B. On the basis of purpose – The accounting ratios may be classified on the basis of purpose of their use. As they are being used by different parties for different purposes to test different aspects of business, classification on the basis of tests of purpose can be made as follows:

i. Liquidity Ratios

ii. Activity Ratios

iii. Profitability Ratios and

iv. Long-term solvency and Leverage Ratios.

Liquidity Rotios

These ratios are meant for studying the short-term solvency or paying ability of a business firm. In other words, these ratios are used to test short-term solvency position. Current ratio, Liquidity ratio, Absolute Liquid ratio are examples of Liquidity ratio.

Activity Ratios

Activity ratios are calculated to measure the efficiency with which the resources of the business are employed. These ratios are also called Turnover Ratios as they normally indicate the speed at which resources or assets are being turned over into sales. Stock Turnover ratio, Debtors Turnover ratio. Creditors Turnover ratio, etc. are examples of activity ratio.

Profitability Ratios

These ratios measure the profitability of the business concern. The overall efficiency of all the business activities is reflected by these ratios. Gross Profit ratio, Net Profit ratio, Return on investment ratio, Return on capital employed ratio, etc. are examples of profitability ratios.

Long-term Solvency and Leverage Ratios

These ratios are meant to test the long-term solvency or paying ability of the firm in long run. Debt equity ratio, Interest coverage ratio, Capital gearing ratio, etc. are examples of long-term solvency test.

An illustrative list of various accounting ratios classified on the basis of their purposes and the parties interested in them is given here for a better view of the classification.

Purpose	**Ratios**	**Parties interested**
Liquidity	Current ratio Acid Test Ratio Absolute Liquidity Ratio Working Capital / Current Assets Stock / Current Assets.	Short-term creditors Banks, Debentureholders, Management
Activity / Use of assets	Inventory Turnover Debtors Turnover Total Assets Turnover Working Capital Turnover Payables Turnover Fixed Assets Turnover	Management Competitors Shareholders Potential buyers of business

Purpose	Ratios	Parties interested
Profitability	Gross Profit Ratio	Shareholders
	Net Profit Ratio	Potential Investors
	Operating Profit Ratio	Lenders
	Expenses Ratio	Competitors
	Return on Investment	Managers
	Earning per share	
	Price Earning Ratio	
Long-term Solvency	Debt Equity Ratio	Long-term Creditors
	Debt to Total Capital Ratio	Banks
	Interest Coverage Ratio	Debentureholders
	Capital Gearing Ratio	Shareholders
		Management

C. On the basis of importance

Ratios can also be classified according to their importance or significance. This classification is based on the idea that some ratios are more important than others. More important ratios from the managements point of view are called Primary Ratios and the others are called Secondary Ratios. The secondary ratios support the primary ratios. For example, Return on capital employed is a primary ratio but Operating profit to sales, Sales to capital employed, Sales to Fixed assets. Stock Turnover, Debtor Turnover, etc. are secondary ratios. Similarly Net profit ratio is a primary ratio but different expenses ratios like Administrative and office expense ratio, Selling and distribution expense ratio and Non-operating expense ratio, etc. are secondary ratios.

Importance of ratios significantly varies among industries, Therefore, each industry has its own primary and secondary ratios. A ratio that is of primary importance in one industry may be of secondary importance in another industry.

4.6 CALCULATION OF DIFFERENT RATIOS

Different ratios as classified in the above section are discussed in detail along with their methods of calculation in the following paragraphs :

4.6.1 Liquidity Ratios

The term 'Liquidity' refers to the ability of a firm to meet its short-term financial obligations, like payments to creditors, suppliers of goods , bankers , etc. These obligations (Current liabilities) can be met only when a firm has sufficient liquid assets or current assets. Current assets are those assets which can be converted into cash easily and quickly so that current liabilities can be met out of them whenever they become due. Cash, bank deposits, bills receivable, sundry debtors, stock-in-trade, etc. are a few examples of current assets. Unless the current obligations are met in time, the goodwill of the firm is sure to suffer and efficiency of management will also be questionable . Therefore, it is essential for the management to see that the liquidity position of the firm is comfortable. In other words , the firm is not cash starved and there is a good margin between current assets and current liabilities . Again high degree of liquidity or unusually more current assets compared to other assets and current liabilities, is also not always welcome, as it is an indication of unutilised or under-utilised resources which is not an indication of sound business.

In the light of the above facts, it is always recessary that the management must keep a track of the liquidity position of the firm which can be tested with the help of different ratios. Normally three ratios are calculated to measure the liquidity. They are :

- Current Ratio
- Quick / Acid Test / Liquid Ratio and
- Absolute Liquid Ratio

Current Ratio

It is the ratio of current assets to current liabilities and found out simply by dividing total current assets by total current liabilities. It is a very popular indicator of liquidity or short-term solvency of a firm. This ratio is also otherwise known as working capital ratio, as its two components- current assets and current liabilities are sole determinants of working capital.

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

As has been told, current assets are those assets which can be sold, consumed or exhausted through normal operation of business within the current fiscal year or operating cycle. In other words, these are assets that can be converted into cash within a short period of time. Current assets, thus, include cash in hand, cash at bank, bills receivables, short-term investments, sundry debtors, marketable securities, inventories, work in progress, etc. Pre-paid expenses are also treated as current assets as they represent advance payments against short-term liabilities like wages, rent, insurance premium, etc.

Current liabilities refer to those business liabilities which are to be settled in cash within one year or operating cycle of a given firm. These are the obligations that are to be settled by current assets or by creation of new current liabilities. Liabilities such as bills payable, outstanding expenses, sundry creditors, short-term loans, accrued expenses, tax payable, dividend payable, bank overdraft, etc. come under current liabilities.

Bank overdraft is normally treated as a current liability unless it is a permanent feature and there is an understanding to that effect with the bank.

Interpretation of Current Ratio

A high current ratio is an indicator of better liquidity whereas a low current ratio indicates just the opposite. For example, if the ratio is 2:1 it indicates that every current liability of one rupee is backed by current assets of ₹ 2 and if the ratio is 1:1, we will say every current liability of one rupee is backed by current asset of one rupee only. It is usual that the higher the ratio, the larger the amount of rupees available per rupee of current liability and greater is the safety of short-term creditors. But this may not be always true. The quantity of current assets may be more, but if they are of bad quality say consisting of unsalable stocks, poor quality investments, doubtful debts, etc., then a high ratio becomes meaningless. Therefore, along with the ratio, number of other considerations like type of assets, type of business and its reputation, etc., must be considered before determining the liquidity position of a firm. Moreover, current ratio must be considered in conjunction with other liquidity ratio like Acid Test Ratio.

A current ratio of 2:1 is considered to be standard liquidity requirement for a firm. It is referred to as banker's rule of thumb. But this should not be arbitrarily followed in each case. Other things as mentioned earlier like quality of assets, constitution of assets, nature of business, reputation of the business must be taken into consideration before drawing any conclusion.

Illustration 1

Following is the Statement of Assets and Liabilities of XYZ Ltd. as on 31.03.2016 :

Liabilities	₹	Assets	₹
Eqluity Share Capital		Fixed Assets	2,00,000
of ₹ 10 each	1,50,000	Goodwill	
Reserves	25,000	Sundry Debtor ₹ 50,000	50,000
Statement of		Less Reserve for	
Profit and Loss	40,000	doubtful debts ₹ 1,000	49,000
Secured Loan	70,000	Stock	40,000
Sundry Creditors	50,000	Advances	10,000
Bank Overdraft	30,000	Bank Balance	20,000
Provision for Taxation	20,000	Cash in hand	16,000
	3,85,000		3,85,000

Find out Current ratio and comment on it.

Solution :

Current Assets :	₹	Current Liabilities:	₹
Cash in hand	16,000	Sundry Creditors	50,000
Bank Balance	20,000	Bank Overdraft	30,000
Advances	10,000	Provision for Taxation	20,000
Sundry Debtors	49,000		
Stock	40,000		
	1,35,000		1,00,000

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

$$= \frac{₹\ 1,35,000}{₹\ 1,00,000}$$

$$= 1.35$$

Comment : As per the ratio, for every one rupee of current liability the company has 1.35 rupees of current assets. But as per the bankers rule of thumb, a current ratio less than the standard 2:1 is not satisfactory. Hence, the company's liquidity is unsatisfactory or not good.

Quick / Acid Test / Liquid Ratio

Liquid ratio, which is also called Acid Test or Quick ratio, provides for a more rigourous test of liquidity than the current ratio. For calculating this ratio, instead of taking into account all the components of current assets, only a selected few are taken into consideration which are called liquid assets. These are assets which can be readily converted into cash without causing any loss or with a minimum loss . Hence, items like stocks, prepaid expenses and not easily marketable securities are excluded from current assets to calculate liquid assets. Prepaid expenses are excluded as it is not possible to convert them into cash. For calculating current liabilities. for the purpose, the normal practice is to exclude bank overdraft as it is considered as a permanent way of financing and is not subject to be called on demand. The various components of Liquid ratio may be stated as below :

Components of Liquid Ratio

Liquid Assets	**Current Liabilities**
Cash in Hand	Bills Payable
Cash at Bank	Sundry Creditors
Bills Receivables	Short-term Loans
Sundry Debtors – Provision for Doubtful Debts	Income Tax payable
Marketable Securities	Dividends Payable
Short-term Investments	

$$\textbf{Quick / Acid Test / Liquid Ratio} = \frac{\textbf{Quick Assets / Liquid Assets}}{\textbf{Current Liabilities}}$$

Interpretation of Liquid Ratio

A high liquid ratio indicates that the firm is capable of meeting its short- term financial obligations in time without any difficulty. On the other hand, a low ratio speaks of the reverse. A liquid ratio of 1:1 is considered as the standard ratio and conventionally accepted by the accountants and managers. One rupee of liquid asset for every rupee of current liability is thought to be sufficient to meet the current payments. But this is based on the assumption that all the liquid assets, like sundry debtors, bills receivables and short-term investments are 100% good. Therefore, it is not the ratio but the quality of the assets which is very very important to come to any conclusion.

Illustration 2

Calculate the Quick Ratio from the following information :

Stock ₹ 95,000

Debtors ₹ 3,40,000

Provision for debtors ₹ 30,000

Marketable Securities ₹ 1,20,000

Cash ₹ 15,000

Bills Receivables ₹ 20,000

Prepaid Expenses ₹ 7,000

Trade Creditors ₹ 1,40,000

Bills Payable ₹ 25,000

Outstanding Expenses ₹ 5,000

Bank Overdraft ₹ 1,20,000

Provision for Tax ₹ 1,40,000

Solution :

Quick Assets = Current Assets – Stock – Prepaid Expenses

Quick Assets	₹	Current Liabilities	₹
Cash	15,000	Trade Creditors	1,40,000
Bills Receivables	20,000	Bills Payable	25,000
Debtors	3,10,000	Outstanding Expenses	5,000
(3,40,000-30,000)		Bank Overdraft	1,20,000
Marketable Secuities	1,20,000	Provision for Tax	1,40,000
	4,65,000		4,30,000

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

$= \frac{4,65,000}{4,30,000}$ ₹ ₹

= 1.08

As the quick ratio is 1.08 which is above the standard ratio of 1:1, the liquidity position of the company is satisfactory.

Absolute Liquid Ratio/ Cash Ratio

Sundry debtors, bills receivable and investments are no doubt more liquid than stocks but still an element of uncertainty lies with them as regards the promptness of there realisation. They are near cash items but cannot be equated with cash . Therefore, to study the liquidity of a firm in a more strict manner, these assets are excluded from current assets and the cash ratio or absolute liquid ratio is calculated.

$$\text{Absolute Liquid Ratio / Cash Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}}$$

Absolute liquid assets consist of only cash in hand, cash at bank and short-term securities. The components of current liabilities remain the same as in case of acid test ratio, i.e., bills payable, sundry creditors, short-term loans, income tax payable, dividend payable, etc.

Absolute liquid ratio is a naked test of liquidity. When examined in conjuction with current ratio and acid test ratio, it reveals everything before the analyst . As a rule of thumb, 0.5:1 is considered satisfactory for this ratio. Higher the ratio better the liquidity and vice versa.

Illustration 3

Calculate Absolute Liquidity Ratio from the following information and comment on it :

Balance Sheet of Gupta & Sons Ltd. as on 31st March 2016

Equity and Liabilities :	₹	₹
1. Shareholders funds :		
Share capital	2,00,000	
General Reserve	60,000	
Profit and Loss Statement	2,40,000	5,00,000
2. Non Current Liabilities :		
8% Debentures		8,00,000

3. Current Liabilities		
Creditors	40,000	
Bills Payable	30,000	
Outstanding Expenses	20,000	
Bank overdraft	10,000	
Provision for Tax	2,40,000	3,40,000
TOTAL		16,40,000
ASSETS :		
1. Non-Current Assets :		
Fixed Assets	10,40,000	
Investments	1,00,000	11,40,000
2. Current Assets		
Stock	90,000	
Debtors	3,15,000	
Marketable Securities	10,000	
Cash in hand	15,000	
Bills Receivables	10,000	
Cash at Bank	60,000	5,00,000
TOTAL		16,40,000

Solution :

Absolute Liquidity Ratio =

Absolute Liquid Assets :

Cash in hand ₹ 15,000

Cash at Bank	₹ 60,000
Marketable Securities	₹ 10,000
	₹ 85,000
Current Liabilities :	
Creditors	₹ 40,000
Bills Payable	₹ 30,000
Outstanding Expenses	₹ 20,000
Provision for Tax	₹ 2,40,000
Bank overdraft	₹ 10,000
	₹ 3,40,000

$$\text{Absolute Liquid Ratio} = \frac{₹\,85,000}{₹\,3,40,000}$$

$$= 0.25.$$

Comment :

Every rupee of current liability is represented by ₹ 0.25 in cash, Hence the liquidity of the firm is not satisfactory. The calculated ratio is much less than the prescribed standard of 0.50.

4.6.2 Activity Ratios

The resources available for a business are always scarce and a price – tag is also attached to them. Therefore, these resources must be used or managed in such a manner that optimum benefit is derived from them and the business objective of profit maximisation is achieved thereby . Thus, the assets of a business which are components of the scarce resources, must be put into efficient use. To measure how efficiently these assests are utilised by the firm, a set of accounting ratios called 'activity ratios' are calculated. They provide an window to the management and other stakeholders to see the movement of different assets. They are also called turnover ratios as they indicate the speed at which the assets are converted or turned over into sales. The important turnover ratios are :

- Stock Turnover Ratio
- Debtors Turnover Ratio
- Creditors Turnover Ratio
- Working Capital Turnover Ratio

Analysis and in depth examination of these ratios will throw light on operational efficiency of the concerned assets and help the management in exercising control.

Stock Turnover Ratio

Stock or inventory is a major component of current assets. In certain business like retail and whole sale trading, stock accounts for more than 50% of the total assets. It is therefore , highly essential that stocks are properly maintained and managed. 'Stocks' usually include stock of raw materials, work in progress, and finished goods . For efficient functioning of business certain quantity of stocks is a sure necessity. However, the quantity of stock should not be too high or too low. High stock level increases the 'holding cost' or 'carrying cost' such as interest on capital, godown rent, insurance premium, cost of obsolescence, damage, pilferage, shrinkage, etc. Similarly, low level of stock at any time may lead to a stock-out situation and thereby loss of business opportunities. Moreover, frequent purchases of small quantities of stock will also lead to increase in 'ordering cost'. Thus, high level of stock as well as low of stocks-both are bad for business. Stocks must be sufficient but neither surplus nor deficient.

Stock turnover or Invententory turnover ratio is a simple measure to know how efficiently the stocks are used and maintained in a business . It is ascertained by dividing costs of goods sold by average inventory .

For calculation of cost of goods sold, cost data are needed or percentage of profit on sales is required. But normally financial statements do not include these information. Hence, when it is not possible to find out the cost of goods sold in its place 'net sales' can be used as an alternative. It is total sales (all credit and cash sales) minus returns inward.

For finding out average inventory, the opening and closing stocks must be taken into account. The arithmetic mean of these two stocks will be the average inventory. If however, monthly stock figures are available, they should be taken into consideration for calculation of average inventory and the following procedure shall be followed :

Average Inventory = $\dfrac{\text{Opening Stock} + \text{12 months' Stock figure} - \text{Closing Stock}}{13}$

When there is wide fluctuations in stock levels, it is advisable to use the monthly figures for calculating average inventory.

Inventory Turnover Ratio = (I) $\dfrac{\text{Cost of goods sold}}{\text{Average inventory at cost}}$

(II) $\dfrac{\text{Net Sales}}{\text{Average inventory at selling price}}$

(when cost of goods sold cannot be found out)

A high stock turnover ratio indicates fast movement of stock or quick conversion of stocks into sales. The higher the ratio, shorter becomes the average time between investment in stocks and sales transactions. Hence, a high ratio is always desirable than a low ratio. A low ratio, on the other hand , indicates slow movement of stocks or delayed conversion of stocks into sales and the time gap between investments in stock and sales transactions is more. This may be on account of bad buying, obsolete stocks or carrying of excess stocks. Thus , a low ratio is always undesirable. When stock movements are high or the ratio is high, the company stands in an advantageous position and even it can afford to sell on a smaller gross profit margin. A very high stock turnover ratio is also not always favourable. It may be an outcome of very low level of stocks or under valuation of stocks which indicates poor inventory management and needs investigation.

Like current ratio there are no 'rules of thumb' or 'standard' for inventory turnover ratio. The rate of stock turnover is highly influenced by the nature of business. For example, stock turnover ratio of retail food business will always be higher than firms dealing in heavy capital goods.

Inventory Conversion Period

Inventory Turnover ratio can be used to find out the average time taken for clearing stocks. This is calculated simply by dividing the number of days in a year by inventory turnover ratio.

Average Inventory Conversion period = $\dfrac{\text{Days in a year}}{\text{Inventory Turnover Ratio}}$

$= \dfrac{365}{\text{Inventory Turnover Ratio}}$

Illustration 4

The cost of goods sold of XYZ Ltd for the year 2015-16 is ₹ 2,45,000. The opening stock of inventory was ₹ 55,000 and the closing stock at the year end was ₹ 60,000. Find out the Inventory Turnover ratio and average inventory conversion period.

Solution:

Inventory Turnover Ratio = $\dfrac{\text{Cost of Goods Sold}}{\text{Average inventory at cost}}$

Cost of Goods sold = ₹ 2,45,000

Average Inventory = $\dfrac{\text{Opening Stock} + \text{Closing Stock}}{2}$

$= \dfrac{55{,}000 + 60{,}000}{2}$ ₹ ₹

= ₹ 57,500

Inventory Turnover Ratio = $\dfrac{2{,}45{,}000}{57{,}500} = 4.26$

Average Inventory conversion Period = $\dfrac{\text{Days in a year}}{\text{Inventory Turnover Ratio}}$

$= \dfrac{365}{4.26}$

= 85.68 or 86 days

Debtors Turnover Ratio

No business can run without ‘credit’. To increase sales and profit, a business must follow a liberal credit policy. But it must be remembered that it is a double edged weapon. If not used properly, it will do more harm than good. To have a check and balance on the quality and quantity of debtors, the management must monitor them regularly. Debtors turnover ratio helps the manager in this regard . It indicates the number of times average debtors are converted or turned over into sales during a year . In other words, it is an indicator of velocity of debt collection of a firm. That is why it is also called 'Debtors Velocity Ratio' This ratio is calculated by dividing net credit sales by average trade debtors.

Debtors Turnover Ratio /

Debtors Velocity Ratio /

Receivables Turnover Ratio = $\dfrac{\text{Net Credit Sales}}{\text{Average Trade Debtors}}$

Net credit sales refer to total annual credit sales minus returns, if any, and average debtors is the arithmetic mean of opening and closing trade debtors. Trade debtors include sundry debtors and bills receivable. Again debtors should always be taken at gross value. Provision for bad and doubtful debts shall not be deducted from total debtors for the purpose. In case credit sales are not known total sales may be used as its substitute. Similarly, when opening and closing balances of trade debtors are not given, the total debtors may be used in place of average trade debtors for computation of debtors turnover ratio. Thus, as an alternative, the ratio can be calculated as follows :

Debtors Turnover Ratio = $\dfrac{\text{Total Sales}}{\text{Debtors}}$

Interpretation

Debtors turnover ratio indicates how many times the debtors are turned over into sales during the year or how fast they move in the business cycle? Higher the ratio, better is the management of debts and quality of debtors. On the other hand, low debtors turnover ratio implies inefficient management of debtors and less liquid or poor quality of debts. But a very high ratio may indicate management's failure to use its credit policy to the best of its advantage and thus, losing opportunity to sale more and earn more profit. Thus, a high ratio may not always be good.

There is no standard or rule of thumb for debtors turnover ratio. This ratio should be compared with ratios of other similar firms, other previous years of the firm or with the industry's ratio to draw any meaningful conclusion from it.

Average Collection period

By using debtors turnover ratio, average collection period of debts can be calculated in number of days. Average collection period is simply the number of days for which a firm has to wait for the receivables to be converted into cash. It is calculated by dividing the number of working days in a year by the debtors turnover ratio.

$$\boxed{\text{Average Collection Period} = \frac{\text{No of working days}}{\text{Debtors Turnover Ratio}}}$$

Normally the number of working days in a year is assumed to be 365 days. It is a more precise and objective measure used to study the quality of debtors. Shorter the average collection period, better is the quality of debts as it indicates quick conversion of debts. On the contrary, longer average collection period indicates poor quality of debts, poor liquidity, ineffcient debt management and greater risk of bad debts. However, this may not be true always. A very low collection period may be due to very conservative credit policy, or inability of management to extend credit due to resource constraints. Therefore, sufficient precautions must be taken before coming to a final conclusion.

Illustration 5

From the financial statements of a business house, the following information are available:

Sundry Debtors	₹	60,000
Less provision for doubtful debts	₹	6,000
	₹	54,000
Bills Receivable	₹	26,000
Gross total sales	₹	6,00,000
Cash sales	₹	2,00,000
Accounts payable	₹	10,000

Calculate Debtors Turnover Ratio and average collection period and comment on it.

Solution :

Debtors Turnover Ratio = $\frac{\text{Net Credit sales}}{\text{Average Trade Debtors}}$

Credit sales = Total sales – Cash sales

= ₹ 6,00,000 – ₹ 2,00,000

= ₹ 4,00,000

Trade Debtors = Sundry Debtors + Bills Receivable

= ₹ 54,000 + ₹ 26,000

= ₹ 86,000

As opening and closing balances of trade debtors are not known, total debtors at the end shall be considered for calculation of the ratio.

Debtors Turnover Ratio = $\frac{4,00,000}{86,000}=4.65$

Average Collection period = $\frac{\text{No of working days}}{\text{Debtors Turnover Ratio}}$

= $\frac{365}{4.65}$ =78.49 or 79 days

From the ratio it can be interpreted that the debtors are fairly liquid and the conversion period of debts into cash is 79 days. For a better view, the ratio may be compared with that of other similar firms or with the industry's ratio .

Creditors Turnover Ratio

In course of business a firm incurs certain short-term liabilities. As a supplier of goods and services, it extends credit to its clients / consumers. Similarly, as a consumer it enjoys credit from its suppliers. It is considered a privilege for the business as it enables the firm to enjoy others money or resources and increase its profit thereby. However, it must be judiciously used. Too much short-term liabilities will affect the liquidity position of the firm and may do more harm than good. Crditors turnover ratio or otherwise called as payables turnover ratio is calculated to know how effictively the trade creditor are managed.

This ratio is calculated just like debtors turnaver ratio. But instead of trade debtors and credit sales, trade creditors and credit purchases are used for the purpose. The ratio is found out by dividing net credit annual purchases by average trade creditors.

$$\text{Creditors / Payable Turnover Ratio} = \frac{\text{Net Credit Annual Purchases}}{\text{Average Trade Creditors}}$$

Net credit purchases refer to total credit purchases minus returns outward. Trade credtitiors include sundry creditors and bills payable. For finding out average trade creditors, the arithmetic mean of the opening and closing balance of trade creditors shall be taken into account. But when opening and closing balance of trade creditors are not available, the balance of creditors may be taken for the purpose of calculation of the ratio. Similarly, when credit purchases are not known the total purchases maybe considered for the purpose.

Interpretation

The ratio indicaties the velocity at which trade creditors are turned over in relation to purchases. When the ratio is high, it is considered good or favourable for the business and when it is low, it is interpreted otherwise. But one must be careful in interpreting this ratio. A very high ratio may imply more credit purchases at lesser or no discount and higher prices paid for the goods or services. For correct interpretation of the ratio, it must be compared with ratios of other similar firms or with that of the industry. Study of the ratio in isolation is meaningless.

Average Payment Period

Average payment period refers to average number of days taken by a firm to pay its creditor. It is a variant of creditors, turnover ratio and gives a clear picture of creditors velocity in number of days. Lower the ratio, better is the liquidity position of the firm. On the other hand, higher the ratio, less is the liquidity position of the firm. Average payment period is found out by dividing average trade creditors by average daily purchases.

$$\text{Average Payment Period} = \frac{\text{Average Trade Creditors}}{\text{Average Daily Purchases}}$$

Where,

$$\text{Average Daily Purchases} = \frac{\text{Net Annual Purchases}}{\text{No. of working days}}$$

$$\text{Thus, Average Payment Period} = \frac{\text{Trade Creditors} \times \text{No. of working days.}}{\text{Net Annual purchases}}$$

$$= \frac{\text{No. of working days}}{\text{Creditors Turnover Ratio}}$$

Average trade creditors and credit purchases are calculated in the same manner as in case of creditors turnover ratio. The number of working days for the purpose is taken as 365 or 360 days. It must be remembered that a high average payment period means a low creditors turnover ratio and vice versa and while the former situation is desirable and the latter is not.

Illustration 6

From the following information given by a firm , calculate Creditors Turnover Ratio and Average Collection Period:

	₹
Total purchases	3,50,000
Cash purchases	35,000
Purchase Returns	40,000
Creditors at the end	1,00,000
Bills payable	50,000
Reserve for Discount	
on creditors	10,000

Solution :

$$\text{Creditors Turnover Ratio} = \frac{\text{Net Credit Purchases}}{\text{Average Trade Creditors}}$$

Amount of Credit purchases = Total purchases – Cash purchases – Returns

= ₹ 3,50,000 – ₹ 35,000 – ₹ 40,000 = ₹ 2,75,000

Trade Creditors = Creditors at the end + Bills Payable

= ₹ 1,00,00 + ₹ 50,000

= ₹ 1,50,000

(Reserve for discount on Creditors shall not be deducted from Creditors)

Creditors Turnover Ratio = $\frac{2,75,000}{1,50,000} = 1.83$

Average Collection period = $\frac{\text{No of Working Days}}{\text{Creditors Turnover Ratio}} = \frac{365}{1.83}$ = 199.45 or 200 days.

Note : In practice, only fraction of a day means that the payment will be made next day. Hence, in the above case, 199.45 days would imply 200 days.

Working Capital Turnover Ratio

Ordinarily when we say working capital, we mean the money that is required to pay the bills for conducting day-to-day operations of the business. But in financial terminology, it is the excess of current assets over current Liabilities. It is very important and considered as the llife blood of a business, because paucity of working capital or misuse of working capital will hamper operational efficiency of firm. All the activities lilke purchases, production and sales of the firm will be affected. Its efficient management is essential for the success of business. Working capital turnover ratio is used to study how effectively working capital of a firm is managed. The ratio relates working capital with sales or turnover of the firm and aims at finding out the number of times working capital is turned over into sales during a year. Thus, just like stock turnover and debtors turnover ratios, it is a measure of velocity or speed of working capital movement.

$$\text{Working Capital Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Average Working Capital}}$$

$$\text{Average Working Capital} = \frac{\text{Opening Working Capital} + \text{Closing Working Capital}}{2}$$

The numerator and denominator of the ratio are, cost of sales and average working capital of the firm during the year. To find out cost of sales, information about purchase and other relevant direct and indirect expenses like carriage inward, factory overheads are required. As financial statements do not provide such information, in place of cost of sales, 'sales' can be used for the purpose of finding out the ratio. Similarly for finding out average working capital, information regarding opening and closing balance of working capital during the year is required. As opening balance of working capital is most of the time not given in the financial statements, the closing balance of working capital or net working capital shall be used to callculate the ratio Thus, the ratio will be :

$$\text{Working Capital Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Net Working Capital}}$$

Net Working Capital = Current Assets – Current liabilities

Interpretation

A high working capital turnover ratio indicates efficient utilisation of working capital whereas a low ratio indicates inefficiency. However, a very high working capital ratio is not a good sign. It may be due to small amount of working capital with the firm and assets are under stress. There is no' bench mark or standard for this ratio and to draw meaningful conclusion, comparison must be made with the ratio calculated for similar firms or the industry.

Illustration 7

From the following information, calculate Working Capital Turnover Ratio :

	₹		₹.
Sales	25,20,000	Fixed Assets	14,40,000
Cost of Sales	19,20,000	Debt	9,00,000
Net Profit	3,60,000	Bills Payable	2,00,000
Inventory	8,00,000	Sundry Creditors	3,00,000
Bills Receivable	4,00,000	Bank Overdraft	1,00,000
Sundry Debtors	2,00,000		
Bank Balance	1,00,000		
Cash in hand	60,000		

Solution :

$$\text{Working Capital Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Net Working Capital}}$$

(As opening balance of Working Capital is not given, Net Working Capital at the end is to be used for calculation of the ratio)

Net Working Capital = Current Assets – Current Liabilities

Current Assets	₹	**Current Liabilities**	₹
Inventory	8,00,000	Bills Payable	2,00,000
Bills Receivable	4,00,000	Sundry Creditor	3,00,000
Sundry Debtors	2,00,000	Bank Overdraft	1,00,000
Bank Balance	1,00,000		
Cash in hand	60,000		
Total	15,60,000	Total	6,00,000

Net Working Capital = ₹ 15,60,000 – ₹ 6,00,000

= ₹ 9,60,000

Working Capital Turnover Ratio = $\frac{₹\ 19,20,000}{₹\ 9,60,000}$ = 2

4.6.3 Profitability Ratios

Profit is like food for a business. As a living organism needs food for survival and growth, a business needs profit for sustenance and development. The amount of profit a business makes, indicates its overall strength and well-being. It is the universally accepted index of success in business world. All the stakeholders of a business – the managers , owners, investors, creditors, employees and the government consider profit as a measure of their respective interest in business. For managers it is a measure of efficiency, for owners it is a measure of their net-worth, for creditors it is a measure of their entitlements so on and so forth. Thus, keeping in view its importance to business and concern of different parties associated with business, profitability of a firm is measured and tested by using different profitability ratios. Some of the important profitability ratios are discussed in detail in the following paragraphs :

- Gross Profit Ratio
- Net Profit Ratio
- Return on Investment
- Return on Capital Employed.

Gross Profit Ratio

Gross profit ratio correlates the gross profit of a firm with its net sales. It is calculated by dividing gross profit by net sales. Usually, the ratio is expressed as a percentage and hence, is multiplied by 100.

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

Gross profit is found out by deducting cost of goods sold from the sales. Net sales are found out by deducting returns inward from gross sales. Thus, for finding out gross profit ratio, net sales and cost of goods sold are the basic information required. Cost of goods sold refers to the carrying value of goods sold during a particular period. It includes the cost of products of raw material, carriage charges, storing charges, direct labour cost, factory overhead expenses and depreciation.

Interpretation

The gross profit ratio indicates how much of a rupee sold is available to meet operating costs, like office and administrative expenses, selling and distribution expenses, payment of dividend and transfer to various reserves. If the gross profit ratio is 40%, then it means, out every rupee 40 paisa is available for meeting operating expenses, distribution of dividend and creation of reserves if any. A higher ratio indicates lesser cost of goods sold, which may be on account of better purchase and stores management and management of other related costs like carriage, factory overheads, etc. There is no standard available for gross profit ratio. For drawing any conclusion, this ratio must be compared with ratios of past years and the same ratios of other competing firms.

Illustration 8

From the following Trading and Profit and Loss Account of a firm, find out the Gross Profit Ratio:

Trading and Profit and Loss Account of a firm for the year ended 31.3.2016

	₹		₹
Opening stock	50,000	Sales	3,50,000
Purchases	2,00,000	less Returns	10,000
			3,40,000
Carriage in- ward	5,000	Closing Stock	70,000
Wages	30,000		
Gross Profit	1,25,000		
	4,10,000		4,10,000
Salary	10,000	Gross Profit b/d.	1,25,000
Rent	7,000	Income from Sale	
Insurance (office building)	3,000	of old furniture	10,000

Office stationary	2,000	Interest from bonds	5,000
Depreciation	10,000		
Advertising expenses	5,000		
Salesman salary	5,000		
Loss on sale of bonds	2,000		
Net Profit	96,000		
	1,40,000		1,40,000

Solution :

Gross Profit Ratio = $\dfrac{\text{Gross Profit x100}}{\text{Net Sales}}$

$= \dfrac{₹\ 1,25,000}{₹\ 3,40,000} \times 100$

= 36.77% or 37%

Interpretation

Around 63% of sales accounts for cost of goods sold and 37% of the sales proceeds are available to meet operating expenses of the firm.

Net Profit Ratio

Net profit ratio correlates net profit with net sales and aims at studying the efficiency of a firm. How successful the management is in managing the administrative, selling and distribution activities are reflected by this ratio. This ratio is an overall measure of success or failure of the firm, there are two variants of this ratio, i.e.,

(i) Ratio of net profit to net sales and

(ii) Ratio of operating net profit to net sales.

(i) Ratio of net profit to net sales

The components of this ratio are net profit and net sales and it is found out by dividing net profit by net sales. As it is normally expressed as percentage , the ratio is multiplied by 100.

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

Net profit for the purpose is calculated taking into consideration all business and non- business incomes and expenditures. Non-business incomes like income from sale of old assets, dividend or interest earned on investment and non-business loss like loss on sale of old furniture, investment, etc. are taken into consideration for calculation of net profit. Taxes payable on income are also deducted from profit. Thus, net profit is calculated as follows :

Gross profit + Non-operating Incomes – (Operating expenses + Non-operating expenses and losses + Taxes)

OR, (Operating Profit + Non-operating income) – (Non-operating expenses +Taxes)

The other component of the ratio 'net sales' is determined by deducting returns inward from gross sales.

A high net profit ratio is a symbol of company's good business performance and a low ratio indicates the reverse. There is no standard or bench mark for the ratio. How high the ratio needs to be ? or how low it need not be ?, are questions to be examined taking into consideration the ratio of past years, ratio of competing firms and overall ratio of the Industry, etc. For example if we say the company's net profit ratio is 15% and hence it is a good indication of its performance. But if the previous years raito was20% or net profit ratio for the industry is more than 15%, then our claim of good performance is not tenable. Therefore, comparison is a must for drawing any valid conclusion.

Ratio of operating net profit to net sales

This ratio aims at measuring operating efficiency of the firm and therefore, in stead of taking the total net profit only operating net profit is taken into consideration. Non-operating incomes and non-operating expenses are excluded for the purposes of calculating operating net profit. Thus, operating net profit is divided by net sales and expressed as a percentage

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

A high operating profit ratio indicates better management of operating expenses, and thus , speaks of the management's efficiency. There is no fixed standard for this ratio and like net profit ratio it must be compared with the previous years ratio and ratios of other firms for drawing any inference.

Illustration 9

Calculate Net Profit Ratio and Net Operating Profit Ratio from the following Statement of Profit and Loss of XYZ Ltd. for the year ended 31st March, 2017 :

Statement of Profit and Loss of XYZ Ltd.

for the year ended 31st March, 2017

Particular	**Note No.**	**Amount ₹**
I. Revenue from operations	1	22,00,000
II. Other Income	2	7,000
III. Total Revenue (I+II)		22,07,000
IV. Expenses :		
Purchases of Stock-in-Trade		11,40,000
Changes in Inventories of Stock-in-Trade	3	(-) 20,000
Employees Benefit Expenses	4	90,000
Finance Costs	5	1,05,000
Other Expenses	6	2,80,000
Total Expenses		15,95,000
V. Profit before tax (III-IV)		6,12,000
VI. Tax	7	2,50,000
VII. Profit after tax (V-VI)		3,62,000

Notes to Accounts :

1.	Revenue from operations :		₹
	Sales		22,00,000
2.	Other Income :		
	Interest and Dividend		5,000
	Profit on sale of Investment		2,000
			7,000
3.	Changes in Inventories of Stock-in-Trade :		
	Opening Inventory	₹ 60,000	
	Less Closing Inventory	₹ 80,000	(-) 20,000
4.	Employees Benefit Expenses :		
	Wages		90,000
5.	Finance Costs :		
	Interest on Debentures	₹ 1,00,000	
	Interest on Overdraft	₹ 5,000	1,05,000
6.	Other Expenses :		
	Carriage Inward	₹ 30,000	
	Office Expenses	₹ 1,00,000	
	Selling and Distribution Expences	₹ 1,20,000	
	Bad debts	₹ 10,000	
	Discount allowed	₹ 10,000	
	Loss of furniture by fire	₹ 10,000	
			2,80,000
7.	Tax :		
	Provision for tax		2,50,000

Solution :

Calculation of Net Operating Profit :		₹
Net profit after tax		3,62,000
Less Non-Operating Incomes :		
Interest and Dividend	₹ 5,000	
Profit on sale of Investment	₹ 2,000	7,000
		3,55,000
Add Non-Operating Expenses :		
Interest on Debentures	₹ 1,00,000	
Loss of furniture by fire	₹ 10,000	
		1,10,000
Net Operating Profit		₹ 4,65,000

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

$$= \frac{3,62,000}{22,00,000} \times 100 = 16.45\%$$

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

$$= \frac{4,65,000}{22,00,000} \times 100 = 21.14\%$$

The company's Net Profit Ratio is 16.45% and Operating Profit Ratio is 21.14%. The net profit ratio indicates that the company earns a net margin of ₹ 16.45 on sale of every 100 rupees, which is available for payment of dividend and creation of reserve. Thus, it can be concluded that the company is in a comfortable position. However, this ratio should be compared with previous years' ratio and ratio of other similar firms before coming to any final conclusion.

The Net Operating Profit Ratio of 21.14% indicates that out of every 100 rupee of sale, ₹ 21.14 is the profit. When compared with the Net Profit Ratio, this ratio is much higher which indicates that non- operating expenses of the company are much higher than the non-operating income which needs immediate attention.

Return on Investment Ratio

Return on Investment (ROI) is also known as return on shareholders investment or networth. This ratio studies the relationship between net profit and shareholders' investment – otherwise known as proprietors fund. It is calculated as follows .

Return on Investment =

By multiplying the ratio by 100 we can also express it as a percentage for better and quick understanding.

This ratio is a general measure of profitability and highlights the performance of the company in relation to the quantum of investment made in it. How effectively the shareholders' money is being utilised in business can be read from this ratio.

The two components of the ratio, net profit and shareholders' fund need little clarification before computation of the ratio. Net profit for the purpose usually means profits after interest and taxes. It is the profit, that is available for the shareholders after payment of interest to creditors, debentureholders and taxes to different authorities. Shareholders' fund which also may be called proprietors fund, includes all equity share capital, preference share capital and free reserves such as, revenue reserves, capital reserves, retained earnings and surpluses. However, it there is any accumulated loss it must be adjusted against total of shareholders' fund.

Interpretation

This ratio indicates how efficiently the shareholders' money are managed. A high ratio indicates better management of funds and a low ratio speaks of the reverse. There is no prescribed standard for this ratio. For coming to any conclusion on the basis of this ratio, one must examine the prevailing market rate of interest, cost of capital , ratio of other competing firms, ratio of previous years and ratio for the industry as well.

Illustration 10

A limited company provides the following information :

			₹
Share Capital :			₹
3,000, Equity shares of ₹ 100 each			3,00,000
2,000, 8% Preference shares of ₹ 100 each			2,00,000
			5,00,000
Reserves and surpluses :			
Revenue Reserve	40,000		
Capital Reserve	1,00,000		
Contingency reserve	30,000	1,70,000	
Net profit before interest and taxes		2,50,000	
Interest charges	70,000		
Tax Rate 50%			

Calculate return on shareholders investment.

Solution :

Shareholders' investment

= Equity Capital + Preference Capital + Reserves and surpluses

= ₹ 3,00,000 + ₹ 2,00,000 + ₹ 1,70,000 = ₹ 6,70,000

Net profit before interest and taxes ₹ 2,50,000

Less interest ₹ 70,000

	₹ 1,80,000
Less tax (50%)	₹ 90,000
Profit after interest and taxes	₹ 90,000

Return on shareholders' investment

$$= \frac{\text{Profit after interest and taxes}}{\text{Shareholders' fund}} \times 100 = \frac{₹\,90,000}{₹\,6,70,000} \times 100 = 13.43\%$$

Return on Capital Employed Ratio (ROCE)

Return on capital employed ratio is used to measure the overall profitability or efficiency of a firm. It correlates profitabilities with capital employed in business and aims at finding out how efficiently the money is invested in business. The two components of the ratio, profit and capital employed have different meaning for different persons hence, need clarification before use.

Capital Employed

When we say 'capital employed', normally we mean the total investment made in business. However, for technical purpose it is interpreted in three different ways. They are :

- Gross Capital Employed
- Net Capital Employed
- Proprietors' Net Capital Employed.

The concept 'gross capital employed' refers to the total of all assets – fixed as well as current assets employed in business. Whereas the concept 'net capital employed' means total assets excluding current liabilities. The third concept proprietor's net capital employed refers to money invested by owners only. Thus, it is total assets excluding outsider liabilities- both current as-well-as non-current. While calculating return on investment ratio or return on shareholders net worth this concept of capital employed is taken into consideration.

Computation of Capital employed

Capital employed in business can be found out using any of the following two methods :

Asset Approach Method

Under this method capital employed is calculated by adding different asset values as follows :

1. All fixed assets like land, building, plant, machinery, furniture, etc. used for the business at their written down value or at replacement value.
2. Investments made inside the business.
3. All current assets like cash in hand, cash at bank, bills receivables, detors, stock, etc.

The sum of all the assets mentioned above constitute the gross capital employed in businss. For finding out the net capital employed total current liabilities of the firm should be deducted from the gross capital employed, However, for finding out capital employed in business under this method following points must be taken into consideration:

1. Asset means those which are used in business. Idle assets or any surplus assets that are not required for business should be excluded for the purpose. However , standby plant and machinery, or stocks to meet contingency should not be excluded for calculation of total assets.
2. Intangible assets like goodwill, patent, trade mark should be excluded unless they have certain sales value or they are acquired by making payments.
3. Ficticious assets like preliminary expenses, accumulated losses, discount on issue of shares, debentures, etc. should be excluded.
4. Obsolete assets, if any, must not be taken into account.
5. Investments made outside the business should be excluded as they are not meant for the business.

Liabilities Approach Method

Under this approach, capital employed is calculated by taking into consideration total liabilities of the firm and making further adjustments in them as mentioned below :

Total Liabilities	XXX	
Add Increase in value		
of assets on replacement	XXX	XXX
less : Accumulated Losses	XXX	
Fictitious Assets	XXX	
Intangibile Assets	XXX	
Idle Assets	XXX	
Obsolete Assets	XXX	
Investment outside business	XXX	XXX
Gross Capital Employed in business		XXX
Less Current Liabilities		XXX
Net Capital Employed in business		XXX

Average Capital Employed

Sometimes instead of return on capital employed, return on average capital employed is calculated. It is considered as a better alternative as capital employed does not remain constant throughout the year.

Average capital employed can be found out by using any of the following methods

Average Capital Employed =

Or

Average Capital Employed = Closing Capital Employed – ½ of the profit earned during the year

Or

Average Capital Employed = Opening Capital Employed + ½ of the profit earnd during the year.

Profits :

'Profits' for the purpose of finding out return on capital employed depends upon the concept 'capital employed', i.e., whether it is 'gross capital employed or net capital employed or "shareholders' fund'. The profits shown in the statement of profit and loss of the company, therefore, need some adjustments. Moreover, some adjustments for depreciation, taxes, non-recurring and non-operating gains and losses are also required, to have a fair a view of the return on capital employed. Some necessary adjustments may be listed as follows :

* Net profit should be taken before payment of tax and making any provision for taxation as they are paid after the income is earned.
* When the capital employed is gross capital employed, interests on long-term borrowings as well as short-term borrowings should be added with the net profit. But when capital employed is net capital employed, only interest on long-term borrowing be added to the net profit:
* The income from those assets, which are excluded for calculation of capital employed shall not be taken into account for calculations of profit.
* Any abnormal, non-recurring , non-operating loss or gain should be adjusted against net-profit. For example, loss or gain arising out of sale of old machinery, plant furniture, etc. must be either deducted or added with net profit.
* When assets are taken at their replacement price, for calculation of capital employed depreciation on them should be adjusted accordingly and reflected in profit.

Illustration 11

From the following information, calculate return on average gross capital employed and average net capital employed for the year 2015-16 :

Balance Sheet of – Company as at 31st March, 2016

Particulars	Note No.	31st March 2016 (₹ in lakhs)	31st March 2015 (₹ in lakhs)
I. Equity and Liabilities :			
1. Shareholders' Funds :			
(a) Share Capital	1	1,000	1,000
(b) Reserves and Surplus	2	1,000	800
2. Non-current Liabilities :			
Long-term Borrowings	3	2,400	2,000
3. Current Liabilities :			
Bank Loans		1,500	1,000
Sundry creditors		1,100	900
TOTAL		7,000	5,700
II. Assets :			
1. Non-Current Assets :			
Fixed Assets	4	2,000	1,600
2. Current Assets :			
Inventories		2,800	2,400
Debtors		900	500
Other Current Assets		1,300	1,200
TOTAL		7,000	5,700

Notes to Accounts :			31.3.2016 (₹ in lakhs)	31.3.2015 (₹ in lakhs)
1. Share Capital :				
Equity Share Capital			1,000	1,000
2. Reserves and Surplus :				
General Reserve			800	1,000
3. Non-Current Liabilities :				
Secured Term Loans			2,400	2,000
4. Fixed Assets :	31.3.2016	31.3.2015		
Fixed Assets	4,000	3,000		
Less Depreciation	2,000	1,400	2,000	1,600

Other Information :	31.3.2016 (₹ in lakhs)	31.3.2015 (₹ in lakhs)
Sales	7,200	4,800
Net Profit after tax and Interest on Term Loans	1,200	800
Interest on Term Loans	240	200
Taxes	100	80
Interest on short-term borrowings	280	—

Solution :

Gross Capital Employed :

Total of all assets is equial to Gross Capital employed. Hance, gross capital employed in 2014-15 is ₹ 5,700 lakhs and in 2015-16 is ₹ 7,000 lakhs.

Average capital employed for 2015-16 =

$$\frac{\text{Opening Gross Capital employed} + \text{Closing Gross Capital employed}}{2}$$

$$= \frac{5{,}700 \text{ Lakhs} + 7{,}000 \text{ Lakhs}}{2} = \frac{12{,}700 \text{ Lakhs}}{2} = 6{,}350 \text{ Lakhs}$$

<u>Net Capital Employed :</u>

	2014-15	2015-16
	(₹ in lakhs)	(₹ in lakhs)
Gross Capital Employed	5,700	7,000
Less Current Liabilities :		
Bank Loans + Sundry Creditors	1,900	2,600
	3,800	4,400

Average Net Capital Employed for 2015-16 =

$$\frac{\text{Opening Net Capital employed} + \text{Closing Net Capital employed}}{2}$$

$$= \frac{3{,}800 \text{ lakhs} + 4{,}400 \text{ lakhs}}{2} = \frac{8{,}200 \text{ lakhs}}{2} = ₹4{,}100 \text{ lakhs}$$

Adjusted profit for the year 2015-16 :	(₹ in lakhs)
Profit after tax and interest on Term Loans	1,200
Add Interest on Term Loans	240
Add Taxes	100
Add Interest on Short-term Borrowings	280
	1,820

Adjusted profit for calculation of Return on Net capital Employed, Interest on Short-term Borrowings should be excluded. Therefore, adjusted profit

= ₹ 1,820 lakhs - ₹ 280 lakhs = ₹ 1540 lakhs

$$\text{Return on Average Gross Capital Employed} = \frac{\text{Adjusted Profit}}{\text{Average Gross Capital Employed}} \times 100$$

$$= \frac{₹\ 1{,}820 \text{ Lakhs}}{₹\ 6{,}350 \text{ Lakhs}} \times 100 = 28.68\%$$

$$\text{Return on Average Net Capital Employed} = \frac{\text{Adjusted Profit}}{\text{Average Net Capital Employed}} \times 100$$

$$= \frac{\text{1,540 laks}}{\text{4,100 lakhs}} \times 100 = 37.56\%$$

Illustration 12

From the following information, you are required to calculate the amount of capital employed by using both the Assets and Liabilities approach methods :

Balance Sheet of – Ltd. as at 31.03.2014

Particulars	Note No.	Amount ₹
I. EQUITY AND LIABILITIES :		
1. Shareholders' Funds :		
(a) Share Capital	1	4,00,000
(b) Reserves and Surplus	2	2,00,000
2. Non-Current Liabilities :		
5% Debentures		70,000
3. Current Liabilities :		
Creditors		60,000
TOTAL		7,30,000
II. ASSETS :		
1. Non-Current Assets :		
(a) Fixed Assets :		
Tangible Assets	3	2,50,000
Intangible Assets	4	50,000
(b) Investments	5	1,20,000
(c) Other Non-Current Assets	6	10,000

2. Current Assets :	
Inventories	2,00,000
Sundry Debtors	1,00,000
TOTAL	7,30,000

Notes to Accounts :

1. Share Capital :

Equity Share Capital (Shares of ₹ 10 each fully paid)	3,00,000
6% Preference Share Capital (Shares of ₹ 10 each fully paid)	1,00,000
	4,00,000

2. Reserves and surplus :

Statement of Profit and Loss (Current year)	40,000
Reserves	30,000
Workmen's Compensation fund	80,000
Depreciation fund :	
Land and Buildings	20,000
Plant and Machinery	30,000
	2,00,000

3. Tangible Assets :

Land and Buildings	1,00,000
Plant and Machinery	1,50,000
	2,50,000

4. Intangible Assets :

Goodwill	50,000

5. Investments :

Investments	1,00,000
Investments for replacement of plant	20,000
	1,20,000

6. Other Non-current Assets :

Preliminary Expenses	10,000

Solution :

Calculation of Capital Employed :

Asset Approach Method :

	₹
Land and Buildings Less Depreciation (₹ 1,00,000 – ₹ 20,000)	80,000
Plant and Machinery Less Depreciation (₹ 1,50,000 – ₹ 30,000)	1,20,000
Current Assets	3,00,000
Investments for Replacement of Plant	20,000
Gross Capital Employed	5,20,000
Less Current Liabilities (Creditors)	60,000
Net Capital Employed	4,60,000

Liabilities Approach Method :

Share Capital (Equity Share Capital + 6% Preference Share Capital)	4,00,000
Reserves	30,000
Statement of Profit and Loss	40,000
Workmen's Compensation Fund	80,000
5% Debentures	70,000
	6,20,000

Less : Goodwill	50,000	
Investments	1,00,000	
Preliminary Expenses	10,000	1,60,000
Net Capital Employed		4,60,000
Add Creditors		60,000
Gross Capital Employed		5,20,000

Illustration 13

From the following information, calculate :

(i) Current Ratio,

(ii) Liquid Ratio and

(iii) Absolute Liquid Ratio

Balance Sheet of X Ltd. as at 31st March 2016

Particulars	Note No.	Amount ₹
I. EQUITY AND LIABILITIES :		
1. Shareholders' Funds :		
(a) Share Capital	1	4,00,000
(b) Reserves and Surplus	2	1,00,000
2. Non-Current Liabilities :		
Long-Term Borrowings :		
10% Debentures		2,00,000
3. Current Liabilities :		
Trade Payables	3	1,70,000
Short-Term Borrowings	4	20,000

Other Current Liabilities	5	30,000
Shourt-Term Provisions	6	30,000
TOTAL		9,50,000
II. Assets :		
1. Non-Current Assets :		
Fixed Assets :	7	5,50,000
2. Current Assets :		
Current Investments	8	50,000
Inventories		1,00,000
Trade Receivables	9	1,60,000
Cash and Cash Equivalents	10	80,000
Other Current Assets	11	10,000
TOTAL		9,50,000

Notes to Accounts : ₹

		₹
1.	Share Capital :	
	Equity Share Capital (Shares of ₹ 10 each)	3,00,000
	8% Preference Share Capital (Shares of ₹ 100 each)	1,00,000
		4,00,000
2.	Reserves and Surplus :	
	General Reserve	1,00,000
3.	Trade payables :	
	Creditors	1,00,000
	Bills payable	70,000
		1,70,000

4.	Short-Term Borrowings :		
	Bank Overdraft		20,000
5.	Other Current Liabilites :		
	Outstanding Expenses		30,000
6.	Short-Term Provisions :		
	Provision for Tax		30,000
7.	Fixed Assets :		
	Tangible Assets	₹ 5,00,000	
	Less Depreciation	₹ 50,000	5,50,000
8.	Current Investments :		
	Short-Term Investments		50,000
9.	Trade Receivables :		
	Sundry Debtors		1,00,000
	Bills Receivable		60,000
			1,60,000
10.	Cash and Cash Equivalents :		
	Cash at Bank		70,000
	Cash in hand		10,000
			80,000
11.	Other Current Assets :		
	Prepaid Expenses		10,000

Solution

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

Current Assets :	₹	
Short-Term Investment	50,000	
Sundry Debtors	1,00,000	
Bills Receivables	60,000	
Cash at Bank	70,000	
Cash in hand	10,000	
Pre-paid expenses	10,000	
Stock	1,00,000	₹ 4,00,000
Current Liabilities :	₹	
Creditor	1,00,000	
Bills payable	70,000	
Outstanding Expenses	30,000	
Bank Overdraft	20,000	
Provision for Tax	30,000	2,50,000

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{4,00,000}{2,50,000} = 1.6$$

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

Liquid Assets = Current Assets – Stock – Prepaid expenses

= ₹ 4,00,000 – ₹ 1,00,000 – ₹ 10,000

= ₹ 2,90,000

$$\text{Liquid Ratio} = \frac{2,90,000}{2,50,000} = 1.16$$

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

Absolute Liquid Assets = Cash in hand + Cash at Bank + Short-term investments

= ₹ 10,000 + ₹ 70,000 + ₹ 50,000 = 1,30,000

Absolute Liquidity Ratio = $\frac{₹\,1,30,000}{₹\,2,50,000} = 0.52$

Illustration 14

Calculate current assets of a company from the following information :

Inventory Turnover Ratio = 4times

Sales ₹ 3,00,000

Gross Profit 25%

Current Liabilities ₹ 40,000

Quick Ratio 0.75

Stock at the end is ₹ 20,000 more than that in the beginning .

Solution :

Sales = ₹ 3,00,000

Gross profit = 25% of sales i.e. ₹ 75,000

Cost of Goods sold = Sales – Gross profit

= ₹ 3,00,000 – ₹ 75,000

= ₹ 2,25,000

Inventory Turnover Ratio = $\frac{\text{Cost of goods sold}}{\text{Average inventory}}$

$= \frac{2,25,000}{\text{Average Inventory}}$

$\therefore$ Average inventory = $\frac{2,25,000}{4}$ = ₹ 56,250

$$\frac{\text{Opening Inventory} + \text{Closing Inventory}}{2} = ₹\ 56,250$$

$\therefore$ Opening Inventory + Closing inventory = ₹ 1,12,500

Closing inventory is ₹ 20,000 more than opening inventory.

$\therefore$ Closing inventory is $\frac{(1,12,\ 500\ -\ 20,000)}{2} + 20,000$

= 46,250 + 20,0 00 = ₹ 66,250

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

= $\frac{\text{Quick Assets}}{40,000}$ = 0.75

$\therefore$ Quick Assets = 0.75 X 40,000 = ₹ 30,000

Current Assets = Quick Assets + Closing Inventory

= ₹ 30,000 + ₹ 66,250

= ₹ 96,250

Illustration 15

From the following information, prepare a summarised Balance Sheet of XYZ Ltd.:

Working capital ₹ 1,20,000

Reserves and Surplus ₹ 80,000

Fixed Assets / Proprietory fund = 0.75

Current Ratio 2.5

Quick Ratio 1.5

Bank Overdraft ₹ 20,000

There is no non-current liabilities.

Solution :

Current Ratio = 2.5

∴ Current Assets = 2.5 Current Liabilities

Current Assets – Current liabilities = ₹ 1,20,000 (as working capital is 1,20,000)

or, 2.5 Current Liabilities – Current Liabilities = =1,20,000

∴ Current Liabilities = $\frac{1,20,000}{1.5}$ = ₹ 80,000

∴ Current Assets = 2.5X80,000= ₹ 2,00,000

Quick Ratio = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$ = 1.5

Quick Assets = 1.5 X Current Liabilities

= 1.5 X 80,000

= ₹ 1,20,000

Stock = Current Assets – Quick Assets

= 2,00,000 – 1,20,000 = ₹ 80,000

Fixed Assets + Current Assets = Proprietary Fund + Current Liabilities + Non-current Liabilities

$\frac{\text{Fixed Assets}}{\text{Proprietory fund}}$ = 0.75 (given)

Fixed Assets = 0.75 Proprietary Funds

∴ 0.75 Proprietary Funds + 2,00,000 = Proprietary fund + 80,000

∴ 0.25 Proprietary fund = ₹ 1,20,000

Proprietary Fund = $\frac{1,20,000}{0.25}$ = ₹ 4,80,000

Share capital = Proprietary fund – Reserves and surplus

= 4,80,000 – 80,000

= ₹ 4,00,000

Fixed Assets = 0.75 X 4.80,000

= ₹ 3,60,000

Balance Sheet of XYZ Ltd. as at...

Particulars	₹
I. Equity and Liabilities :	
1. Shareholders' Funds :	
(a) Share Capital	4,00,000
(b) Reserves and Surplus	80,000
2. Non-current Liablities	NIL
3. Current Liabilities :	
Bank Overdraft	20,000
Other Current Liabilities	60,000
TOTAL	5,60,000
II. Assets :	
1. Non-current Assets :	
Fixed Assets	3,60,000
2. Current Assets :	
Stock	80,000
Other Current Assets	1,20,000
TOTAL	5,60,000

Illustration 16

From the following Balance Sheet of Messrs. Gupta&Sons, Calculate : (i) Current Ratio (ii) Quick Ratio (iii) Working Capital Turnover Ratio (iv) Debtors Turnover Ratio and (v) Stock Turnover Ratio :

Balance Sheet of Messrs. Gupta &Sons as on 31. 03.2014

Particulars	₹	Assets		₹
Capital	4,00,000	Land and Buildings		14,00,000
General Reserve	1,20,000	Plants and Machinery		10,00,000
Profit and Loss Account	4,80,000	Furniture and Fixture		2,00,000
				26,00,000
Long-Term Loan Debentures	16,00,000	Less Depreciation		4,00,000
Trade Creditors	2,00,000			22,00,000
Bills Payable	60,000	Trade Investments (Long-term)		2,00,000
Outstanding Expenses	40,000	Stock		1,90,000
Bank Overdraft	20,000	Debtors	7,80,000	
Provision for tax	4,80,000	less Provision	40,000	7,40,000
		Marketable Securities		20,000
		Cash		20,000
		Bills Receivables		20,000
		Pre-paid Expenses		10,000
	34,00,000			34,00,000

Net sales for the year amounted to ₹ 38,00,000.

Solution :

(i) Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

Current Assets	₹	Current Liabilities	₹
Stock	1,90,000	Trade Creditors	2,00,000
Debtors	7,40,000	Bills payable	60,000
Marketable Securities	20,000	Outstanding expenses	40,000
Cash	20,000	Bank Overdraft	20,000
Bills Receivables	20,000	Provision for tax	4,80,000
Prepaid Expenses	10,000		
	₹ 10,00,000		₹ 8,00,000

∴ Current Ratio = $\frac{₹ 10,00,000}{₹ 8,00,000}$ = 1.25 —

(ii) Quick Ratio = $\frac{\text{Quick Assets}}{\text{Current Liabilities}}$

Quick Assets = Current Assets – Stock – Prepaid Expenses

= ₹ 10,00,000 – ₹ 1,90,000 – ₹ 10,000

= ₹ 8,00,000

∴ Quick Ratio = $\frac{₹ 8,00,000}{₹ 8,00,000}$ =1.00

(iii) Working Capital Turnover Ratio

= $\frac{\text{Sales}}{\text{Net working capital}}$

Net working capital = current Assets – Current Liabilities

= ₹ 10,00,000 - ₹ 8,00,000 = ₹ 2,00,0000

∴ Working Capital Turnover Ratio = $\frac{₹ 38,00,000}{₹ 2,00,000}$ =19

(iv) Debtors Turnover Ratio = $\frac{\text{Total sales}}{\text{Debtorsl}}$

Trade Debtors = Debtors + Bills Receivable

= ₹ 7,80,000 + ₹ 20,000 = ₹ 8,00,000

:. Debtors Turnover Ratio = $\frac{₹\ 38,00,000}{₹\ 8,00,000}$ = 4.75

(v) Stock Turnover Ratio = $\frac{\text{Sales}}{\text{Stock}}$

= $\frac{₹\ 38,00,000}{₹\ 1,90,000}$ = 20

(As cost of goods sold and average inventory at cost are not available, total sales and closing stock are used for calculation of the turnover ratio)

Illustration 17

From the following information calculate, (i) Gross Profit Ratio (ii) Inventory Turnover Ratio (iii) Current Ratio (iv) Liquid Ratio (v) Net Profit Ratio (vi) Working Capital Turnover Ratio (vii) Return on capital Employed :

Sales	₹ 25,20,000	Fixed Assets	₹ 14,40,000
Cost of Sales	₹ 19,20,000	10% Long-Term Debt	₹ 9,00,000
Net Profit	₹ 3,60,000	Current Liabilities	₹ 6,00,000
Average Inventory	₹ 8,00,0000	Trade Creditors	₹ 2,00,000
Other Current Assets	₹ 7,60,000	Net profit before Interest and tax	₹ 8,10,000
		(Total Rate 50%)	

Solution :

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

Gross Profit = Sales – Cost of goods sold

= ₹ 25,20,000 – ₹ 19,20,000 = ₹ 6,00,000

:. Gross Profit Ratio = $\frac{₹\ 6,00,000}{₹\ 25,20,000} \times 100$ = 23.81%

(ii) Inventory Turnover Ratio = $\frac{\text{Cost of sales}}{\text{Average Inventory}}$

= $\frac{₹\ 19,20,000}{₹\ 8,00,000}$ = 2.4

(iii) Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

Current Assets = Inventory + Other Current Assets

= 8,00,000 + 7,60,000 = ₹ 15,60,000

:. Current Ratio = $\frac{₹\ 15,60,000}{₹\ 6,00,000}$ = 2.6

(iv) Liquid Ratio = $\frac{\text{Liquid Assets}}{\text{Current Liabilities}}$

= $\frac{₹\ 7,60,000}{₹\ 6,00,000}$ = 1.27 (as Liquid Assets are Current Assets minus Inventory)

(v) Net Profit Ratio = $\frac{\text{Net Profit}}{\text{Sales}}$

= $\frac{3,60,000}{25,20,000} \times 100$ = 14.29%

(vi) Working Capital Turnover Ratio = $\frac{\text{Sales}}{\text{Working Capital}}$

= $\frac{₹25,20,000}{\text{Current Assets} - \text{Current Liabilities}}$

= $\frac{₹\ 25,20,000}{(7,60,000 + 8,00,000) - 6,00,000}$

= $\frac{₹\ 25,20,000}{₹\ 9,60,000}$ = 2.63

(vii) Return on Capital Employed

$$= \frac{\text{Net Profit before Interests and Tax}}{\text{Capital Employed}}$$

Capital Employed = (Fixed Assets + Current Assets) – Current Liabilities

= (14,40,000 +15,60,000) – 6,00,000

= 30,00,000 – 6,00,000 = ₹ 24,00,000

Return on Capital Employed = $\frac{₹\ 8,10,000}{₹\ 24,00,000} \times 100 = 33.75\%$

Illustration 18

Calculate Debtors Turnover Ratio and Average Debt Collection period for year 2014- 2015 from the following information :

	01.04.2014	31.03.2015
	₹	₹
Sundry Debtors	25,000	55,000
Bills Receivables	15,000	25,000
Provision for Doubtful Debts	3,500	6,500
Total Sales	2,30,000	
Sales Return	15,000	
Cash Sales	40,000	

Solution

Debtors Turnover Ratio = $\frac{\text{Net Credit Sales}}{\text{Average Debtors}}$

Net Credit Sales

= Total sales – Sales Return – Cash sales

= ₹ 2,30,000 – ₹ 15,000 – ₹ 40,000 = ₹ 1,75,000

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

Opening Balance = ₹ 25,000 + ₹ 15,000 = ₹40,000

Closing Balance = ₹ 55,000 + ₹ 25,000 = ₹ 80,000

$$\text{Average} = \frac{40{,}000 + 80{,}000}{2} = 60{,}000$$

$$\text{Debtors Turnover Ratio} = \frac{1{,}75{,}000}{60{,}000} = 2.92$$

Average Debt Collection Period

$$= \frac{365}{\text{Debtors Turnover Ratio}} = \frac{365}{2.92} = 125 \text{ days.}$$

4.7. QUESTIONS

1. From the alternatives given under each bit, write the correct answer along with its serial number again each bit:

(i) One of the following pairs of alternatives, which determine current ratio, is :

(a) Current Assets and Current Liabilities

(b) Current Liabilities and Fixed assets

(c) Current Assets and Fixed assets

(d) Fixed Assets and Long-term liabilities

(ii) One of the following which is not a quick asset, is:

(a) Sundry Debtors

(b) Bills Receivables

(c) Short term securities

(d) Prepaid expenses

(iii) Inventory is a:

(a) Fixed asset

(b) Current asset

(c) Quick asset

(d) Absolute liquid asset.

(iv) One of the following ratios, which tests the short-term solvency of the firm, is:

(a) Profitability Ratio

(b) Secondary Ratio

(c) Activity Ratio

(d) Liquidity Ratio

(v) Standard fixed for current ratio is :

(a) 1:1

(b) 2:1

(c) 0.5:1

(d) 1:2

(vi) The other name of activity ratio is :

(a) Liquidity ratio

(b) Velocity ratio

(c) Primary ratio

(d) Solvency ratio

(vii) Efficiency in payment of credit is evaluated by :

(a) Current ratio (c) Debtors Turnover ratio

(b) Creditors Turnover ratio (d) Stock Turnover ratio

(viii) Efficiency in recovery of debt is evaluated by:

(a) Creditor Turnover ratio (c) Debtors turnover ratio

(b) Debt Equity ratio (d) Stock turnover ratio

(ix) One of the following which is not a current liability, is :

(a) Bills Payable (c) Outstanding Expenses

(b) Creditors (d) Debenture

(x) One of the following which is not a liquid asset, is :

(a) Cash (c) Bills Receivables

(b) Debtors (d) Stock

(xi) Debtors turnover ratio is calculated by dividing net annual credit sale by :

(a) Average Trade Creditors (c) Bills receivables and payable

(b) Average Trade Debtors (d) Average inventory

(xii) One of the following which is an absolute liquid asset, is :

(a) Inventory (c) Marketable investments

(b) Trade Debtor (d) Prepaid expenses

(xiii) Standard norm for Absolute liquid ratio is :

(a) 1:1 (c) 2:1

(b) 0.5:1 (d) 1.5:1

(xiv) Trade Debtors consist of :

(a) Only Bills receivables (c) Bills receivables and Sundry debtors

(b) Only Sundry debtors (d) Credit sales

(xv) One of the following items which is not taken into consideration for calculation of capital employed in business, is :

(a) Land and Building (c) Preliminary expenses

(b) Cash in hand (d) Inside investments

[Ans:- (i) a, (ii)d, (iii) b, (iv) d, (v) b, (vi) b, (vii) b, (viii) c, (ix) d, (x) d, (xi) b, (xii) c, (xiii) b, (xiv) c, (xv) c.]

2. Fill in the blanks of the following sentences :

(a) Goodwill is a/an __________ asset.

(b) Preliminary expenses are ____________ asset.

(c) The difference between current assets and current liabilities is known as ________ capital.

(d) Current ratio is a test of short term ____ of a firm.

(e) Activity ratios are also known as ________ ratios.

(f) Bank overdraft is a _________ liability.

(g) Trade debtors include sundry debtors and ________ receivable.

(h) Average collection period is calculated by dividing number of working days by ______ turnover ratio.

(i) When the debtors turnover ratio is high the average collection period is _________ .

(j) ________ expenses are current assets.

[Ans:- (a) intangible (b) fictitious (c) working (d) solvency (e) velocity /movement (f) current (g) Bills (h) Debtors (i) Low (j) prepaid.]

3. Correct the underlined portions of the following sentences :

(a) Liquidity ratio measures <u>long- term</u> solvency of a firm.

(b) Preliminary expenses are <u>current</u> assets.

(c) Excess of current assets over long-term liabilities is called working capital.

(d) Current ratio studies the long-term financial position of the firm.

(e) Debtors turnover ratio is a solvency ratio.

(f) Average payment period represents the number of days taken by the firm to pay its debtors.

(g) Absolute liquid ratio is known as acid test ratio.

(h) Inventory turnover ratio studies the relationship between cost of goods sold and closing inventory.

(i) Return on investment ratio measures profitability of the business.

[Ans:- (a) short-term (b) fictitious (c) current (d) short (e) activity (f) creditors (g) cash (h) average (i) Efficiency.]

4. Express the following in one word / term each :

(a) Liabilities which are to be met within a period of one year.

(b) Ratios which test the financial standing of a firm.

(c) Excess of current assets over currents liabilities

(d) Assets that has no tangible existence or realisables value but represents actual cash expenditure.

(e) An asset that has no physical existence .

(f) Relationship between one number and another number.

(g) A reserve created by the accumulated capital surplus of an organisation.

(h) Funds that is kept aside out of profits to be used in future.

(i) The ratio studying the absolute liquidity of an organisation.

(j) More important ratios are known as .

[Ans:- (a) Current Liabilities (b) Solvency Ratios (c) Working capital (d) Fictitious assets (e) Intangibles asset (f) Ratio (g) Capital reserves (h) Revenue reserve (i) Absolute Liquidity (j) Primary ratios.]

5. Answer the following question within 30 words :

(a) What is short-term solvency ?

(b) What is a liquidity ratio?

(c) What is a bench mark?

(d) Explain objectives of activity ratios.

(e) State the meaning and objective of Creditors Turnover Ratio.

(f) Write two differences between current ratio and quick ratio.

(g) What do you mean by proprietors fund?

(h) Write any two uses of ratio analysis.

(i) Write any two limitations of ratio analysis.

(j) How will you interpret an increase in Debtors Turnover Ratio?

(k) How will you interpret a decrease in Stock Turnover Ratio.

(l) State the meaning and significance of Current Ratio

(m) What is working capital ?

(n) Explain fictitious assets.

(o) What is a revenue reserve?

6. Answer the following questions within 50 words :

(a) Explain stock turnover ratio

(b) How is current ratio interpreted?

(c) Write any three limitations of ratio analysis .

(d) State the meaning and objectives of profitability ratios.

(e) What do you mean by capital employed ?

(f) How ratio analysis help the management ?

(g) What is average debt collection period ?

(h) How is average payment period calculated ?

(i) How will you interpret the gross profit ratio

(j) Write the objectives behind calculation of activity ratios.

7. Enumerate the categories into which the ratios are grouped on the basis of the purposes they serve.

8. What is ratio analysis ? Explain the usefulness of the ratios.

9. " Accounting ratios are mere guides, complete reliance on them on decision-making is suicidal" Explain.

10. Write notes on the following :

(i) Stock Turnover Ratio

(ii) Debtors Turnover Ratio

11. A company has a current ratio of 2.5:1. Its stock is ₹ 80,000 and its current liabilities are ₹ 80,000. Calculate liquid ratio.

12. Current liabilities ₹ 1,20,000, working Capital ₹ 3,60,000, creditors ₹ 20,000. Inventory ₹ 1,20,000 Calculate Quick Ratio.

13. XYZ Ltd. has a current ratio of 2.5:1 and quick ratio of 1.5:1. Its current assets are ₹ 2,00,000 Calculate the value of stock.

14. The following are the ratio of trading activities of XYZ Ltd :

Debtors Velocity	3 months
Stock velocity	8 months
Gross Profit Ratio	25%

Closing stock of the year is ₹ 10,000 above the opening stock. Gross profit and Bills Receivables for the year amounts to ₹ 4,00,000 and ₹ 25,000 respectively. Calculate (i) Sales (ii) Sundry Debtors and Closing stock.

15. From the following information, calculate

Stock Turnover Ratio and Gross Profit Ratio :

	₹		₹
Opening stock	80,000	Sales	4,20,000
Purchases	2,00,000	Closing stock	75,000
Wages	10,000		
Gross profit	2,05,000		
	4,95,000		4,95,000

16. (a) Current Liabilities of a company are ₹ 3,50,000. Its current ratio is 3:1 and acid test ratio is 1.75 : 1. Calculate the value of Current assets, Liquid assets and Inventories.

[Ans.: Current Assets ₹ 10,50,000

Liquid Assets ₹ 6,12,500

Inventories ₹ 4,37,500]

(b) Working Capital of a company is ₹ 30,000. Its Current Ratio is 2.5.:1. Calculate the value of current assets, current liabilities and acid test ratio, assuming inventories of ₹ 26,000.

[Ans. : Current Assets ₹ 50,000, Current Liabilities 20,000, Acid Test Ratio 1.2:1.]

17. The Ration Current Assets (₹ 6,00,000) to Current Liabilities (₹ 4,00,000) is 1.5:1. The management is interested in maintaining a Current Ratio of 2:1, by paying off a part of the Current Liabilities. Compute the amount of Current Liabilities that should be paid, so that the Current Ratio may be maintained at the Level of 2:1.

[Ans.: ₹ 2,00,000]

Hints : Payment of current liabilities will result in equivalent reduction both in the amount of current assets as well as Current Liabilities. Let the amount of Current Liabilities to be paid = x

Then solve the equation, $\frac{6,00,000-x}{4,00,000-x}=2$

18. From the given information, calculate the inventory turnover ratio : Sales ₹ 2,00,000. Gross Profit 25% on cost, Opening Inventory was $\frac{1}{3}$rd of te value of Closing Inventory. Closing Inventory was 30% of sales.

    [Ans. : 4]

    Hint : Cost of goods sold ₹ 1,60,000

19. From the following details, calculate Debtors Turnover Ratio and Average collection period :

	₹
Total sales	2,25,000
Cash sales : 25% of sales	
Sales Returns (out of credit sales)	20,000
Opening Balance of Debtors	8,000
Closing Balance of Debtors	12,000

[Ans : Debtors Turnover Ratio - 16

Average collection period - 23 days.]

20. Compute 'Working Capital Turnover Ratio' from the following information :

    Cash Sales ₹ 1,30,000, Credit Sales ₹ 3,80,000, Sales Returns ₹ 10,000, Liquid Assets ₹ 1,40,000, Current Liabilities ₹ 1,05,000 and Inventory ₹ 90,000.

    [Ans. : 4]

21. Calculate from the following : (a) Gross Profit Ratio,

    (b) Operating Profit Ratio and

    (c) Net Profit Ratio

	₹
Opening Invantory	3,00,000
Closing Inventory	4,20,000
Purchases	14,00,000
Wages	3,70,000
Carriage Inwards	1,50,000
Administrative Expenses	84,000

Selling Expenses	36,000
Income Tax	1,00,000
Sales	24,00,000

[Ans. : (a) G.P. Ratio 25% (b) Operating Profit Ratio 20%
(c) Net Profit Ratio 15.83%]

22. Calculate Return on Capital Employed from the following particulars :

	₹
Share Capital	50,000
Reserves and surplus	25,000
Net Fixed Assets	2,25,000
Non-Current Trade Investments	25,000
Current Assets	1,10,000
12% Long-term Borrowings	2,00,000
Current Liabilitis	85,000
Net Profit before tax	60,000

[Ans. : 30.55%]

23. Following is the Balance Sheet of Sun Ltd. as at 31st March, 2017 :

Particulars	**Note No.**	₹
I. Equity and Liabilities :		
1. Shareholders' funds :		
Equity Share capital		30,00,000
Reserves and Surplus	1	23,00,000
2. Non-Current Liabilities		
Long-term Borrowings	2	22,00,000
3. Current Liabilities		
Trade Payables		4,00,000
TOTAL		79,00,000

II. Assets :		
1. Non-Current Assets :		
Fixted Assets		55,00,000
2. Current Assets :		
Inventory		12,00,000
Trade Receivables		9,00,000
Cash and Cash Equivalents		3,00,000
	TOTAL	79,00,000

Notes to Accounts :

1.	Reserves and Surplus :	₹
	Reserve	13,00,000
	Profit for the year	10,00,000
		23,00,000
2.	Long-term Borrowings :	
	8% Loans	10,00,000
	10% Debentures	12,00,000
		22,00,000

Calculate Return on Capital Employed.

[Ans. 16%]

24. Following particulars are obtained from the books of Odisha Steel Ltd. as at 31st March, 2017 :

	₹
Equity Share Capital	2,30,000
10% Preference Share Capital	2,00,000
Reserves and Surplus	1,70,000
15% Long-term Loans	80,000
Current Liabilities	3,60,000
Profit after Interest and Tax	1,80,000

Tax Rate 40%

Calculate Return on Capital Employed.

[Ans. 45.88%]

25. Calculate current assets of a company from the following information :

(i) Inventory Turnover Ratio 4 times

(ii) Inventory in the end is ₹ 20,000 more than inventory in the beginning.

(iii) Revenue from operations ₹ 3,00,000

(iv) Gross profit ratio 20%

(v) Current Liabilities ₹ 40,000

(vi) Quick Ratio 0.75

[Ans.: Current Assets ₹ 1,00,000]

Hint : Closing Inventory ₹ 70,000.

CHAPTER - 5

WORKING CAPITAL MANAGEMENT

STRUCTURE

5.1 INTRODUCTION

Every business needs funds for two purposes, for its establishment and to carry out its day-to-day operations. Long term funds are required to create production facilities through purchase of fixed assets, such as plant and machinery, land, building, furniture, etc. Fixed assets are assets of permanent nature and not intended for resale. Investments in fixed assets represent that portion of firm's capital which is blocked on permanent or fixed basis and is known as fixed capital. Fixed capital caters to the permanent needs of a business and it results in revenue generation. Funds are also needed for short-term purposes such as, purchases of raw materials, payment of wages and other day-to-day expenses, etc. These funds are known as working capital. In other words working capital refers to that part of a firm's capital which is required for financing short-term or current assets such as, cash, marketable securities, debtors, inventories, etc. Current assets are those assets which can be converted into cash within a short period, normally one accounting year. Working capital is kept in the form of cash, debtors, inventory, bills receivable, etc.

5.2 MEANING AND DEFINITION OF WORKING CAPITAL

Working capital is that part of the capital a business enterprise which is invested in current assets, such as stock of raw materials, work-in-progress, finished goods, debtors, bills receivable, cash to meet expenses like wages, salaries, rent, insurance, general expenses, etc. In an ordinary sense, working capital denotes the amount of funds needed for meeting day-to-day requirements of a concern. It circulates in the business like the blood circulation in the human body. Current assets, wherein working capital is invested, are changed form one form to another in the ordinary course of the business, i.e., from cash to raw material, raw material to works-in-progress, works-in-progress to finished goods, finished goods to receivable and from receivables to cash and this process continues. The duration of time required to complete the sequence of events from purchase of raw materials or goods for cash to the realization of sales in cash is called working capital cycle or operating cycle. Working capital is also known as circulating capital or short-term capital.

Some of the important definitions of working capital are given below:

According to Weston and Brigham, "Working capital refers to a firm's investment in short– term assets such as cash, accounts receivables, inventories, etc." In the words of J.S. Mill, "The sum of the current assets is the working capital of the business." According to C.W. Gersten Berg "Circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, as for example, from cash to inventories, inventories to receivable, receivables into cash." In the words of Shubin, "working capital is the amount of funds necessary to cover the cost of operating the enterprise."

According to Harry G. Guthman and Herbert E. Dongall, "Working capital is the excess of current assets over current liabilities."

According to Dr. Colin Park and Prof. J. W. Gladson, working capital is defined as " the excess of current assets of business (cash, accounts receivables, inventories) over current items owed to employees and others (such as salaries, wages and accounts payable, taxes owed to Govt.)."

According to National Council of Applied Economic Research, "Working capital is taken as the total current assets or as the excess of current assets over current liabilities."

From the above definitions of working capital, it appears that the various authors have defined working capital with diverse perceptions, using both gross working capital concept and net working capital concept. But the most widely acceptable definition is, the excess of current assets over current liabilities is called working capital. In this sense, the term working capital refers to net working capital. In a broader sense, working capital refers to that part of total capital which is invested is financing of current assets, i.e., inventories, debtors, cash in hand and at bank, prepaid expenses, etc. This means that total of all current assets is known as working capital which is usually termed as gross working capital. In another sense, the term working capital denotes funds that are required to finance day-to-day operations of a business. It may also be defined as that portion of a firm's current assets which is financed by long-term funds.

5.3 CONCEPTS OF WORKING CAPITAL

There are two concepts of working capital, i.e. Gross concept and net concept.

Gross concept of working capital refers to the total value of all current assets. In other words, gross working capital is the total amount available for financing of current assets. These assets are financed by both long-term and short-term sources.

Gross Working Capital = Total of all Current Assets

Current assets are those assets which can be converted into cash within one accounting year. These include cash in hand and at bank, short –term investments, short-term loans and advances given by the firm to other firms, prepaid expenses, accrued incomes, debtors, bills receivable and inventories.

Under the net concept, working capital represents the excess of current assets over current liabilities. Current liabilities are those liabilities which are short-term maturing obligations to be met normally within one accounting year and include items such as bils payable ,crediltors, short-term borrowings, bank overdraft, outstanding expenses, provision for taxation, etc. Working capital under the net concept represents the amount of current assets which would remain if all the current liabilities are paid. In another sense, net working capital is that part of current assets which is financed from long-term sources.

Net Working Capital = Curent Assets- Current Liabilities

Net working capital can be positive or negative. A positive net working capital arises when current assets are more than current liabilities. A negative net working capital occurs when current liabilities are in excess of current assets. Negative net working capital represents the situation of 'working capital deficit'.

Both the gross and net concepts cannot be regarded as mutually exclusive. Each concept has its importance in specific situation. Gross working capital concept focuses on the problem of managing individual current assets in day-to-day operations. It is in the nature of quantitative definition that highlights attention on the levels of current assets for a given activity. Use of this concept is helpful in providing for the correct amount of working capital at the right time so that the firm is able to realize the highest possible return on its investments. On the other hand, the net concept of working capital is in the nature of a qualitative definition, which helps creditors and investors to judge the financial soundness of an enterprise. It also helps to find the correct financial position of firms having the same amount of current assets. It is the net working capital which can be relied upon to meet the contingencies. Thus, the level of net working capital in a firm is a measure of liquidity and also suggests the extent to which working capital needs may be financed by long-term funds. The net concept of working capital may be suitable only for sole trading and partnership forms of organisations. But the gross concept is very suitable to the company form of organisation where there is a diverse between ownership, management and control.

A list of current assets and current liabilities is given below for the reference of the students :

List of current Assets and Current Liabilities

Current Assets	Current Liabilities
Cash in hand	Trade Creditors
Cash at bank	Bills payable
Short –term investments	Short-term loans, advances and deposits
Marketable securities	Bank overdraft
Trade debtors	Outstanding expenses
Bills receivable	Income received in advance
Short-term loans and advances	Provision for taxation (if it does not amount to appropriation of profits)
Inventories (stock of raw-material, works -in-progress, finished goods, stores and spares parts)	Proposed dividend (if it does not amount to appropriation of profits)
	Dividend payable
	Provisions against current assets (provision for doubtful debts, provision for discount on debtors,etc)
Prepaid expenses	
Accrued incomes, etc.	

Illustration I

From the following Balance Sheet of Mr.X as at 31st March, 2016, calculate:

(a) Gross Working Capital and

(b) Net Working Capital.

Liabilities	(₹)	Assets	(₹)
Capital	10,00,000	Land and Buildings	10,00,000
General Reseve	1,10,000	Plant and Machinery	5,00,000
		Furniture	1,00,000
Bank Loan	6,00,000	Inventories	50,000
Short-term Loan	50,000	Sundry Debtors	60,000
Sundry Creditors	30,000	Bills Receivable	20,000
Bill Payable	18,000	Short- term Investment	40,000
Bank Overdraft	20,000	Marketable Securities	30,000
Outstanding Expenses	2,000	Cash at Bank	25,000
		Cash in hand	5,000
	18,30,000		18,30,000

Solution:

(a) Gross working capital = Total of all Current Assets

= Inventories + Sundry Debtors + Bills Receivable + Short-term Investment + Marketable Securities + Cash at Bank + Cash in hand

= ₹ 50,000+ ₹ 60,000 + ₹ 20,000+ ₹ 40,000+ ₹ 30,000 + ₹ 25,000+ ₹ 5,000 = ₹ 2,30,000

(b) Net Working Capital = Current Assets – Current Liabilities

Total of Current Liabilities = Short-term Loans + Sundry Creditors+ Bills Payable + Bank Overdraft + Outstanding Expenses

= ₹ 50,000+ ₹ 30,000 +₹ 18,000+ ₹ 20,000 + ₹ 2,000 = ₹ 1,20,000

Net Working Capital

= Total Current Assets – Total Current Liabilities

= ₹ 2,30,000- ₹ 1,20,000 = ₹ 1,10,000.

5.4 NEED OR OBJECTS OF WORKING CAPITAL

Working capital is as important as the fixed capital in a business. A major part of fixed capital is usually invested in fixed assets for the purpose of earning profit. Working capital feeds the fixed assets and it is the force behind the utilisation of fixed assets. If working capital is inadequate or absent, effective utilization of fixed assets becomes impossible. As such, fixed assets which act as the guarantee of long–term success, would prove to be a total failure, if short- term survival is not ensured by the supply of adequate working capital. An enterprise with adequate working capital, can meet the day-to-day expenses to ensure uninterrupted functioning. It can also take care of unforeseen contingencies and take advantage of business opportunities. Further, it pay off the creditors in time. This helps to improve the creditworthiness of an enterprise. Thus, working capital is the life blood and nerve centre of a business enterprise . If this centre becomes weak, sooner or later, it is likely to collapse.

Working capital is very essential to maintain smooth running of a business. No business can run successfully without an adequate amount of working capital. The main objects of working capital are as follows :

(i) **To have regular supply of goods or raw materials :** Working capital is required to have regular supply of goods or raw materials. Quick payment to the creditors for credit purchase of goods or raw materials, ensures the regular supply of goods or raw materials from suppliers, resulting continuous production.

(ii) **To ensure regular payment of wages and salaries :** Working capital is needed for regular payment of wages and salaries to the employees. Such regular payments lead to the satisfaction of the employees and raise their morale, increase efficiency, reduce wastage and costs, reduced, labour-turnover and enhance production and profit .

(iii) **To avail cash discount and reduce cost :** Working capital enables a concern to avail cash discounts on the purchase and hence, reduces cost.

(iv) **To exploits the favourable market conditions :** If a firm is having adequate working capital, it can exploit the favourable market conditions such as purchasing its requirements in bulk quantity when prices are lower.

(v) **To ensure smooth business operation :** Working capital is really the life blood of any business enterprise and it maintains the firm in well condition. Any day-to-day financial requirement can be met without any shortage of funds. All expenses and current liabilities are paid on time.

(vi) **To strengthen the solvency:**

Working capital is needed to operate the business activities smoothly without any financial problem for making the payment of short-term liabilities. Purchase of raw materials, payment of wages, salaries and other expanses can be made without any delay. Such a situation helps in maintaining solvency of the business.

(vii) **To enable the firm to face crisis :**

Adequate working capital is needed to enable a firm to face business crisis in emergencies such as depression.

(viii) **To ensure quick and regular payment of dividend:**

Sufficient amount of working capital enables a company form of organization to pay dividends regularly and timely to its shareholders and can raise more funds in future.

5.5 CLASSIFICATION OR KINDS OF WORKING CAPITAL:

Working capital may be classified in two ways:

- on the basis of concept and
- on the basis of time.

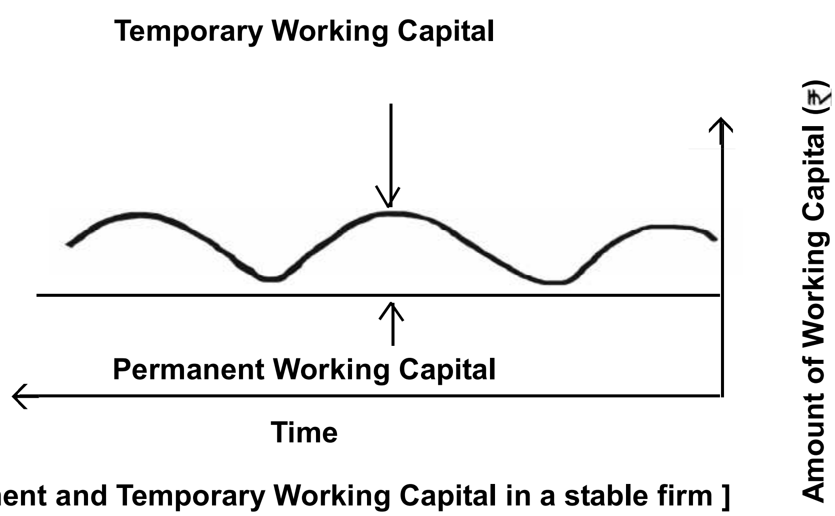
Kinds of Working Capital

- On the basis of concept
  - Gross working capital
  - Net working capital
- On the basis of time
  - Permanent or Fixed or Regular working capital
  - Temporary or Variable or Seasonal working capital

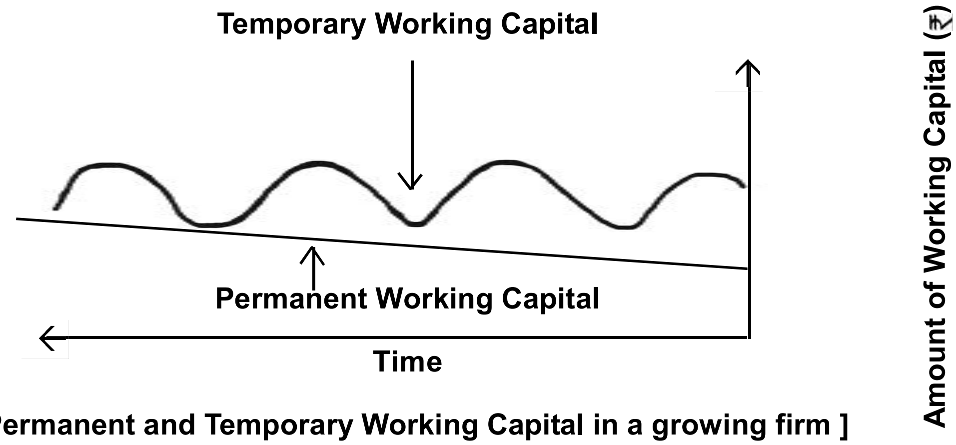
On the basis of concept, working capital can be classified as gross working capital and net working capital. Gross working capital is the capital invested in total current assets of the enterprise. As started earlier, current assets are those assets which can be converted into cash within a short period, normally one accounting year, such as cash in hand and at bank, sundry debtors, short-term loans and advances, inventories, temporary investments, marketable securities, prepaid expenses, accrued incomes, etc. On the other hand, net working capital refers to the excess of current assets over current liabilities. Current liabilities are those liabilities which are intended to be paid in the ordinary course of business within a short period, normally one accounting year, such as sundry creditors, bills payable, short-term loans, advances and deposits, bank overdrafts, etc. This classification on the basis of concept, is very significant from financial manager's point of view as it lays emphasis on the various areas of financial responsibility. But it is not completely adequate as it totally ignores the time which is an important variable influencing the pattern in financing working capital requirements.

On the basis of time, working capital may be classified into two categories, i.e., Long-term or permanent or fixed or regular working capital and short-term or temporary or variable or reasonal working capital. Permanent or fixed capital is the minimum amount of investment in all current assets which is required at all times to carry out the minimum level of business activities. It represents the current assets required on a continuous basis over the entire year. Permanent working capital is also known as 'hardcore working capital'. Financing of this portion of working capital is generally made from long-term sources. Permanent working capital keeps on changing its form from one asset to another. It also grows with the growth of the business. On the other hand, temporary or variable working capital is the amount of working capital which is required over and above the permanent working capital to meet the seasonal demands and some special exigencies. It represents additional current assets required at different times during the operating period. The need for this type of working capital varies with the fluctuation in the level of activity over and above the minimum one. Firms dealing in products that are seasonal in nature require more temporary working capital. This type of working capital may not be gainfully employed in the business beyond the time of emergency. Thus, such type of working capital is generally financed from short-term sources such as bank credit. Temporary working capital differs from permanent working capital in the sense that it fluctuates, i.e. sometimes rising and sometimes declining, while permanent working capital remains stable over a period of time. In case of a growing firm, the permanent working capital increases with the passage of time due to expansion of business activities. But it does not fluctuate like temporary working capital.

The following figures display permanent and temporary working capital needs of a stable firm and a growing firm respectively:



[Permanent and Temporary Working Capital in a stable firm]



[Permanent and Temporary Working Capital in a growing firm]

5.6 SOURCES OF FINANCING WORKING CAPITAL

Sources of financing working capital depend on the nature of working capital under review. As stated earlier, working capital may be permanent or fixed working capital and tempory or variable working capital. Permanent or fixed working capital is the minimum amount of investment in all current assests which is required at all times to carry out the minimum level of business activities. On the other hand, temporary working capital is the amount of working capital which is required over and above the permanent working capital to meet the seasonal demands and some special exigencies. This type of working capital cannot be permanently employed gainfully in business.

Generally the permanent working capital is financed from long-term sources, while the temporary or variable working capital is met from short-term sources. The reason for such a principle is that the business units wil be ensuerd of the uninterrupted supply of funds to finance permanent working capital for a long period of time. Similarly, temporary working capital may sometimes result in surplus to remain idle. If long-term sources are used in financing this type of working capital, it will lead to a situation of idle capital as well as higher cost of financing, resulting in making the profit margin to narrow down.

The various sources of financing working capital are as follows:

- **Long-term sources and**
- **Short-term sources**

Long-term Sources : The main sources of long-term financing of working capital are as follows :

(i) Equity Shares

(ii) Preference Shares

(iii) Debentures

(iv) Term Loans from Financial Institutions

(v) Public Deposits

(vi) Retained Earnings

(i) **Equity Shares –** Issue of equity shares is an important source for permanent fixed working capital. Equity shares do not have any fixed rate of dividend for payment and it is to be paid subject to the availability of sufficient profits. In the event of liquidation, these shareholders get back money left only after all debts, liabilities and preference shares have fully been paid off. A firm should raise the maximum amount of permanent working capital by issue of equity shares, since it does not involve any cost is the initial years.

(ii) **Preference Shares –** Issue of preference shares is another important source of permanent working capital. Preference shares enjoy the preferential right over equity shares in receiving of dividend at a fixed rate and in regard to the repayment of capital in the event of winding up of the company.

(iii) **Debentures** – Debenture is an acknowledgement of debt. It is a document issued under the common seal of the company acknowledging the debt to the holder, on certain terms and conditions. The debentrueholders are the creditors of the company and they are paid interest at fixed rate. Interest on debenture is an expense for the company which is charged against the statement of profit and loss. The debentures are generally issued as a floating charge on the assets of the company. Company can issue different types of debentures like naked or unsecured debentures, secured or mortgage debentures, redeemable debentures, irredeemable debentures, convertible and non-convertible debentures. It is a good source of finance and beneficial for both the parties, i.e., investors and the company. It is an important source of permanent working capital.

(iv) **Term Loans from Financial Institutions –** Term loan refers to loan taken for a fixed tenure. Term loans are generally raised to finance long–term assets. This source of finance is also suitable to meet medium- term demands of working capital. Term loans are provided by banks and financial institutions , such as Life Insurance Corporation of India, Industrial Finance Corporation of India, Industrial Development Bank of India, State Financial Corporations, etc.

(v) **Public Deposits –** Public deposits are accepted directly from the public as fixed deposits by an enterprise for raising medium-term finance. Public deposits carry monthly,quarterly, half-yearly or cumulative interest payment. Public deposits are suitable to meet the medium-term demands of working capital.

(vi) **Retained Earnings –** Retained earnings are profits not distributed among the shareholders but retained and invested in business. These are free profits not meant for any specific purpose. It is an internal source of finance and can be utlised to provide necessary funds for permanent working capital .

Short-term Sources :

The important sources of short-term financing of working capital are as follows :

(i) Borrowings from Banks

(ii) Trade Credit

(iii) Outstanding Expenses

(iv) Advances from Customers

(v) Commercial Paper

(vi) Factoring of Receivables

(vii) Internal Sources

(i) Borrowings from Banks – A large partion of working capital is financed through borrowings from commercial banks. Borrowings from banks are the most important source of financing temporary working capital. The different forms in which banks usually provide loans and advances are :

(a) Demand Loan, (b) Cash Credit, (c) Overdraft,

(d) Purchasing and Discounting of Bills and (e) Guarantee.

(a) **Demand Loan –** It is also called loan. This type of loan is for a specified amount, period and rate of interest. The entire amount of loan is disbursed in one drawing. Demand loans are sanctioned against Government securities, National Savings Certificates, Public sector bonds, debentures issued by Municipalities, Port Trusts, Improvement Trusts, etc., bank's own term deposits, units of Unit Trust of India, gold ornaments and against pledge of goods, etc. No demand loan can be granted against shares or debentures of companies and life insurance policies.

(b) **Cash Credit –** Cash Credit is a short–term source of finance. Under cash credit, the bank offers the firm to take a loan up to a certain limit. Cash credit is usually taken to meet the working capital requirements of a business enterprise. It is given against collateral security. Interest is charged only on the amount of loan taken by the firm and not on the amount of credit sanctioned. Such loan is granted by the bank on the basis of firm's turnover, its financial status, value of inventory, etc. So it is difficult for new and financially weak firms to obtain cash credit.

(c) **Overdraft –** It is also a source of temporary working capital. Under this method, a current accountholder is permitted to draw a specified amount, even if there is no credit balance in the bank account. A customer is permitted to deposit and withdraw. Including overdrawals as many times as required. Normally, overdraft is granted against Government securities, National Savings Certificates, public sector bonds, debentures issued by Municipalities, Port Trusts, etc., bank's own term deposits, units of Unit Trust of India, gold ornaments, fully paid shares and debentures of limited companies, surrender value of life insurance policies, etc. Overdraft may also be permitted without any security. Overdraft is usually allowed for a period of three months. But often it is rolled over and therefore, some authorities on business finance prefer to treat overdraft as a source of long-term finance. Bank charges interest on such overdraft account every month on the last working day.

(d) **Purchasing and Discounting of Bills –** Under this facility, banks grant finance against cheque or bills of exchange. For example, on a bill of exchange of ₹ 100,000 for one month, bank shall recover interest at the prevailing rate and credit the balance amount to the account of the customer. If the prevailing rate of interest is 12%, the bank shall recover ₹ 1,000 towards interest and credit the balance of ₹ 99,000 to the account. In case there is delay in realisation, the bank further recovers interest for delayed period.

(e) **Guarantee –** Bank also provide guarantee to secure obligations of the businessman. Gurantees are generally provided against security of some tangible assets. Guarantee is a commitment by a bank wherein it promises to pay to the benificiary the amount granted in the event of default by the person on whose behalf guarantee is given. Bank charges guarantee fee for providing guarantee.

(ii) **Trade Credit –** Trade credit is the credit extended by one trader to another for the purchase of goods and services. It facilitates the purchase of goods and services without immediate cash payment. It is commonly used by business enterprises as a source of short–term financing. Trade credit is allowed usually upto a maximum period of three months. Smaller business units rely heavily on trade credit to finance their operations, because they, often, are unable to obtain funds from banks or other lenders in the financial market. Trade credit is granted on the basis of creditworthiness of the firm. It does not involve any explicit cost and therefore, a firm should utilise this source of finance to the fullest extent.

(iii) **Outstanding Expenses –** Expenses which have been incurred during the year, but payment for which has not been made, are known as outstanding expenses. Outstanding wages, outstanding rent, etc. are the examples of outstanding expenses. They represent liabilities for services rendered to the firm that have not yet been paid for by the firm. They constitute an interest-free source of finacing although of a smaller magnitude.

(iv) **Advances from customers –** One way of raising funds for short-term requirements, is to demand for advance from one's own customers. Advances are paid at the time of placing order for the goods. This has become an increasingly popular source of short-term finance among the business entriprises mainly due to the fact that the enterprises do not pay any interest on advances from their customers . and if at all any firm pays interest on advances, that too at a nominal rate. Thus, advances from customers become one of the cheapest sources of raising funds for meeting working capital requirements.

(v) Commercial Paper – Commercial paper is an unsecured money market instrument issued in the form of a promissory note. It was introduced in India in 1990 with a view to enabling highly rated corporate borrowers to diversify their sources of short-term borrowings. Subsequently, primary dealers and All India Financial Institutions were also permitted to issue commercial paper to enable them to meet their short-term funding requirements for their operations. Commercial paper can be issued for maturities between a minimum of seven days and maximum of up to one year from the date of issue. It is sold at a discount from its face value and redeemed at full face value on its maturity. It is a cheper source of raising short-term finance as compared to the bank credit, because interest rates on commercial paper issues tend to be below the prime lending rate. Purchasers of commercial paper include companies with excess funds to invest, banks, insurance companies, pension funds, mutual funds, etc.

(vi) Factoring – Factoring is a type of short-term finance in which a business would sell its accounts receivables (invoices) to a third party, known as a factor, to meet its short-term liquidity needs. Under the transaction between both parties, the factor would pay the amount due on the invoices minus his commission or fees. When receivables are factored, title to them is transferred to the factors and the receivables no longer appear on the firm's balance sheet. Factoring helps a firm in getting immediate payment for sales made on credit. Most factoring of receivables is done on a non- recourse basis, i.e., the factor assumes the risk of default. The factor charges a factoring commission or service fee of one to three percent of the factored receivables to cover the cost of credit checking, collection and bad debt losses. The factor normally charges an interest rate of 2 to 5 percentage points over the prime rate on advances to the firm. A company that factors all its receivables does not need a credit department and does not have to incur the administrative and clerical costs of credit investigation and collection or the losses on uncollected accounts. Thus, although factoring receivables may be more costly form of credit than unsecured borrowings, the net cost may be below the stated factoring commission and interest rates because of non-maintenance of credit department and avoidance of bad debts.

(vii) Internal Sources – Short–term sources of funds may also be available from internal sources such as provision for depreciation, provision for tax, proposed dividend, etc.

5.7 DETERMINANTS OF WORKING CAPITAL OR FACTORS INFLUENCING THE WORKING CAPITAL REQUIREMENTS

Every firm wants to hold as small quantity of working capital as possible without impairing its short-term solvency and profitability. Firms, which manage adequate working capital, always earn higher profit than the firm, which fails to manage adequate working capital. There are a large number of factors upon which working capital need of a concern depends such as, size, nature of business, length of production cycle, etc. These factors cannot be ranked as each of them has different importance and influence. A firm should plan its operations in such a way that it should have neither the lack of working capital nor it should have excess of working capital. No set rule or formula can be framed to determine the amount of working capital. The data and problem of each firm should be analysed to determine the amount of working capital. The following factors usually influence the working capital needs of a firm;

(i) **Nature of Business –** The working capital needs are basically influenced by the nature of the business. Trading firms require working capital in large amount as they have to carry large stock of a variety of merchandise to satisfy their customers' varied demand. Such firms have low investment in fixed assets. On the other hand, public utility concerns like electricity, water supply and railway undertakings require large amount for investment in fixed assets. Their working capital needs are nominal because they offer cash sales only and supply services, not products, and as such no funds are tied up in inventories and receivables. The manufacturing concerns require more working capital which fall between those two extremes.

Firms engaged in manufacturing essential products of daily consumption would require relatively less amount of working capital in comparison to firms manufacturing luxurious products.

(ii) **Size of Business –** Size of the business directly affects the working capital requirements. Greater the size of a business unit, generally large will be the requirements of working capital. Actually size is measured in terms of the scale of operation. A firm with larger scale of operation, will need more working capital than a small firm. However, in some cases, even a smaller concern may need more working capital due to high overhead charge, inefficient use of available resources and other economic disadvantage of small size.

(iii) **Manufacturing Cycle –** Needs of working capital is in direct proportion to length of manufacturing cycle , i.e., longer the processing period of manufacture, larger is the amount of working capital needs. The larger manufacturing time blocks money in purchase of raw materials, labour and service costs for long period before the finished product is finally obtained.

(iv) **Production policy –** The need of working capital depends upon the production policy followed by the business unit. In some industries, the demand is subject to wide fluctuations due to seasonal variations. The working capital requirements, in such cases, depend upon the production policy of the firm to meet the seasonal fluctuations. Such firm may adopt a steady production policy independent of fluctuations in demand for the product or a fluctuating production policy having regard to the seasonal nature of demand. If the steady production policy is adopted, there will be a large accumulation of finished goods during slack season. This will require more amount of working capital. On the other hand, production is curtailed during off– season and increased during peak season. Thus, the requirement of working capital will fluctuate accordingly.

(v) **Length of Operating Cycle –** The operating cycle or working capital cycle refers to the length of time required to complete the cycle of events namely, conversion of cash into raw materials, conversion of raw materials into works-in-progress, conversion of works-in-progress into finished goods, conversion of finished goods into debtors or bills receivable through sale and conversion of debtors or bills receivable into cash. The speed with which the working capital completes one cycle determines the requirements of working capital. Longer the period of the cycle, larger is the requirement of working capital and vice- versa.

(vi) **Business Fluctuations –** Business fluctuations refer to alternate expansion and contraction in general economic activites, such as boom and recession. During boom in the economy, the demand for products rises. As such, three will be an increase in the investment on inventories and book debts of the firm. As a result, there is a need for larger amount of working capital. During recession, the demand for products slows down. Consequently, the level of inventory and book debts will also decline. Accordingly, the need for working capital during recession gets reduced.

(vii) **Seasonal Variations –** For certain industries, availability of raw material is seasonal and cannot be obtained throughout the year. In such a situation it becomes necessary to buy raw materials in bulk to ensure uninterrupted flow of production during the entire year. This will require more amount of working capital. On the other hand, if materials are available regularly, in working capital will be lower. For example, in case of sugar mills,more working capital will be needed at the time of harvesting of sugar cane.

(viii) **Growth and Expansion –** The need of working capital increases with the growth and expansion of an enterprise. The need for increased working capital funds does not follow the growth in business activities but it proceeds it. Thus, advace planning is essential for a growing concern.

(ix) **Terms of Purchase and Sale –** The terms of purchase and sale influence considerably the requirements of working capital. A firm that purchases its requirements on credit and sells its products on cash, require lesser amount of working capital. On the other hand, the level of working capital will be high, if the purchases are made on cash and sales are on credit. Further, working capital requirement will decrease if the credit period for the realisation of debtors is reduced and the period of payment of creditors is enhanced. On the other hand, the working capital needs will increase if the credit period allowed to debtors is increased and the period of repayment of creditors is decreased.

(x) **Market Competition –** Market competition influences the working capital requirements of a business enterprise. For example, if a firm enjoys monopoly, it shall require lesser working capital as it shall be able to recover the debt quickly and may also raise advance from customers. On the other hand, if there is a cut-throat competition, it shall have to respond to the credit terms offered by the competitors. Further, a large quantity of finished goods will have to be maintained to serve the customers who may not like to wait because other firms are prepared to meet their needs. Under such a situation, a firm shall have to invest large amount in debtors and inventories .

(xi) **Overheads –** Cash requirements for day-to-day expenses like wages, salaries, rent, advertisement, etc. also determine working capital requirements. If the overhead expenses are more, the requirement for working capital will also be more.

(xii) **Price Level Changes –** Changes in the price Level also affect the working capital requirements. Rising in the price Level needs a higher investment in working capital as more funds will be required to maintain the same quantity of current assets.

(xiii) **Rate of Stock Turnover –** Stock turnover ratio is a valuable measure of selling efficiency and it indicates the rate at which the funds invested in inventories are converted into receivables or cash through sale. If it is high, the working capital requirement will be lesser as compared to a firm having a low rate of stock turnover.

(xiv) **Ready Availability of Credit –** A firm with readily available credit from banks requires less working capital than a firm without such a facility.

(xv) **Changes in Technology –** The technological changes and developments in the area of production can have immediate effects on the needs of working capital. If the firm installs a new machine in place of old system, the new system can utilise less expensive raw materials and the investment in inventory will be reduced resulting in less working capital requirement.

(xvi) **Other factors –** Certain other factors such as operating efficiency, management attitude, import policy, taxation, depreciation policy, dividend and retention policy, etc. also enfluence the magnitude of working capital.

5.8 ADEQUACY OF WORKING CAPITAL

Blood circulation is essential in the human body for maintaining life. Similarly smooth flow of funds is very much necessary to maintain the health of a firm. Thus, working capital is the life blood of a business. Even a fully equipped manufacturing firm is sure to collapse without adequate amount of working capital. For effective and smooth running of any business undertaking, adequate amount of working capital is essential. Both execessive and inadequate working capital pose a serious problem to a firm.

A firm may be in favour of maintaining a high level of current assets to ensure solvency. In such a situation, it will have no difficulty in paying claims of creditors and it will also be able to ensure smooth production thereby meeting the demands of customers. Thus, a firm holding larger working capital has less risk of insolvency or facing stock-out situation. But the maintenance of large volume of current assets may cause some of the assets to remain idle involving idle capital cost. The idle capital cost would narrow down the profit margin. On the other hand, the firm may be in favour of maintaining lower level of current assets in order to minimise the idle capital cost with an object of magnifying the profit margin. But due to the paucity of current assets, the firm's capacity to meet its obligations will be impaired. In order to meet this exigency, the firm may be forced to incur debts at a high rate of interest. Further, it may face stock-out situation resulting in loss of sales, profit and goodwill. Thus, inadequate working capital is disastrous.

Disadvantages or Dangers of Excessive working capital

Excessive working capital is a waste of precious resources and has the following disadvantages :

(i) Excessive working capital means idle funds which earn no profits for the business and hence, the business cannot earn a proper rate of return on its investments.

(ii) Excessive working capital may lead to unnecessary purchasing and accumulation of inventories causing more chances of theft, waste and obsolescence.

(iii) Excessive working capital implies excessive debtors and defective credit policy which may cause higher incidence of bad debts.

(iv) It may result in overall inefficiency in the organisation,

(v) When there is excessive working capital, relations with banks and other financial institutions may not be maintained.

(vi) Due to low rate of return on investment, the value of shares may also fall.

(vii) It leads to imbalance between liquidity and profitability, i.e., the firm may enjoy high liquidity and at the same time, suffer from low profitability.

Disadvantages or Dangers of Inadequate Working Capital

Inadequate working capital is more dangerous than excessive working capital. A firm has to face the following problems on account of inadequate working capital:

(i) A firm which has inadequate working capital cannot pay its short–term liabilities in time. Thus, it will lose its reputation and will not be able to get good credit facilities.

(ii) The firm cannot pay day-to-day expenses of its operations and it would create inefficiencies, increase costs and reduce the profits of the firm.

(iii) It cannot buy its requirements in bulk and cannot avail of discounts, etc.

(iv) It becomes difficult for the firm to exploit favourable market conditions and undertake profitable projects due to lack of working capital.

(v) It becomes impossible to utilise the full capacity of the fixed assets due to non-availability of liquid funds. This results in fall in the rate of earnings on investments.

(vi) The firm will not be able to pay dividend to its shareholders. This may affect the interest of the investors in the firm and bring down its share prices.

(vii) It impairs credit rating of the business.

(viii) It becomes impossible to utilise production facilities fully for want of working capital.

(ix) The firm may have to borrow at exorbitant rates of interest.

(x) Creditors may apply to the court for winding up if the firm fails to pay their obligations in time.

Importance or Advantages of Adequate Working Capital

Considering the dangers of both excessive and inadequate working capital, a firm would like to maintain an adequate amount of working capital. The main advantages of maintaining adequate amount of working capital are as follows :

(i) Solvency of the business – Adequate working capital helps in maintaining short-term solvency of the business by providing uninterrupted flow of production. It also increases creditworthiness of the firm.

(ii) Goodwill – Adequate working capital enables a business enterprise to make prompt payments and helps in creating and maintaining goodwill.

(iii) Easy loans – A concern having adequate working capital ,high solvency and credit standing, can arrange loans from banks and other financial institutions on easy and favourable terms,

(iv) Regular payment of day-to-day expenses – A firm 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 productivity and profits.

(v) 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, to avail attractive credit offers and take advantage of profitable business opportunities.

(vi) Cash discounts – Adequate working capital also enables a firm to avail cash discounts on purchases and hence, reduces costs.

(vii) Uninterrupted production – Sufficient working capital ensures regular supply of raw materials, thereby enabling uninterrupted flow of production.

(viii) Quick and regular return on investments – Every investor wants a quick and regular return on his investments. Adequate working working capital enables a concern to pay quick and regular dividends to its investors. This gains the confidence of the investors and creates a favourable market to raise additional funds.

(**ix)** **Ability to face crisis –** Adequate working capital enables a firm to face business crisis in emergencies such as depression.

(x) **High morale –** Adequacy of working capital creates an environment of security, confidence and high morale and thus, increases the overall efficiency in a business.

Therefore, an efficient management should maintain an adequate amount of working capital on continuous basis. The excess working capital should be invested outside the business, in marketable securities so that it will earn some interest to enhance the profitability of the firm.

5.9 COMPUTAION OR ESTIMATION OF WORKING CAPITAL NEEDS OF TRADING CONCERNS

As discussed earlier, inadequacy of working capital is very dangerous and one of the important factors of business failure, On the other hand, excessive working capital leads to lower profitability and poor financial position, Thus ,both inadequate working capital and excessive working capital are not good for the business. Therefore, it is necessary to compute or estimate the working capital needs for running the business more profitably and efficiently.

It is a fact that a certain amount of funds is always tied up in inventories, sundry debtors and day-to-day cash requirements. However, the businessman also enjoys credit facilities from his suppliers who may sell the goods on credit. Similarly, a businessman may not pay for many expenses immediately. The employees are also paid periodically. Therefore, a certain amount of funds is automatically available to finance the current assets requirement. But the requirements of current assets are usually more than the amount of funds available through current liabilities. In other words, the current assets are to be kept at a higher level than the current liabilities. This difference is known as working capital. The requirement of working capital can easily be estimated by making the forecasts of the amount of each component of current assets and current liabilities. The following factors are to be considered while estimating the working capital needs of a trading concern:

1. Total cost incurred on purchase of goods.

2. The period during which goods are to be kept in the godown waiting for sales.
3. The average period of credit allowed to the customers.
4. The amount of cash required to pay day-to-day expenses of the business.
5. The amount required for advance payments, if any.
6. The average period of credit to be allowed by suppliers.
7. Time lag in the payment of expenses like wages, salaries, etc.

The procedure for estimating the amount of different components of working capital is explained as follows :

(i) **Stock of Goods or Inventory –** Goods are not sold immediately after purchasing. These are kept in the godown for certain period. This period is an important factor in determining the amount to be locked up in stock of goods. On the basis of purchases made during the year, the amount of goods kept in the godown for the storage period can be easily calculated. For example,

Purchases : 1,20,000 units per annum

Cost per unit : ₹ 10

Goods are likely to be kept in the godown for one month on an average.

The working capital requirements for inventory or stock of goods can be estimated as follows :

Purchases on average for one month = $\frac{1,20,000}{12}$ = 10,000 units

Cost of inventory (held for one month) = ₹ 10X10,000 = ₹ 1,00,000

(ii) **Sundry Debtors –** The amount of working capital locked up in sundry debtors can be calculated on the basis of credit sales and the period of credit allowed to the debtors, i.e., time lag in collection. Such amount of debtors may be determined either at sales value or at cost. In the former case, the amount of credit sale is taken into consideration while in the latter case, the cost of credit sale is considered. For example,

Credit Sales for the year : ₹ 18,00,000

Credit period allowed to the customers : 2months

The amount of working capital locked up in sundry debtors can be calculated as under :

Credit sales per month = ₹ $\frac{18,00,000}{12}$ = ₹ 1,50,000

Amount of Sundry Debtors = ₹ 1,50,000X2 = ₹ 3,00,000

(2 months' credit sales)

Note:- Calculation of debtors should be made at cost. Profit included in debtors should be ignored because this may or may not be used as a source of working capital.

(iii) Prepaid Expenses : A certain amount of funds is also locked up in prepaid expenses and this can be computed on the basis of agreement with the parties to whom such amount is paid, such as insurance premium. For example,

Annual insurance premium :- ₹ 12,000

Insurance premium paid six monthly in advance.

The amount of working capital locked up in prepaid insurance can be calculated as given below :

Annual Insurance Premium = ₹ 12,000

Prepaid Insurance = ₹ 12,000 x $\frac{6}{12}$ = ₹ 6,000

(iv) Cash and Bank Balances – These are estimated on the basis of past experience. Every businessman knows the amount that would be required to meet the day-to-day expenses of the business and on that basis the amount of cash in hand and cash at bank can be estimated.

(v) Sundry Creditors – This is estimated on the basis of credit purchases and the credit period allowed by the suppliers, i.e., time lag in payment to the creditors for supply of goods. For example,

Creditors Purchases for the year: ₹ 9,00,000

Credit Period allowed by the suppliers : 2months

The amount of Sundry Creditors can be calculated as follows :

Credit Purchases per month = ₹ 9,00,000X$\frac{1}{12}$ = ₹ 75,000

Amount of Sundry Creditors = ₹ 75,000X2 = ₹ 1,50,000

(2months' purchase)

(vi) **Outstanding Expenses –** These are estimated on the basis of time lag in payment of expenses like wages, salaries, etc.

After computing the above figures for current assets and current liabilities, the total amount of current assets are determined and from it the total amount of current liabilities are deducted to find out the requirements of working capital. Further, some extra amount calculated as a fixed percentage of the working capital so calculated, may be added to provide for contingencies.

Proforma for Working Capital Estimates of Trading Concern

Statement showing Working Capital Requirements

Particulars		**Amount (₹)**
Current Assets:		
Stock of Goods / Inventories		–
Sundry Debtors		–
Cash in hand / Cash at Bank		–
Prepaid Expenses		–
Gross Working Capital		–
Less Current Liabilities:		
	₹	
Sundry Creditors	–	
Outstanding Expenses /		
Lag in payment of Expenses	–	–
Net Working Capital		–
Add Margin for contingencies		–
Working Capital Required		–

Illustration 2

Prepare a statement showing working capital needs of a trading concern from the following information :

Estimated Annual sales	₹ 120 lakhs
Net Profit as a percentage on sales	10%
Goods are expected to remain in the godown on averge	2 months
Average credit period allowed to customers	1 month
Average credit period allowed by suppliers	2 months
Cash in hand required to meet day-to-day expenses	₹ 20,000

Add 10% to the computed figure to allow for contingencies.

Solution :

Statement showing Working Capital Needs

Particulars	**Amount (₹)**
Current Assets:	**(In lakhs)**
Stock (2 months) : ₹ 1,08,00,000 x $\frac{2}{12}$	18.00
Sundry Debtors at cost : (one month) ₹ 1,08,00,000 x $\frac{1}{12}$	9.00
Cash in hand (given)	0.20
Gross Working Capital	27.20
Less Current Liabilities :	
Sundry Creditors : (2 months) ₹ 1,08,00,000 x $\frac{2}{12}$	18.00
Net Working Capital	9.20
Add 10% for contingencies : ₹ 9,20,000 x $\frac{10}{100}$	0.92
Working Capital Required	10.12

Working Notes :

1. Sales = ₹ 120 lakhs

   Profit = 10% of ₹ 120 lakhs= ₹ 12lakhs

   Thus, Cost of Sale = Sales - Profit = ₹ 120 lakhs – ₹ 12 lakhs = ₹ 108 lakhs.

2. In a trading concern, cost of sales is assumed to be the purchases.

3. Sundry debtors have been taken at cost and profits have been ignored as funds provided by profits may or may not be used as a source of working capital.

Illustration 3

Prepare a statement showing the working capital requirements of a trading concern from the following particulars:

Projected Annual Sales	1,43,000 units
Selling price	₹ 10per unit
Percentage of net profit on cost of sales	25%
Average stock carrying in trems of sales requirement	10weeks
Average Credit priod allowed to debtors	4weeks
Average Credit period allowed by suppliers	8weeks

Add 10% to the computed figure to allow for contingencies.

Solution :

Statement showing the Working Capital Requirements

Particulars	Amount (₹)
Current Assets:	**(In lakhs)**
Stock (10 weeks) : 11,44,000 x $\frac{10}{52}$	2,20,000
Debtors (4 weeks) : 11,44,000 x $\frac{4}{52}$	88,000
Gross Working Capital	3,08,000
Less Current Liabilities :	
Creditors (8 weeks) : 11,44,000 x $\frac{8}{52}$	1,76,000
Net Working Capital	1,32,000
Add 10% for Contingencies : ₹ 1,32,000 x $\frac{10}{100}$	13,200
Working Capital Required	1,45,200

Working notes :

1. Cost of Sales:

   Sales= ₹ 10X1,43,000= ₹ 14,30,000

   Profit = 25% on cost of sales, i.e., 20%on sales = ₹ 14,30, 000X $\frac{20}{100}$ = ₹ 2,86,000

   Thus, Cost of Sales = ₹ 14,30,000 - ₹ 2,86,000 = ₹ 11,44,000

2. In a trading concern, cost of sales is assumed to be the purchases.

3. Debtors have been taken at cost and profit has been ignored because this may or may not be used as a source of working capital.

4. The number of weeks in a year is taken as 52.

Illustration 4

A trading concern wishes to purchase a business and seeks your advice about the average working capital requirements in the first year's working. You are given the following estimates and are required to add 10% to your computed figure to allow for contingencies:

		Per annum ( )
1.	Average amount locked up in stock	1,10,500
2.	Average credit allowed :	
	Island sales(6 weeks)	10,92,000
	Export Sales(8 weeks)	2,73,000
3.	Time lag in payment for :	
	Purchases (one month)	13,50,000
	Salaries (one month)	1,20,000
	Miscellaneous Expenses (½ month)	18,000
4.	Insurance premium (paid quarterly in advance)	10,000
5.	Undrawn profits on average throughout the year	50,000

Compute the average of working capital required.

Solution :

Statement showing the working capital requirements

Particulars	Amount (₹)
Current Assets:	
Stock (given)	1,10,500
Sundry Debtors :	
For Inland Sales ₹ 10,92,000× $\frac{6}{52}$ = ₹ 1,26,000	
For Export Sales ₹ 2,73,000× $\frac{8}{52}$ = ₹ 42,000	1,68,000
Prepaid Insurance ₹ 10,000× $\frac{1}{4}$	2,500
Gross Working Capital	2,81,000
Less Current Liabilities :	
Sundry Creditors ₹ 13,50,000 × $\frac{1}{12}$ = ₹ 1,12,500	
Outstanding Salaries ₹ 1,20,000 × $\frac{1}{12}$ = ₹ 10,000	
Outstanding Miscellaneous Expenses ₹ 18,000× $\frac{1}{24}$ = ₹ 750	1,23,250
Net Working Capital	1,57,750
Add 10% for contingencies ₹ 1,57,750× $\frac{10}{100}$	15,775
Working Capital Required	1,73,525

Note : Undrawn profits have been ignored because profits may or may not be used as a source of working capital.

Illustration 5

From the following particulars of Laxmi Traders, prepare an estimate of working capital requirements:

Estimated Annual Sales	1,56,000 units
Selling price	₹ 10per unit
Percentage of Net Profits on Cost of sale	$33\frac{1}{3}$%
Goods are likely to stay in godown on average	2months
Credit allowed by suppliers	1month
Credit allowed to customers	1month
Salaries per annum	₹ 2,40,000
Lag in payment of salaries	1month
Expenses per annum are estimated at	₹ 60,000
Lag in payment of expenses	$\frac{1}{2}$ month

25% of sales are against cash. Cash in hand and at Bank is expected to be ₹ 20,000

Solution:

Statement showing Estimation of Working Capital Requierments

Particulars		Amount (₹)
Current Assets:		
Stock (2 months) ₹ 11,70,000 × $\frac{2}{12}$		1,95,000
Sundry Debtors (1 month) ₹ 11,70,000 × $\frac{1}{12}$ × $\frac{3}{4}$		73,125
Cash in hand and at Bank (given)		20,000
Gross Working Capital		2,88,125
Less Current Liabilities :		
Sundry Creditors (1 month) ₹ 11,70,000 × $\frac{1}{12}$ = ₹	97,500	
Outstanding Salaries (1 month) ₹ 2,40,000 × $\frac{1}{12}$ = ₹	20,000	
Outstanding Expenses ($\frac{1}{2}$ month) ₹ 60,000 × $\frac{1}{24}$ = ₹	2,500	1,20,000
Working Capital Reuirments		1,68,125

Note :

1. Cost of sale :

   Sales= ₹ 10 x 1,56,000 = ₹ 15,60,000

   Profit = $33\frac{1}{3}$% cost of sales, i.e., 25% on sales

   = ₹ 15,60,000 × $\frac{25}{100}$ = ₹ 3,90,000

   Thus, cost of sales = ₹ 15,60,000 - ₹ 3,90,000 = ₹ 11,70,000

2. Cost of sale is assumed to be purchases.

3. Sundry Debtors have been taken at cost and profits have been ignored as funds provided by profits may or may not be used as a source of working capital.

Illustration 6

Prepare a statement showing the working capital needed, from the following information:

Budgeted annual sales	1,20,000 units
Selling price per unit	₹ 50
Percentage of net profit on sales	20%

Goods remain in warehouse on an average for a month.

Two months' credit is allowed to debtors.

Debtors may be calculated at selling price.

Suppliers of goods extend a month's credit.

A minimum cash balance of ₹ 60,000 is expected to be maintained.

Insurance premium per annum ₹ 24, 000 and it is paid half yearly is advance.

Solution:

Statement showing the working capital needed

Particulars	**Amount (₹)**
Current Assets:	
Stock of Goods (one month) : 1,20,000 × 50 × $\frac{80}{100}$ × $\frac{1}{12}$	4,00,000
Debtors (2 months) 1,20,000 × 50 × $\frac{2}{12}$	10,00,000
Cash in hand (given)	60,000
Prepaid Insurance ₹ 24,000 × $\frac{6}{12}$	12,000
Gross Working Capital	14,72,000
Less Current Liabilities :	
Creditors (One month)	
1,20,000 × 50 × $\frac{80}{100}$ × $\frac{1}{12}$	4,00,000
Net Working Capital Required	10,72,000

Note:

1. Cost of sale is treated as purchases.
2. Debtors have been taken at selling price.

5.10 QUESTIONS

1. From the alternatives given below choose and write the correct answer along with its serial number against each bit :

i) Gross working capital refers to :

(a) Current Assets + Current Liabilities

(b) Current Assets – Current Liabilities

(c) Current Assets + Fixed Assets

(d) Sum total of all current assets.

ii) Net working capital refers to

(a) Sum total of all current assets

(b) The excess of current liabilities over current assets

(c) The excess of current assets over current liabilities

(d) The excess of fixed assets over current liabilities

iii) Current assets include:

(a) Plant and Machinery

(b) Trade Debtors

(c) Land and Buildings

(d) Furniture and Fixture

iv) One of the following which is not a current asset, is :

(a) Land (c) Prepaid Expenses

(b) Marketable Securities (d) Accrued Incomes

v) One of the following which is not a current liability, is :

(a) Debentures (c) Bills Payable

(b) Bank Overdraft (d) Sundry Creditors

vi) Current liabilities include:

(a) Dividend Payable (c) General Reserve

(b) Share Capital (d) Long-term Loan

vii) A firm should raise the maximum amount of permanent working capital by :

(a) Issue of equity shares (c) Issue of commercial paper

(b) Advances from customers (d) Bank overdraft

viii) If sum total of all current assets be ₹ 3,50,000 and total of all current liabilities be ₹ 1,40,000, then gross working capital shall be :

(a) ₹ 2,10,000 (c) ₹ 140,000

(b) ₹ 3,50,000 (d) ₹ 4,90,000

ix) If sum total of all current assets be ₹ 6,20,000 and total of all current liabilities be ₹ 3,30,000, then net working capital shall be :

(a) ₹ 9,50,000 (b) ₹ 3,30,000 (c) ₹ 2,90,000 (d) ₹ 6,20,000

x) If cost of sales for the year is ₹ 12,00,000 and credit allowed to customers is 2months, then funds locked up is sundry debtors at cost will be :

(a) ₹ 3,00,000 (b) ₹ 1,00,000 (c) ₹ 6,00,000 (d) ₹ 2,00,000

xi) If sales per annum is 12,000 units, cost per unit is ₹ 10 and goods are likely to stay in the godown for two months on overage, then funds locked up is stock of goods will be :

(a) ₹ 1,20,000 (b) ₹ 60,000 (c) ₹ 20,000 (d) ₹ 10,000

xii) If credit sales for the year is ₹ 1,30,000, percentage of net profit on sales is 10% , and average credit period allowed to customers is 4 weeks, then funds locked up in sundry debtors at cost, considering a time period of 52weeks is equivalent to one year, will be :

(a) ₹ 18,000 (b) ₹ 9,000 (c) ₹ 10,000 (d) ₹ 20,000

[**Ans.–** (i) d, (ii) c, (iii) b, (iv) a, (v) a, (vi) a, (vii) a, (viii) b, (ix) c, (x) d, (xi) c, (xii) b]

2. Answer the following questions in one word/ term each :

(i) Give any one example of current asset.

(ii) State any one example of current liabilities

(iii) What is the total of all current assets called ?

(iv) What is the excess of current assets over current liabilities called?

(v) If ‘a’ represents current assets and ‘b’ represents current liabilities, then what does ‘(a-b)’ represent ?

(vi) If ‘x’ represents current liabilities and ‘y’ represents working capital, then what does ‘(x+y)’ represent?

(vii) If ‘a’ represents current assets and ‘b’ represents working capital, then what does ‘(a-b)’ represent ?

[**Ans.–** (i) Cash /Stock/ Debtors,etc, (ii) Creditors / Bills payable / Bank overdraft, etc, (iii) Gross working capital (iv) working capital / net working capital (v) working capital, (vi) current assets, (vii) current liabilities]

3. Answer the following questions in one sentence each:

(i) What is the other name of working capital?

(ii) What is Gross Working Capital?

(iii) What is Net Working Capital ?

(iv) State any one objective of working capital.

(v) What is fixed working capital?

(vi) What is temporary working capital?

(vii) State any one source of long-term financing of working capital.

(viii) Write any one source of short-term financing of working capital

(ix) State any one determinant influencing the working capital requirement.

(x) Write any one disadvantage of excessive working capital.

(xi) Write any one disadvantage of inadequate working capital.

(xii) State any one advantage of adequate working capital .

4. Correct the underlined portion of the following sentences :

(i) <u>Net</u> working capital refers to sum total of all current assets .

(ii) <u>Gross</u> working capital refers to the excess of current assets over current liabilities.

(iii) Net working capital refers to the excess of <u>fixed</u> assets over current liabilities.

(iv) Inventory is an example of <u>fixed</u> assets.

(v) Issue of shares is a source for <u>temporary</u> working capital.

(vi) <u>Permanent</u> working capital is the amount of working capital which is required to meet the seasonal demands and some special exigencies.

(vii) If sum total of all current assets be ₹ 50,000 and total of all current liabilities be ₹ 20,000 , then gross working capital shall be ₹ 30,000.

[**Ans.–** (i) Gross, (ii) Net, (iii) current, (iv) current, (v) permanent, (vi) Temporary, (vii) ₹ 50,000]

5. Fill up the blanks :

(i) Sundry Debtors are current ________.

(ii) Sundry Creditors are current ________.

(iii) Inventory is a ________ asset.

(iv) Working capital is also known as ________ capital.

(v) Excess of current assets over current liabilities is ________ capital.

(vi) Gross working capital refers to the total of ________ assets.

(vii) Negative net working capital represents the situation of working capital ________.

(viii) Public utility concerns need ________ amount of working capital.

(ix) Debenture is a source of financing ________ working capital.

(x) Overdraft is a source of financing ________ working capital.

[**Ans.–** (i) assets, (ii) liabilities, (iii) current , (iv) circulating or short-term, (v) working, (vi) current, (vii) deficit, (viii) less or nominal, (ix) permanent,(x) temporary.]

6. Answer each of the following questions within 30 words:

(i) What are various kinds of working capital?

(ii) Explain the meaning of net working capital.

(iii) State any three objects of working capital.

(iv) What do you mean by permanent working capital?

(v) What is temporary working capital?

(vi) State any three important factors which influence the working capital requirements of a firm.

(vii) State any three sources of long-term financing of working capital.

(viii) Write any three sources of short-term financing of working capital.

7. Answer each of following questions within 50 words :

(i) Explain the concepts of working capital.

(ii) What is the need of working capital in a business?

(iii) State any five important factors which influence the working capital requirements of a firm.

(iv) What are the sources of long-term financing of working capital?

(v) What are the sources of short-term financing of working capital?

(vi) Write a note and overdrafts from banks as a short-term source of financing working capital.

(vii) Write a note on trade credit as a source of short-term financing of working capital.

(viii) Write a note on commercial paper as a short-term source of finance.

(ix) Write a note on factoring of receivables.

(x) Write the dangers of inadequate working capital

(xi) State the dangers of excessive working capital.

(xii) Write the advantages of adequate working capital.

8. What is working capital ? Explain the concepts of working capital.

9. Define working capital. Discuss the need of working capital for a manufacturing firm.

10. Explain different types of working capital.

11. Describe the various determinants of working capital.

12. Discuss the different long–term sources of financing working capital.

13. Explain various sources of short–term financing of working capital.

14. What are the consequences if a firm has

    (a) Excessive working capital and

    (b) Inadequate working capital?

15. Discuss the advantages of adequate working capital.

16. Explain the steps to be followed in estimating the working capital needs of a trading firm .

17. From the following Balance Sheet of Mr.A as at 31st March, 2016, calculate:

    (a) Gross Working Capital and

    (b) Net working capital.

Balance Sheet of Mr. A as at 31st March, 2016

Liabilities	Amount (₹)	Assets	Amount (₹)
Capital	12,20,000	Land and Buildings	8,10,450
General Reserve	3,00,000	Plant and Machinery	4,59,550
Bank Loan	1,50,000	Furniture	50,200
Short-term Loan	80,200	Inventories	80,150
Sundry Creditors	45,125	Sundry Debtors	70,135
Bills Payable	22,320	Bills Receivable	25,000
Outstanding Expenses	5,027	Short-term Securities	2,25,000
		Marketable Securities	80,000
		Cash at Bank	20,100
		Cash in hand	2,087
	18,22,672		18,22,672

[**Ans.–** (a) ₹ 5,02,472, (b) ₹ 3,49,800]

18. Prepare a statement showing working capital needs of a trading concern from the following particulars :

Projected Annual sales	₹ 180 lakhs
Net profit on sales	20%
Goods are expected to remain in godown for sale	2months
Average credit period allowed to customers	1month
Average credit period allowed by suppliers	2months

Cash in hand needed to meet

day-to-day expenses ₹ 25,000

Add 10% to the computed figure to allow for contingencies.

[**Ans.–** ₹ 13,47,500]

19. Prepare a statement showing the working capital requirements of Lucky Traders from the information given below :

Estimated annual sales	1,57,300units
Selling price	₹ 5 per unit
Percentage of profit on cost of sales	25%
Average stock carrying in terms of sales requirement	8 weeks
Average credit period allowed to customers	2 weeks
Average credit period allowed by suppliers	4 weeks

Add 10% to the calculated figure for contingencies.

The number of weeks in a year is 52.

[**Ans.–** ₹ 79,860.]

20. A trading concern wishes to purchase a business and seeks your advice about the average working capital requirements in the first year's working. You are given the following estimates and are required to add 10% to your computed figure to allow for contingencies :

		Per annum (₹)
1.	Average amount locked up in stock	50,600
2.	Average credit allowed :	
	Inland sales (4 weeks)	11,44,000
	Export sales (8 weeks)	2,47,000

3.	Time lag in payments for :	
	Purchase (1month)	10,50,000
	Salaries (1month)	2,40,000
	Miscellaneous Expenses ($\frac{1}{2}$ Month)	12,000
4.	Insurance premium	12,000
	(paid half-yearly in advance)	
5.	Undrawn profits on average throughout the year	25,000

[Ans.– ₹ 82,060.]

21. From the following figures of Ambika Traders, prepare an estimate of working capital requirement :

Projected annual sales	1,63,800 units
Selling price	₹ 20 per unit
Percentage of net profit on cost of sale	$33\frac{1}{3}$%
Goods are likely to stay in godown on average	2 months
Credit allowed by suppliers	2 months
Credit allowed to customers	1 month
Salaries per annum	₹ 3,00,000
Lag in payment of salaries	1 month
Expenses per annum	₹ 75,000
Lag in payment of expenses	$\frac{1}{4}$ month
20% of sales are against cash	
Cash in hand and at bank is expected to be	₹ 45,000

[**Ans.–** ₹ 1,65,050]

22. Prepare a statement showing the working capital needed, from the following information :

Budgeted annual sales	1,32,000 units
Selling price per unit	₹ 20
Percentage of profit on sales	20%

Goods remain in warehouse on an average for a month.

Two months' credit allowed to debtors.

Debtors may be calculated at selling price.

Suppliers of goods extend $1\frac{1}{2}$ months' credit.

A minimum cash balance of ₹ 75,000 is expected to be maintained.

Insurance premium per annum ₹ 18,000 and it is paid quarterly in advance.

[**Ans.–** ₹ 4,31,500]

CHAPTER - 6

CASH FLOW STATEMENT

STRUCTURE

6.1 INTRODUCTION

Financial statements are the end products of accounting process. Financial statement in relation to a company include a Balance Sheet as at the end of the financial year, a Statement of Profit and Loss for the financial year, a Cash Flow Statement for the financial year and a Statement of Shareholders' Equity. The Balance Sheet and the Statement of Profit and Loss provide information about the financial position and profitability of an enterprise. But the Cash Flow Statement provides information on a firm's liquidity and solvency. Potential lenders or creditors use the statement of cash flows to determine a firm's ability to repay the debts. A firm may earn huge amount of profits, yet it may have paucity of cash and when it suffers loss, it may still have plenty of cash. A cash flow statement explains the reasons for it and provides information about the liquidity and solvency of the firm. Therefore, the Cash Flow Statement is a critical tool for analysts and investors.

6.2 MEANING OF CASH FLOW STATEMENT

A cash flow statement is a statement of changes in cash position between the beginning and end of a period. The statement summarises the sources from which cash payments are made during a particular period of time. In other words, a cash flow statement shows the various sources of cash inflows and uses or applications of cash outflows during a period, thus explaining the changes in cash position of the firm. Thus , a cash flow statement is a statement of changes in the financial position of a firm on cash basis. It reveals the net effects of all business transactions of a firm during a period on cash and explains the reasons of changes in cash position between two balance sheet dates.

As per Accounting Standard (AS-3) issued by the Institute of Chartered Accountants of India, the term cash includes:

1. Cash in hand
2. Demand deposits with banks
3. Cash equivalents.

Cash equivalents are 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. These include cheques and drafts on hand, short-term investments, marktable securities, etc. Generally an investment will be treated as cash equivalent if it has a short maturity period, i.e., three months or less from the date of its acquisition.

Cash flow means inflow or outflow of cash or cash equivalents. An inflow, i.e., sources of cash, increases the total cash available at the disposal of the firm, while outflow, i.e., use of cash, decreases it. The difference between cash inflows and cash outflows is known as net cash flow which can be either net cash inflow or net cash outflow. It should be noted that cash flow statement deals with flow of cash but does not consider movement among cash, bank balance and cash equivalents. According to Khan and Jain, “Cash Flow Statements are statements of changes in financial position on the basis of funds defined as cash or cash equivalents.”

The Institute of Cost and Works Accountants of India defines Cash Flow Statement as “a statement setting out the flow of cash under distinct heads of sources and their utilisation to determine the requirements of cash during the given period and to prepare for its adequate provision."

Thus, a Cash Flow Statement is a statement which provides a detailed explanation for the changes in a firm's cash balance during a particular period by indicating the firm's sources and uses of cash and cash equivalents.

Features of Cash Flow Statement

The features or characteristics of cash flow statement may be summarised as follows:

(i) It is a periodical statement as it covers a particular period of time, i.e., a month or a year.

(ii) It shows the movement of cash and cash equivalents in between two balance sheet dates.

(iii) It shows the sources and applications of funds on cash basis during a particular period of time.

(iv) It records the changes in fixed assets as well as current assets.

(v) It reflects how the financial position of a firm changes over a period of time due to its operating activities, investing activities and financing activities.

(vi) It is an indicator of cash earning capacity of the firm.

(vii) A projected cash flow statement is referred to as cash budget.

6.3 OBJECTIVES OF CASH FLOW STATEMENT

Cash Flow Statement plays an important role in taking decisions and planning by investors, creditors and management. It also fulfills the following main objectives.

(i) To know the cash inflows and outflows arising from operating, investing and financing activities.

(ii) To assess liquidity and solvency position of a firm. Cash flow statement provides information relating to size and kind of cash and cash equivalents available during a particular period and thus, helping is assessing liquidity and solvency position of a firm. Usually banks and financial institutions analyse the cash flow statement before deciding to grant loans to a firm.

(iii) To supply necessary information to the users of the accounting information to assess the ability of a firm to pay its obligations as soon as it becomes due, to analyse and interpret the various transactions for future courses of action and see the cash generation ability of a firm.

(iv) To help the management to ascertain cash planning for future and thereby avoid any awkward situation. Cash flow statement can be used for appraisal of various capital investment projects to determine their viability and profitability .

(v) To help in taking decisions about payment of dividend. The liquidity position of a firm must be satisfactory for payment of dividend though the firm has earned a huge amount of profits. Cash flow statement helps to know about the liquidity position of the firm to pay dividend.

(vi) To ensure intra-firm and inter-firm comparison. Cash flow statement facilitates comparison of various figures of financial in nature of current year with those of previous year. It also helps in inter-firm comparision to identify the operational efficiency of an organisation vis-a-vis its competitors.

(vii) To identify non-cash items for ensuring cash incomes and expenses of a concern. While preparing cash flow statement, non-cash items are identified and thus, it is possible to know the cash incomes and expenses for taking different managerial decisions.

6.4 ADVANTAGES /IMPORTANCE /UTILITY OF CASH FLOW STATEMENT

Cash flow statement is useful for short-term planning and control of cash. A business entity needs sufficient amount of cash to meet its various obligations in the near future such as, payment of operating expenses, repayment of debt , payment for purchase of fixed assets, etc. It helps the management to make a cash flow projection for the immediate future taking data relating to cash inflows and cash outflows from past records. Thus, cash flow statement is an important tool of financial analysis for the management. The main advantages of cash flow statement are:

(i) **Helpful in evaluation of cash position –** Cash flow statement is very helpful in knowing the cash position of a firm. Since cash is the basis for carrying on business smoothly, the cash flow statement is very useful in evalution of current cash position of the firm.

(ii) **Useful in planning and control –** A projected cash flow statement which can be prepared from the current cash flow statement, enables the management to plan and coordinate the financial operations properly. The management can know how much cash is needed, from where it will be derived, how much cash can be generated internally and how much can be obtained from outside.

(iii) **Helpful in performance evalution –** A comparison of actual cash flow statement with the projected cash flow statement, will disclose the failure or success of the management in managing cash resources. Deviation will indicate the need for corrective action.

(iv) **Easy to know the liquidity position –** Liquidity position of a firm refers to its ability to meet short-term obligations such as, payment of operating wages and salaries, payment of other operating expenses, repayment of debt, etc. From cash flow statement, the management is able to know how well the firm meets those obligations. At the same time, the ability of the firm in cash earning can be known from cash flow statement. As a matter of fact, a firm's profitability is ultimately dependant upon its cash earning capacity.

(v) **Helpful in capital budgeting decisions –** The cash flow statement and the projected cash flow statement help the management in taking capital budgeting decisions. With the help of cash flow statement, appraisal of various capital investment projects is made to determine their viability and profitability.

(vi) **Answers to different questions –** Cash flow statement is able to explain some questions often encountered by the financial manager such as, why is the firm not able to pay dividend in spite of making huge profits, why there is large cash balance in spite of loss, etc.

(vii) **Useful to outsiders –** Cash flow statement helps the investers, debentureholders, bankers, lenders, suppliers, etc. to analyse the financial position of a firm and on the basis of such analysis they take proper decisions on investment in the firm.

6.5 LIMITATIONS OF CASH FLOW STATEMENT

Cash flow statement is used as a tool for financial statement analysis. Still it suffers from some limitations which are as follows:

(i) **Fails to assess the liquidity and solvency position –** Cash flow statement does not help to assess liquidity and solvency position of a firm, because proper liquidity does not depend upon cash alone . Liquidity also depends upon those assets which can be converted into cash easily. Cash flow statement does not represent the real liquidity position as it does not consider these assets.

(ii) **Possibility of window-dressing –** The possibility of window-dressing is higher in case of cash position in comparison to the working capital position of a firm. The cash balance can be easily manipulated by postponing purchases and other payments and by rapidly collecting cash from trade debtors before the balance sheet date. Thus , a funds flow statement presents a more realistic picture than a cash flow statement.

(iii) **Ignores the accrual concept of accounting –** Cash flow statement is prepared on cash basis and ignores the accrual concept of accounting. Hence, the accuracy of cash flow statement is questionable.

(iv) **Ignores non-cash transactions –** Non-cash transactions in respect of investing and finacing activities such as, purchase of assets by issue of shares or debentures, issue of bonus shares, conversion of debentures into shares, etc. are ignored while preparing cash flow statement. Hence, the true position of a firm cannot be judged by cash flow statement.

(v) **Fails to present net income –** Cash flow statement actually fails to present the net income of a firm since it does not consider non- cash items such as depreciation while calculating cash flows from operating activities. But it can be used as a suppliment to income statement.

6.6 DIFFERENCE BETWEEN CASH FLOW STATEMENT AND FUNDS FLOW STATEMENT

A cash flow statement is a statement which is prepared to show the various cash inflows and outflows between two balance sheet dates. It reveals the reasons for changes in cash and cash equivalents from one balance sheet date to another. But a funds flow statement is a statement which is prepared to show the inflows and outflows of funds, i.e., sources and applications of funds for a particular period. Here funds denote working capital and thus a funds flow statement is prepared to explain the changes in the working capital position of a firm between two balance sheet dates. At present, cash flow statement is included as a part of financial statements instead of funds flow statement. Both the cash flow statement and funds flow statement are used for financial analysis of a firm though they are of different nature. A cash flow statement is not very much different from a funds flow statement. In fact the main difference between the two relates to meaning and concept of the term 'fund'. The term 'fund' as used in funds flow statement , means net working capital, i.e., the difference between current assets and current liabilities. But in a cash flow statement the term 'fund' means cash fund as defined by AS-3 , i.e., cash and cash equivalents. Cash flow statement and funds flow statement differ from each other in the following respects :

Basis	**Cash Flow Statement**	**Funds Flow Statement**
1. Concept	Cash flow statement is based on the narrower concept of funds which considers changes in cash and cash equivalents between two balance sheet dates.	Funds flow statement is based on the broader concept of funds, i.e., working capital and considers both the changes of cash as well as of other current assets and current liabilities between two balance sheet dates.

2. Purpose Of preparation	It is prepared to show the reasons for movement in the cash and cash equivalents at the beginning and at the end of the accounting period. It analyses the cash generating efficiency of the firm.	It is prepared to show the reasons for the changes in respect of the working capital of previous accounting period and current accounting period. It examines the firm's efficiency in utilising the working capital.
3. Basis of preparation	Cash basis of accounting is followed in preparing cash flow statement.	Accrual basis of accounting is followed in preparing the funds flow statement.
4. Disclosure	Cash flow statement discloses the inflows and outflows of cash and cash equivalents.	Funds flow statement discloses the sources and applications of funds, i.e., working capital.
5. Utility	It is suitable for short-term analysis.	It is suitable for both long-term and short-term analysis.
6. Schedule of changes in working capital	In cash flow statement, changes in current assets and current liabilities are shown in the statement itself. Cash flow statement is not followed by any statement like schedule of changes in working capital.	In funds flow statement , changes in current assets and current liabilities are shown separately through the schedule of changes in working capital. Funds flow statement is generally followed by such schedule of changes in working capital.

7. Legal requirements	Cash flow statement is a part of financial statements and it is prepared by every listed company as per AS-3 as required by SEBI.	Funds flow statement is not a part of financial statements and there is no legal requirement to prepare such statement.
8. Opening and closing Balances	In cash flow statement opening and closing balances of cash and cash equivalents are given.	A funds flow statement does not contain any opening and closing balances.

6.7 TRANSACTIONS AFFECTING CASH FLOW STATEMENT

A cash flow statement includes only those transactions which affect cash and cash equivalents. As per AS-3 (Revised), a cash flow statement should be prepared in a manner that it reflects inflows (sources) and outflows (uses) of cash and cash equivalents of a firm during a specified period of time. All the activities of the firm are classified into three categories, viz., operating, investing and financing activities. Such classification helps the users of the statement to assess the effect of these activities on the cash and cash equivalents of the firm. Thus, the transactions resulting cash flows from these three activities affect the cash flow statement. These are discussed as follows :

(a) Cash Flows from Operating Activities :

Operating activities are the principal revenue generating activities of a firm. Cash flows from operating activities generally result from the transactions and events which are taken into account for determination of net profit or loss of the firm. Examples of cash flows from operating activities are:

(i) Cash receipts from sale of goods and rendering of service.

(ii) Cash receipts from royalties, fees, commissions and other revenue.

(iii) Cash receipts from trade debtors (debtors and bills receivable).

(iv) Cash payments for purchase of goods and services.

(v) Cash payments to trade creditors (creditors and bills payable).

(vi) Cash payment for wages, salaries , and other payments to employees.

(vii) Cash payments or refunds of income tax unless they can be specifically identified with investing and financing activities.

(viii) Cash payments and cash receipts from purchase and sale of securities in case of financial enterprises such as bank, mutual funds, etc.

(ix) Interest paid and interest received in case of financial enterprises.

(x) Dividend received in case of financial enterprises.

(b) Cash Flows from Investing Activities :

Investing activities are in respect of purchase and sale of long- term assets such as land, buildings, plant, machinery, etc. which are held not for resale. These activities also include the purchase and sale of such investments which are not included in cash equivalents. Cash flows from investing activities reveal the expenditures made for resources intended to generate future income and cash flows. Examples of cash flows from investing activities are :

(i) Cash payments to acquire fixed assets including intangibles.

(ii) Cash receipts from sale of fixed assets including intangibles.

(iii) Cash payments to acquire shares, warrants or debt instruments of other enterprises (other than payments for those instruments considered to be cash equivalents and those held for dealing or trading purposes).

(iv) Cash receipts from sale of shares, warrants or debt instruments of other entereprises (other than receipts for those instruments considered to be cash equivalents and those held for dealing or trading purposes.

(v) Cash advances and loans to third parties other than advances and loans made by financial enterprises.

(vi) Cash receipts from repayment of advances and loans made to third parties other than advances and loans made by financial enterprises.

(vii) Cash receipts in respect of insurance claim for property involved in accident.

(viii) Cash receipts of interest and dividend other than for financial enterprises.

(c) Cash Flows from Financing Activities :

Financing activities are those activities that result in changes in the size and composition of owner's capital including preference shares in case of a company and borrowings of the enterprise. Examples of cash flows arising from financing activities are :

(i) Cash receipts from issue of shares or other similar instruments such as issue of equity or preference shares.

(ii) Cash receipts from short-term or long-term borrowings such as issue of debentures, bonds, loans, etc.

(iii) Cash payments for short-term or long-term barrowings such as redemption of debentures, bonds, preference shares.

(iv) Cash payment for buy-back of equity shares.

(v) Cash payments for dividend on equity shares and preference shares.

(vi) Cash payments for interest on borrowings such as interest on debentures and long-term loans.

(vii) Payment of preliminary expenses including expenses on issue of shares or debentures.

(viii) Change in bank overdraft and cash credit. Increase in bank overdraft or cash credit is treated as cash inflows and decrease in bank overdraft or cash credit is treated as cash outflows.

Note:- Bank overdraft and cash credit will be considered as financing activities as they are short-term borrowings and are not considered as cash and cash equivalent. However, where bank overdrafts are repayable on demand form an integral part of a firm's cash management, bank overdraft is included as a component of cash and cash equivalent.

6.8 TRANSACTIONS NOT AFFECTING CASH FLOW STATEMENT

There are certain transactions, which do not involve cash inflow or cash out flow. Although they affect the capital and assets of an enterprise, they do not affect cash flow statement and hence, are excluded while preparing the cash flow statement. Such significant non-cash transactions should be disclosed outside the cash flow statement. Examples of the transactions not affecting cash flow statement are:

(i) Acquisition of assets by issue of shares or debentures.

(ii) Acquisition of assets on credit.

(iii) Sale of assets on credit.

(iv) Conversion of convertible debentures into shares.

(v) Issue of bonus shares.

(vi) Movement between items that constitute cash or cash equivalents. For example, deposit of cash into bank, withdrawing from bank, purchase and sale of short – term investments or marketable securities, etc.

(vii) Bad debts written off out of provision for bad debts.

Illustration 1

State which of the following would result in inflow or outflow of cash and cash equivalents with reasons :

(i) Purchase of goods for cash.

(ii) Purchase of goods on credit.

(iii) Sale of goods on credit.

(iv) Sale of goods costing ₹ 500 for ₹ 600 in cash.

(v) Sale of machinery at a loss of ₹ 1000 (book value ₹ 20,000).

(vi) Purchase of Building by issue of shares.

(vii) Issue of shares for cash.

(viii) Buy-back of equity shares.

(ix) Redemption of preference shares.

(x) Issue of fully paid bonus shares.

(xi) Redemption of debentures.

(xii) Issue of preference shares for cash.

(xiii) Redemption of debentures by converting into equity shares.

(xiv) Purchase of own debentures of ₹ 1,00,000 @99%.

(xv) Cash received from sundry debtors ₹ 20,000 and ₹ 1,000 discount allowed.

(xvi) Cash paid to sundry creditors ₹ 9,000 and they allow discount ₹ 1,000.

(xvii) Salaries paid.

(xviii) Bad debts written off against provision for doubtful debts.

(xix) Declaration of final dividend.

(xx) Declaration of interim dividend.

(xxi) Depreciation on machinery.

(xxii) Interest on debentures paid.

(xxiii) Deferred revenue expenditure charged to profit.

(xxiv) Payment of outstanding expenses.

(xxv) Old furniture written off.

(xxvi) Purchase of furniture on credit.

(xxvii) Cash deposited into bank.

(xxviii) Cash withdrawn from bank.

(xxix) Sale of short-term investment for cash.

(xxx) Purchase of marketable securities for cash.

Solution :

Statement showing the effect of transactions on cash and cash equivalents

Transaction No	Effect on Cash and Cash Equivalents	Reasons
(i)	Outflow	Cash decreases.
(ii)	No effect	Cash is not affected.
(iii)	No effect	Cash is not affected.
(iv)	Inflow	Cash increases by ₹ 600.
(v)	Inflow	Cash increases by ₹ 19,000.
(vi)	No effect	Cash is not affected.
(vii)	Inflow	Cash increases
(viii)	Outflow	Cash decreases
(ix)	Out flow	Cash decreases
(x)	No effect	Cash is not affected.
(xi)	Out flow	Cash decreases
(xii)	Inflow	Cash increases
(xiii)	No effect	Cash is not affected.
(xiv)	Outflow	Cash decreases by ₹ 99,000
(xv)	Inflow	Cash increases by ₹ 20,000
(xvi)	Outflow	Cash decreases by ₹ 9,000.
(xvii)	Outflow	Cash decreases.
(xviii)	No effect	Cash is not affected.
(xix)	No effect	Cash is not affected as dividend will be paid next year.
(xx)	Outflow	Interim dividend is paid in the current financial year.

(xxi)	No effect	Cash is not affected.
(xxii)	Outflow	Cash decreases.
(xxiii)	No effect	Cash is not affected.
(xxiv)	Outflow	Cash decreases.
(xxv)	No effect	Cash is not affected.
(xxvi)	No effect	Cash is not affected.
(xxvii)	No effect	Cash and bank both are included under cash and equivalents.
(xxviii)	No effect	Cash and bank both are included under cash and cash equivalents.
(xxix)	No effect	Cash and short-term investments both are included under cash and cash equivalents
(xxx)	No effect	Cash and marketable securities both are included under cash and cash equivalents.

Illustrations 2

Classify the following into (a) Operating activities, (b) Investing activities, (c) Financing activities and (d) Cash and Cash Equivalents while preparing a Cash Flow Statement :

1. Sale of goods for cash.
2. Cash purchases.
3. Cash received from Trade Debtors.
4. Sale of Plant and Machinery.
5. Purchase of Building.
6. Issue of shares for cash.

7. Issue of Debentures for cash.
8. Dividend paid.
9. Interest on Debentures paid.
10. Cash paid to Trade Creditors.
11. Redemption of Preference Shares.
12. Raising of Long-term Loans.
13. Salaries and wages paid.
14. Selling expenses paid in cash.
15. Rent paid.
16. Rent received.
17. Income tax paid.
18. Short-term deposits in Bank.
19. Sale of Building.
20. Income tax paid on profit on sale of Building.
21. Decrease in Balance of Bank overdraft.
22. Dividend received on Shares.
23. Commission and Royalty received.
24. Balance at Bank.
25. Income tax refund received.

Solution :

(a) Operating Activities:

(i)sale of goods for cash (ii)cash purchases (iii) cash received from trade debtors (iv) cash paid to trade creditors (v) salaries and wages paid (vi) selling expenses paid in cash (vii) rent paid (viii) income tax paid (ix) commission and royalty received (x)income tax refund received.

(b) Investing Activities:

(i) sale of plant and machinery (ii) purchase of building (iii) rent received (iv) sale of building (v) income tax paid on profit on sale of building (vi) dividend received on shares.

(c) Financing Activities:

(i) issue of shares for cash (ii) issue of debentures for cash (iii) dividend paid (iv) Interest on debentures paid (v) redemption of preference shares (vi) raising lon-term loans (vii) decrease in balance of bank overdraft.

(d) Cash and Cash Equivalent:

(i) short-term deposits in bank (ii) balance at bank.

Note : The activities are classified assuming the firm is a non- financing firm.

Illustration 3

Classify the following activities into (a) Operating Activities (b) Investing Activities and (c) Financing Activities in case of (i) a Financial Enterprise and (ii) a Non-Financial Enterprise :

1. Purchase of equity shares.
2. Sale of securities.
3. Issue of shares.
4. Interest on securities received.
5. Brokerage paid on purchase of equity shares.
6. Loans and advances made.
7. Receipts from the repayments of loans and advances.
8. Dividend paid.
9. Dividend received.
10. Debenture interest paid.

Solution :

(i) In case of Financial Enterprise:

(a) Operating Activities :

(1) Purchase of equity shares (2) Sale of securities (3) Interest on securities received (4) Brokerage paid on purchase of equity shares (5) Loans and advances made (6) Receipts from the repayment of loans and advances (7) Dividend received (8) Debenture interest paid.

(b) Investing Activities:

NIL

(c) Financing Activities:

(1) Issue of shares (2) Dividend paid

(ii) In case of Non-Financial Enterprise:

(a) Operating Activities:

NIL

(b) Investing Activities:

(1) Purchase of equity shares (2) Sale of securities (3) Interest on securities received (4) Brokerage paid on purchase of equity shares (5) Loans and advances made (6) Receipt from the repayment of loans and advances (7) Dividend received.

(c) Financing Activities :

(1) Issue of shares (2) Dividend paid (3) Debenture interest paid.

Note : Banks, Investment companies and Mutual Funds are Financing companies. All trading companies, manufacturing companies and other business establishments are non-financing companies.

6.9 PROCESS OF PREPARING CASH FLOW STATEMENT AS PER AS-3

The cash flow statement is prepared as per Accounting Standard -3 (Revised) issued by The Institute of Chartered Accountants of India. This has been made mandatory in respect of accounting years commencing on or after 1st April, 2001 for the following enterprises:

1. Enterprises whose equity or debt securities are listed on a recognised stock exchange in India.
2. All other commercial, industrial and business enterprises whose turnover for the accounting year exceeds ₹ 50 Crores.

The cash flow statement reports the cash inflows and cash outflows and the net changes (either increase or decrease) in cash and cash equivalents resulting from operating, investing and financing activities of an enterprise during a period. Classification by activity provides information that allows users to assess the impact of those activities on the financial position of an enterprise and the amount of cash and cash equivalents. A single transaction may include cash flows that are classified differently. For example , when the instalment paid in respect of a fixed asset purchased on deferred basis, includes both interest and loan, the interest element is classified under financing activities and the loan element is classified under investing activities. The meaning and examples of cash flows from the three activities such as, operating activities, investing activities and financing activities have already been discussed earlier in this chapter. Order followed for presenting cash flows in the cash flow statement is to show cash flows from operating activities, followed by cash flows from investing activities, and then cash flows from financing activities. The net cash flows from an activity, i.e, operating, investing and financing, can be positive or negative. Positive cash flow means net cash inflow, i.e., receipts exceed payments. Negative cash flow means net cash outflow or net cash used . i.e., payments exceed receipts. The sum of net cash inflows or outflows of all the three activities represents an increase or decrease in cash and cash equivalents, which is reconciled with opening and closing balance of cash and cash equivalents.

Computation of Cash Flows from Operating Activities:

Cash flows from operating activities of a firm are primarily derived from revenue – producing activities. There are two methods of calculating the cash flows from operating activities.

(a) Direct Method

(b) Indirect Method

(a) Direct Method- Under this method, actual cash receipts from operating revenues and actual cash payments from operating activities are arranged and presented in the cash flow statement. The difference between cash receipts and cash payments is the cash generated from operating activities. In other words, it is the statement of profit and loss prepared on cash basis. While preparing cash flow statement under direct method, items like depreciation, amortisation of intangible assets, preliminary expanses, discount on issue of debentures, etc. are ignored. Likewise, no adjustment is made for loss or gain on sale of fixed assets and investments while preparing the cash flow statement. Income tax paid during the year is deducted from cash generated from operating activities to find out cash flows from operating activities before extra-ordinary items. Then extra-ordinary items such as tax refund, bad debts recovered, insurance claim, etc. are added to determine net cash flows from operating activities.

Format for Computation of Cash Flows from Operating Activities (Direct Method)

Particulars	**Amount (₹)**
Cash receipts from customers	XXX
Cash paid to suppliers, employees and for other operating expenses	(-) XXX
Cash generated from operation	XXX
Income tax paid	(-) XXX
Cash Flows before extra-ordinary items	XXX
Extra- ordinary items	XXX
Net Cash Flows from (used in) Operating Activities	XXX

Note :

1. Cash receipts from customers =

   Total sales + Opening trade debtors- Closing trade debtors

   Trade debtors = Debtors+ Bills Receivable.

2. Cash payments to suppliers =

   Total purchases + Opening trade creditors – Closing trade creditors

   Trade creditors = Creditors + Bills Payable

3. Cash payments to employees =

   Salaries + Opening outstanding salaries – Closing outstanding salaries + Closing prepaid salaries – Opening prepaid salaries.

4. Income Tax paid =

   Income tax provided during the year + Opening provision for tax – Closing provision for tax.

5. Operating expenses paid =

   Operating expenses + Opening outstanding expenses – Closing outstanding expenses + Closing prepaid expenses – Opening prepaid expenses.

Illustration 4

Compute Cash Flows from operating activities from the following particulars using Direct Method :

	₹
Sales for the year	5,90,000
Purchases for the year	4,50,000
Trade Debtors on 1.4.2015	50,000
Trade Creditors on 31.3.2016	41,300
Trade Debtors on 31.3.2016	35,000
Trade Creditors on 1.4.2015	37,500
Salaries and other operating expenses for the year	1,35,000
Outstanding expenses of 1.4.2015	2,000
Prepaid expenses on 1.4.2015	1,500
Outstanding expenses on 31.3.2016	2,500
Prepaid expenses on 31.3.2016	1,000
Income tax paid during the year	3,000

Solution:

Working Notes :

1. Cash receipts from Customers =

   Sales + Trade debtors on 1.4.2015 – Trade debtors on 31.3.2016

   = ₹ 5,90,000 + ₹ 50,000 – ₹ 35,000= ₹ 6,05,000

2. Cash paid to suppliers, employees and for other operating expenses

   = Purchases+ Trade creditors on 1.4.2015 – Trade creditors on 31.3.2016

   + Salaries and other operating expenses + Outstanding expenses on

   1.4.2015 – Outstanding expenses on 31.3.2016 + Prepaid expenses on 31.3.2016

   – Prepaid expenses on 1.4.2015

   = ₹ 4,50.000 + ₹ 37,500 – ₹ 41,300 + ₹ 1,35,000 + ₹ 2,000 – ₹ 2,500 + ₹ 1000 – ₹ 1,500 = ₹ 5,80,200

Statement Showing

Cash Flows from operating activities for the year ended 31st March 2016

Particulars	**Amount (₹)**
Cash receipts from customers	6,05,000
Cash paid to Suppliers, employees and for other operating expenses	(-) 5,80,200
Cash generated from operation	24,800
Income tax paid	(-)3000
Cash Flows before extra-ordinary items	21,800
Extra-ordinary items	NIL
Net Cash Flows from Operating Activities	21,800

Illustration 5

Compute Cash flows from operating activities from the following information:	₹
Cash sales	1,60,000
Credit sales	8,20,000
Salaries and other operating expenses	2,35,000
Bad debts recovered	5,500
Provision made for Income tax	2,500
Trade Debtors on 1.4.2015	75,000
Trade Creditors on 1.4.2015	20,000
Trade Debtors on 31.3.2016	80,000
Trade Creditors on 31.3.2016	30,000
Outstanding Expenses on 1.4.2015	2,500
Outstanding Expenses on 31.3.2016	1,500
Prepaid expenses on 1.4.2015	2,000
Prepaid expenses on 31.3.2016	1,000
Provision for income tax on 1.4.2015	3,000
Provision for income tax on 31.3.2016	2,000
Inventory on 1.4.2015	25,000
Inventory on 31.3.2016	30,000
Cost of goods sold	7,15,000

Solution :

Working Notes :

1. Purchases =

   Cost of goods sold + Inventory on 31.3.2016 – Inventory on 1.4.2015

   = ₹ 7,15,000 + ₹ 30,000 – ₹ 25,000 = ₹ 7,20,000

2. Cash receipts from customers=

   Cash sales + Credit sales + Trade debtors on 1.4.2015

   – Trade debtors on 31.3.2016

   = ₹ 1,60,000 + ₹ 8,20,000 + ₹ 75,000 – ₹ 80,000 = ₹ 9,75,000

3. Cash paid to suppliers, employees and for other operating expenses

   = Purchases + Trade creditors on 1.4.2015

   – Trade creditors on 31.3.2016 + Salaries and other operating expenses

   + expenses on 31.3.2016 – prepaid expenses on 1.4.2015

   = ₹ 7,20,000 + ₹ 20,000 – ₹ 30,000 + ₹ 2,35,000 + ₹ 2,500

   – ₹ 1,500 + ₹ 1,000 – ₹ 2,000 = ₹ 9,45,000

4. Income tax paid =

   Provision for income tax on 1.4.2015 + Provision made for

   income tax during the year – Provision for income tax on 31.3.2016

   = ₹ 3,000 + ₹ 2,500 - ₹ 2,000 = ₹ 3,500

Statement Showing

Cash Flows from Operating Activities for the year ended 31st March, 2016

Particulars	Amount ( )
Cash receipts from customers	9,75,000
Cash paid to suppliers, employees and for other operating expenses	(-) 9,45,000
Cash generated from operation	30,000
Income tax paid	(-) 3,500
Cash flows before extra-ordinary items	26,500
Extra-ordinary items (Bad debts recovered)	5,500
Cash Flows from Operating Activities	32,000

(b) Indirect Method – Under indirect method, net profit before tax for the period is used as the base while computing the cash flows from operating activities. Then adjustments are made for items that affect the income statement but does not affect the cash. In other words, non-cash and non-operating charges in the income statement are added back to the profit before tax while non-cash and non-operating incomes shown in the Statement of Profit and Loss, are deducted to calculate the operating profit before working capital changes. Further necessary adjustments are made for increase or decrease in current assets and current liabilities to obtain cash generated from operating activities before tax. Income tax paid is deducted therefrom to find out the cash flows from operating activities before extra- ordinary items, if any. Then extra-ordinary items are added to determine the net cash flows from operating activities.

The following steps are followed for calculating cash flows from operating activities under indirect method:

Step1 : Calculation of Net Profit before Tax:

Net profit before tax is calculated as follows:

		( )
Difference between opening balance and closing balance of		
Statement of Profit and Loss		XXX
Add	Proposed dividend for current year	XXX
	Interim dividend paid during the year	XXX
	Transfer to Reserves	XXX
	Provision for tax made for current year	XXX
		XXX
Less	Refund of Tax (if any) shown in Statement of Profit and Loss	(-) XXX
Net Profit before Tax		XXX

Net profit before tax is calculated in 'Notes' below the Cash Flow Statement.

Step2 : Adjustment for Non-Cash and Non-Operating items :

1. Items to be added back to Profit :

The items which are shown as expenses in the statement of profit and loss but do not result in outflow of cash, i.e., non-cash items, are added back to profit to determine cash profit. Some of such items are:

(i) **Depreciation-** It is shown as expense in the statement of profit and loss but does not result in outflow of cash and hence, is added back to profit.

(ii) **Amortisation of fictitious or Intangible assets –** Some fictitious and intangible assets are written off and are shown as expenses or losses in the statement of profit and loss but do not involve any cash payment and hence, are added back to the profit. Examples of such items are:

Goodwill written off, Preliminary expenses written off, Discount on issue of debentures written off, etc.

(iii) **Bad debts written off –** Bad debts written off do not involve any cash outflow and hence, are added back to the profit, if they are shown as losses in the statement of profit and loss. But if bad debt is written off out of provision for doubtful debts, it is ignored while preparing cash flow statement.

(iv) **Loss on sale of fixed assets –** If loss on sale of fixed assets is shown in the statement of profit and loss, it is added back to profit so as to determine operating cash profit.

(v) **Interest on Long-term borrowings –** Interest on long-term borrowings such as interest on debentures is also added back to profit, if it is shown in the statement of profit and loss as it is a non- operating expense.

(vi) **Creation of provisions –** If any provision is created and shown in the statement of profit and loss, it is added back to profit as it reduces the profit without reducing cash balance of the firm. Examples of such provisions are :

Provision for doubtful debts, Provision for discount on debtors, Provision for repairs, etc.

2. Items to be deducted from profit :

The items which are shown as incomes in the statement of profit and loss but they are non-operating incomes, are deducted from profit to find out operating profit. Some of such items are:

(i) **Profit on sale of fixed assets –** Profit on sale of fixed assets shown in the statement of profit and loss as income, is deducted from profit to find out operating profit .

(ii) **Receipt of interest and dividend –** Interest and dividend incomes shown in the statement of profit and loss, are deducted from profit as they belong to non- operating activities.

(iii) **Rent received –** Rent received shown in the statement of profit and loss as income is also deducted from profit as it is non- operating in nature.

(iv) **Re- transfer of excess provision –** If any provision such as provision for doubtful debts is found to be in excess of the firm's needs, it is transferred to the statement of profit and loss and and is shown as income. In such a situation, such excess provision shown as income, is deducted from profit as it does not involve any flow of cash.

Step 3: Adjustment for changes in Current Assets and Current Liabilities:

Adjustments are made in respect of increase or decrease in current assets and current liabilities except cash and cash equivalents to find out cash generated from operation. These adjustments are made in the following manner:

(i) Decrease in Current Assets – Decreases in current assets such as trade debtors,, inventories, prepaid expenses, accrued incomes, etc., are added to operating profit. For example, trade debtors at the beginning of the year and at the end of the year were ₹ 45,000 and ₹ 35,000 respectively. Decrease in trade debtors indicates that the collection from trade debtors are more than the amount of credit sales during the year and hence, ₹ 10,000 should be added to operating profit to find out cash generated from operating activities.

(ii) Increase in Current Assets – Increases in current assets are deducted from operating profit to find out the cash generated from operation. For example, trade debtors at the beginning of the year and at the end of the year were ₹ 45,000 and ₹ 55,000 respectively. Increase in trade debtors indicates that the collections from trade debtors are less than the amount of credit sales by ₹ 10,000 during the year and hence, deducted from operating profit.

(iii) Decrease in Current Liabilities – Decreases in Current Liabilities such as trade creditors, outstanding expanses, incomes received in advance, etc. are deducted from operating profit. For example, trade creditors at the beginning of the year and at the end of the year were ₹ 25,000 and ₹ 20,000 respectively. Decrease in trade creditors indicates that payments to trade creditors were more than the amount of credit purchases during the year and hence, ₹ 5,000 should be deducted from operating profit to find out cash generated from operating activities.

(iv) Increase in Current Liabilities – Increases in current liabilities are added to operating profit to determine the cash generated from operation. For example, trade creditors at the beginning of the year and at the end of the year were ₹ 25,000 and ₹ 30,000 respectively. Increase in trade creditors indicates that payment to trade creditors were less than the amount of credit purchases during the year and hence, ₹ 5,000 should be added to operating profit.

Thus, it is clear from the above that,

Decrease is Current Assets increases the Cash from Operation.

Increase in Current Assets decreases the Cash from Operation.

Decrease in Current Liabilities decreases the Cash from Operation.

Increase in Current Liabilities increases the Cash from Operation.

However, changes in cash and cash equivalents from one period to another, are not considered while calculating cash generated from operating activities.

Step 4: Deduction for Income Tax paid:

Income tax paid during the year, is deducted from cash generated from operation.

Step 5: Extra-ordinary items :

Cash flows from extra - ordinary items from operating activities such as bad debts recovered, income tax refund, insurance claims for loss of inventory , etc., are added to cash flows after tax to find out the net cash flows from operating activities .

Format for Computation of Cash Flows from Operating Activities (Indirect Method)

Particulars	₹	₹
Net Profit before Tax		XXX
Adjustments for Non-Cash and Non-Operating items:		
Add : Depreciation	XXX	
Provision for Doubtful Debts / Bad debt written off	XXX	
Loss on sale of Fixed Assets	XXX	
Loss on sale of Investments	XXX	
Preliminary Expenses written off	XXX	
Discount on issue of Debentures written off	XXX	
Goodwill / Patents / Trade marks written off	XXX	
Interest on long-term borrowings, etc.	XXX	
		XXX
Less : Income from Interest, Dividend	XXX	
Income from Rent	XXX	
Provision written back	XXX	
Profi on sale of Fixed Assets	XXX	
Profit on sale of Investments, etc.	XXX	
		(-) XXX
Operating profit before Working Capital Changes		XXX

Adjustments for Working Capital Changes:		
Add : Decrease in Current Assets	XXX	
Increases in Current Liabilities	XXX	
		XXX
Less : Increase in Current Assets	XXX	
Decrease in Current Liabilities	XXX	
		(-) XXX
Cash generated from (used in) Operating Activities before Tax		XXX
Less Income Tax paid		(-) XXX
Cash Flows from (used in) Operating Activities before extra-ordinary items		XXX
Add Extra-ordinary items		XXX
Net Cash Flows from (used in) Operating Activities		XXX

Illustration 6

From the following particulars, calculate cash flows from operating activities :

	31.3.2015	31.3.2016
Liabilities:		
	(₹)	(₹)
Equity Share Capital	4,00,000	6,00,000
General Reserve	1,00,000	1,20,000
Statement of Profit and Loss	20,000	32,000
10% Debentures	2,00,000	2,00,000
Sundry Creditors	80,000	1,00,000
Bill Payable	20,000	24,000
	8,20,000	10,76,000

Assets :		
Plant and Machinery (at cost)	4,00,000	4,72,000
Investment	2,00,000	3,80,000
Stock	1,00,000	80,000
Trade Debtors	60,000	80,000
Prepaid Expenses	30,000	28,000
Cash in hand and at bank	30,000	36,000
	8,20,000	1076,000

Solution:

Calculation of Cash Flows from Operating Activities for the year ended 31st March, 2016

Particulars	(₹)	(₹)
Net Profit before Tax (Working Note)		32,000
Adjustment for non-cash and non-operating items:		
Add Interest on Debentures (10% on ₹ 2,00,000)		20,000
Operating profit before working capital changes		52,000
Add Increase in Current Liabilities :		
Creditors	20,000	
Bills Payable	4,000	
Add Decrease in Current Assets:		
Stock	20,000	
Prepaid expenses	2,000	
		46,000
		98,000
Less Increase in Current Assets :		
Trade Debtors		(-)20,000
Cash generated from operating activities before tax and extra-ordinary items		78,000

Less Income Tax Paid		NIL
Cash flows from operating activities before extra-ordinary items		78,000
Add Extra-ordinary items		NIL
Net Cash Flows from Operating Activities		78,000

Working Note : Profit before tax :

Balance of Statement of Profit and Loss on 31.3.2016		₹ 32,000
Less Balance of Statement of Profit and Loss on 31.3.2015		₹ 20,000
		₹ 12,000
Add Transfer to General Reserve (₹ 1,20,00- ₹ 1,00,000)		₹ 20,000
	Profit before tax	32,000

Illustration 7

A Ltd. made a profit of ₹ 50,000 after charging depreciation of ₹ 10,000, transfer to General Reserve of ₹ 15,000, provision for tax of ₹ 2,000 and goodwill written off ₹ 3,500. Gain on sale of machinery of ₹ 1,500 was also shown as income in the income statement. The other information in respect of changes in the value of current assets and current liabilities were :

At the end of the year trade debtors showed an increase of ₹ 3,000, trade creditors an increase of ₹ 5,000, prepaid expenses an increase of ₹ 100 and outstanding expenses a decrease of ₹ 1,000. Calculate the cash flows from operating activities.

Solution :

Calculation of Net profit before tax :

Net Profit after tax	₹ 50,000
Add transfer to General Reserve	₹ 15,000
Provision for Tax	₹ 2,000
Profit before tax	₹ 67,000

Provision for tax made during the year is treated as tax paid.

Statement Showing Cash Flows from Operating Activities

Particulars	₹	₹
Net Profit before Tax		67,000
Adjustments for non-cash and non-operating items:		
Add : Depreciation	10,000	
Goodwill written off	3,500	
		13,500
		80,500
Less Gain on sale of machinery		(-) 1,500
Operating Profit before working capital changes		79,000
Add Increase in Current Liabilities :		
Trade creditors		5,000
		84,000
Less Increase in Current Assets:		
Trade debtors	3,000	
Prepaid expenses	100	
Decrease in Current Liabilities:		
Outstanding Expenses	1,000	(-)4,100
Cash generated from operating activities before tax		79,900
Less Income Tax paid		(-) 2,000
Cash Flows from operating activities before Extra-ordinary items		77,900
Add Extra-ordinary items		NIL
Net Cash Flows from Operating Activities		77,900

Illustration 8

From the following Statement of Profit and Loss and additional information of X Ltd. for the Year ended 31st March, 2016, calculate net cash provided by operations by indirect method :

Statement of Profit and Loss

	Particulars	(₹)
I.	Revenue from operations (Sales)	12,00,000
II.	Expenses :	
	Purchases	6,00,000
	Changes in Inventories	60,000
	(Opening Inventory ₹ 3,00,000 – Closing Inventory ₹ 2,40,000)	
	Operating Expenses	3,60,000
	Total Expenses	10,20,000
III.	Profit before Tax (I-II)	1,80,000

Additional information :

(a) Trade Debtors decreased by ₹ 36,000 during the year.

(b) Trade Creditors decreased by ₹ 18,000 during the year.

(c) Operating expenses included depreciation of ₹ 30,000.

(d) Outstanding expenses increased by ₹ 3,600 during the year.

(e) Prepaid expenses increased by ₹ 6,000 during the year.

Solution:

Statement Showing

Cash Flows from Operating Activities of X Ltd. for the year ended 31st March, 2016

Particulars	(₹)	(₹)
Net Profit before Tax		1,80,000
Adjustments for Non-Cash and Non-Operating items:		
Add Depreciation		30,000
Operating Profit before working Capital Changes		2,10,000
Add Decrease in Current Assets :		
Inventories	60,000	
Trade Debtors	36,000	
Increase in Current Liabilities:		
Outstanding expenses	3,600	99,600
		3,09,600
Less Increase in Current Assets :		
Prepaid Expenses	6,000	
Decrease in Current Liabilities :		
Trade creditors	18,000	(-)24,000
Cash generated from operating activities before tax		2,85,600
Less Income Tax paid		NIL
Cash flows before extra-ordinary items		2,85,600
Add Extra-ordinary items		NIL
Net Cash Flows from Operating Activities		2,85,600

Illustration 9

The net profit of A Ltd. For the year ended 31st March 2016 was ₹ 5,00,000. Depreciation charged for the year was ₹ 40,000. Profit for the year was arrived at after adjusting gain on sale of machinery ₹ 10,500, loss on sale of furniture ₹ 4,800 and writing off cost of issue of shares ₹ 5,000.

Other information :

	31.3.2016	31.3.2015
	(₹)	**(₹)**
Inventory	1,75,000	1,92,000
Debtors	1,23,000	1,21,000
Creditors	1,09,000	92,000
Prepaid expenses	5,000	7,500
Outstanding expenses	8,000	10,000
Bank overdraft	75,000	55,000
Cash in hand and at bank	31,000	11,000

Calculate cash flows from operating activities.

Solution:

Computation of Cash Flows from Operating Activities of A Ltd. for the year ended 31st March 2016

Particulars	₹	₹
Net Profit before tax		5,00,000
Adjustments for non-cash and non-operating items:		
Add : Depreciation	40,000	
Loss on sale of furniture	4,800	
Cost to issue of shares written off	5,000	49,800
		5,49,800
Less Gain on sale of machinery		(-) 10,500
Operating Profit before Working Capital Changes		5,39,300

Add Decrease in Current Assets:		
Inventory	17,000	
Prepaid expenses	2,500	
Increase in Current Liabilities:		
Creditors	17,000	36,500
		5,75,800
Less Increase in Current Assets:		
Debtors	2,000	
Decrease in Current Liabilities:		
Outstanding Expenses	8,000	(-) 10,000
Cash generated from operating activities before tax and		
Extra-ordinary items		5,65,800
Less Income Tax paid		NIL
Cash flows before extra-ordinary items		5,65,800
Add Extra-ordinary items		NIL
Cash Flows from Operating Activities		5,65,800

Note :- 1. Bank overdraft will be treated as financing activity.

2. Cash in hand and at bank will not affect cash flows from operating activities.

Illustration 10

Calculate cash flows from operating activities from the following information :

	31.3.2015	31.3.2016
	(₹)	**(₹)**
Balance of Statement of Profit and Loss	6,00,000	5,00,000
Provision for Depreciation	1,20,000	1,60,000
Outstanding Salaries	36,000	30,000

Prepaid Insurance	12,000	18,000
Goodwill	80,000	64,000
Provision for Doubtful Debts	20,000	28,000
Trade Debtors	2,80,000	1,96,000
Cash in hand and at bank	60,000	50,000

Solution:

Calculation of Cash Flows from Operating Activities for the year ended 31st March, 2016

Particulars	₹	₹
Net loss (Working Note -1)		(-) 1,00,000
Adjustments for non-cash and non-operating items:		
Add Depreciation charged (₹ 1,60.000 – ₹ 1,20,000)	40,000	
Goodwill written off (₹ 80,000 – ₹ 64,000)	16,000	
Provision for Doubtful Debts created (₹ 28,000 – ₹ 20,000)	8,000	64,000
Operating loss before working capital changes		(-) 36,000
Add Decrease in Current Assets:		
Trade Debtors		84,000
		48,000
Less Increase in Current Assets:		
Prepaid Insurance	6,000	
Decrease in Current Liabilities:		
Outstanding Salaries	6,000	(-)12,000
Cash generated from operating activities		
before tax and extra-ordinary items		36,000
Less Income Tax paid		NIL
Cash flows from operating before Extra-ordinary items		36,000
Add Extra-ordinary items		NIL
Net Cash Flows from Operating Activities		36,000

Working Notes:

1. Calculation of Net Loss:

Balance of Statement of Profit and Loss on 31.3.2016	₹ 5,00,000
Less Balance of Statement of Profit and Loss on 31.3.2015	₹ 6,00,000
Net loss during the year	₹ 1,00,000

2. Cash in hand and at bank will not affect cash flows from operating activities. It will be included in cash and cash equivalents.

Illustration 11

Sun Ltd. earned a profit after tax ₹ 3,80,000 for the year ended 31st March ,2016. The relevant items of balance sheet appeared as follows :

	31.3.2015	31.3.2016
	₹	₹
Sundry Debtors	60,000	80,000
Bills Receivable	30,000	35,000
Sundry Creditors	50,000	60,000
Bills Payable	25,000	30,000
Outstanding Expenses	4,000	2,000
Prepaid expenses	–	3,000
Provision for taxation	15,000	25,000

Bad debts written off during the year ₹ 6,000, Depreciation charged on Fixed Assets ₹ 35,000 and Profit on sale of investments ₹ 8,000 appeared on Statement of Profit and Loss for the year ended 31st March, 2016.

You are required to calculate the cash flows from operating activities .

Solution :

Calculation of Cash Flows from Operating Activities of Sun Ltd. for the year ended 31st March, 2016.

Particulars	₹	₹
Net profit before Tax (Working Note -1)		4,05,000
Adjustments for non-cash and non-operating items :		
Add : Bad debts written off	6,000	
Depreciation on Fixed Assets	35,000	41,000
		4,46,000
Less Profit on sale of Investments		(-) 8,000
Operating profit before working capital changes		4,38,000
Add Increase in Current Liabilities :		
Sundry Creditors	10,000	
Bills Payable	5,000	15,000
		4,53,000
Less Increase in Current Assets :		
Sundry Debtors [₹ 80,000–(₹ 60,000–Bad debt ₹ 6,000)]	26,000	
Bills Receivable	5,000	
Prepaid expenses	3,000	
Decrease in Current Liabilities :		
Outstanding Expenses	2,000	(-) 36,000
Cash generated from operating activities before tax		4,17,000
Less Income Tax paid (Working Note-2)		(-) 15,000
Cash flow from operating activities before extra-ordinary items		4,02,000
Add Extra-ordinary items		Nil
Net Cash Flows from Operating Activities		4,02,000

Working Notes :

1. Calculation of profit before tax:

Profit earned during the year	₹ 3,80,00
Add Provision for tax made for the year	₹ 25,000
	₹ 4,05,000

2. Provision for tax for the year ended 31st March, 2015, i.e., ₹ 15,000 is treated as payment of tax.

Illustration 12

Calculate cash flows from operating activities from the following information by (a) Direct Method (b) Indirect Method :

Statement of Profit and Loss for the year ended 31st March,2016

	Particulars	Note no.	Amount (₹)
I.	Revenue from operations	1	6,00,000
II.	Other Incomes	2	9,000
III.	Total Revenue		6,09,000
IV.	Expenses :		
	Cost of materials consumed		3,87,500
	Employees' benifit expenses		75,000
	Finance costs		22,500
	Depreciation and Amortisation Expenses	3	41,000
	Other Expenses	4	25.000
			5,51,000
V.	Profit before Tax (III – IV)		58,000
	Tax paid		18,000
VI.	Profit for the period		40,000

Notes : 1. Revenue from Operations :

Sale	₹ 6,10,000
Less Returns	₹ 10,000
	₹ 6,00,000

2. Other Incomes :

Profit on sale of Land	₹ 7,500
Interest received	₹ 1,500
	₹ 9,000

3. Depreciation and Amortisation Expenses:

Depreciation	₹ 36,000
Goodwill written off	₹ 5,000
	₹ 41,000

4. Other Expenses :

Loss on Sale of Plant	₹ 15,000
Office Expenses	₹ 10,000
	₹ 25,000

Additional information :

	31.3.2015	31.3.2016
	₹	₹
Trade Debtors	70,000	82,000
Inventory	42,000	57,500
Trade Creditors	30,000	36,500
Office Expenses Outstanding	3,000	2,000

Solution :

(a) Direct Method :

Statement Showing

Cash Flows from Operating Activities for the year ended 31st March, 2016

Particulars	₹
Cash receipts from customers (Working Note -1)	5,88,000
Cash paid to suppliers, Employees and for other operating expenses (Working Note-2)	(-) 482,500
Cash generated from operations	1,05,500
Income Tax paid	(-)18,000
Cash Flows before extra-ordinary items	87,500
Extra-ordinary items	NIL
Net CashFlows from Operating Activities	87,500

Working Notes :

1. Cash receipts from customers :

   Sales + Opening Trade Debtors – Closing Trade Debtors

   = ₹ 6,00,000 + ₹ 70,000 - ₹ 82,000 = ₹ 5,88,000

2. Cash paid to suppliers, employees and for other operating expenses:

   Purchases + Opening Trade Creditors – Closing Trade Creditor + Employees' Benefit Expenses + Office expenses + Opening Office Expenses Outstanding – Closing Office Expenses Outstanding = ₹ 4,03,000+ ₹ 30,000 – ₹ 36,500+ ₹ 75,000 + ₹ 10,000 + ₹3,000 – ₹ 2,000 = ₹ 4,82,500

3. Purchases = Cost of materials consumed + Closing Inventory – Opening Inventory = ₹ 3,87,500 + ₹ 57,500- ₹ 42,000 = ₹ 4,03,000

(b) Indirect Method :

Statement Showing

Cash Flows from Operating Activities for the year ended 31st March,2016

	Particulars	(₹)	(₹)
	Net Profit before tax		58,000
	Adjustment for non-cash and non-operating items :		
Add :	Finance costs		22,500
	Depreciation		36,000
	Goodwill written off		5,000
	Loss on sale of plant		15,000
			1,36,500
Less :	Profit on sale of land	7,500	
	Interest received	1,500	(-) 9,000
	Operating Profit before working capital changes		1,27,500
Add	Increase in Current Liabilities :		
	Trade Creditors		6,500
			1,34,000
Less	Increase in Current Assets :		
	Trade Debtors	12,000	
	Inventory	15,500	
	Decrease in Current Liabilities :		
	Outstanding office expenses	1,000	(-) 28,500
Cash generated from operating activities before Tax			1,05,500
Less Tax paid			(-) 18,000
Cash flows before Extra-ordinary items			87,500
Extra-ordinary items			NIL
Net Cash Flows from Operating Activities			87,500

Illustration 13

Compute the cash flows from operating activities from the following Balance Sheet and additional information:

Balance Sheet of S Ltd. As at 31st March, 2016

Particulars	Note no.	31.3.2016	31.3.2015
I. EQUITY AND LIABILITIES :			
1. Shareholders' funds:			
Share Capital		3,50,000	3,00,000
Reserves and Surplus	1	25,000	10,000
2. Non-Current Liabilities			
Long-term Borrowings	2	2,50,000	2,00,000
3. Current Liabilities			
Trade Creditors		20,000	15,000
TOTAL		6,45,000	5,25,000
II. ASSETS:			
1. Non-Current Assets:			
(a) Fixed Assets:			
(i) Tangible Assets	3	4,20,000	3,50,000
(ii) Intangible Assets	4	50,000	60,000
(b) Non- Current Investments	5	1,20,000	80,000
2. Current Assets:			
Inventory		40,000	30,000
Cash and Cash equivalents		15,000	5,000
TOTAL		6,45,000	5,25,000

Notes:

		31.3.2016	31.3.2015
		₹	₹
1.	Reserves and Surplus:		
	General Reserve	15,000	14,000
	Statement of Profit and Loss	10,000	(4,000)*
		25,000	10,000
	*Bracket denotes negative balance.		
2.	Long-term Borrowings:		
	10% Debentures	2,50,000	2,00,000
3.	Tangible Assets:		
	Plant and Machinery	4,50,000	3,70,000
	Less Provision for Depreciation	30,000	20,000
		4,20,000	3,50,000
4.	Intangible Assets :		
	Goodwill	50,000	60,000

5. Rate of interest on Non- Current Investments is 10% p.a.

Additional Information :

Debentures of ₹ 50,000 were issued on 31.3.2016

Investments of ₹ 40,000 were made on 31.3.2016.

Solution:

Calculation of Cash Flows from Operating Activities of S Ltd. for the year ended 31st March, 2016

Particulars	₹	₹
Net Profit before Tax (working Note)		15,000
Adjustments for non-cash and non-operating items:		
Add Payment of interest on long-term borrowings		
(Debentures)		
10% on ₹ 2,00,000	20,000	
Depreciation (₹ 30,000- ₹ 20,000)	10,000	
Goodwill written off (₹ 60,000 – ₹ 50,000)	10,000	40,000
		55,000
Less Interest on Non-Current Investments		
10% on ₹ 80,000		(-) 8,000
Operating Profit before working capital changes		47,000
Add Increase in Current Liabilities:		
Trade Creditors		5,000
		52,000
Less Increase in Current Assets:		
Inventory		(-) 10,000
Cash flows from operating activities before tax and extra-ordinary items		42,000
Less Tax paid		NIL
Cash flows from operating activities before extra-ordinary items		42,000
Extra-ordinary items		NIL
Net Cash Flows from Operating Activities		42,000

Working Note : Calculation of Net Profit before Tax:

Net profit during 2015-16 (₹ 10,000 +₹ 4,000)	₹ 14,000
Add Transfer to General Reserve (₹ 15,000 – ₹ 14,000)	₹ 1,000
	₹ 15,000

Negative balance of Statement of Profit and Loss amounting to ₹ 4,000 appearing in the Balance Sheet on 31.3.2015 represents an amount of loss. In the current year 2015-16, after recovering this loss of ₹ 4,000 the Statement of Profit and Loss shows a profit of ₹ 10,000. This means net profit during 2015-16 must have been ₹ 10,000 + ₹ 4,000= ₹ 14,000.

Computation of Cash Flows from Investing Activities:

Investing activities of a firm refer to acquisition and disposal of long –term assets such as , plant , machinery , furniture , land and buildings, etc. and other investments not included in cash and cash equivalents. Examples of cash flow arising from investing activities have already been given earlier in this chapter.

Format for Computation of Cash Flows from Investing Activities

Particulars	₹
Proceeds from Sale of Fixed Assets	XXX
Payments for purchase of Fixed Assets	(-) XXX
Proceeds from sale of Non- Current Investments	XXX
Payments for purchase of Non- Current Investments	(-) XXX
Interest received on Debentures	XXX
Dividend received on Shares	XXX
Net Cash Flows from (used in) Investing Activities	XXX

Illustration 14

Calculate cash flows from investing activities from the following particulars :

	Purchased	Sold
	₹	₹
Plant and Machinery	4,50,000	2,40,000
Investments	3,20,000	1,10,000
Goodwill	50,000	–
Patents	–	120,000

Interest received on debentures held as investment ₹ 12,000

Interest paid on debentures issued ₹ 10,000

Dividend received on Shares held as investment ₹ 25,000.

Dividend paid on equity shares issued ₹ 15,000.

A piece of land was purchased out of the surplus funds for investment purposes (included under investments) and was let out for commercial use and rent received ₹ 36,000.

Solution :

Calculation of Cash Flows from Investing Activities

Particulars	₹
Proceeds from sale of Plant and Machinery	2,40,000
Purchase of Plant and Machinery	(-) 4,50,000
Proceeds from sale of Investments	1,10,000
Purchase of Investment	(-) 3,20,000
Purchase of Goodwill	(-) 50,000
Proceeds from sale of Patents	1,20,000
Interest on Debentures held as Investment received	12,000
Dividend on shares held as Investments received	25,000
Rent received from letting out of land	36,000
Net Cash used in Investing Activities	(-) 2,77,000

Note : Interest paid on debentures issued ₹ 10,000 and dividend paid on equity shares issued ₹ 15,000 will not be considered for calculating cash flows from investing activities. They will be recorded for calculating cash flows from financing activities.

Illustration 15

Calculate the amount of cash flows from Investing activities from the following particulars :

	31.3.2015	31.3.2016
	₹	₹
Plant and Machinery	7,00,000	7,75,000
Non-Current Investments	30,000	70,000
Land (at cost)	3,00,000	1,50,000

Additional information :

(i) Depreciation charged on Plant and Machinery was ₹ 35,000.

(ii) Plant and Machinery with a book value of ₹ 50,000 was sold for ₹ 45,000.

(iii) Land was sold at a profit of ₹ 50,000

Solution:

Calculation of cash flows from Investing Activities

Particulars	₹
Sale of Plant and Machinery	45,000
Sale of Land (Working Note -2)	2,00,000
Purchase of Plant and Machinery (Working Note – 1)	(-) 1,60,000
Purchase of Non-Current Investments (₹ 70,000 – ₹ 30,000)	(-) 40,000
Net Cash Flows from Investing Activities	45,000

Working Notes :

1. Calculation of Purchase of Plant and Machinery :

Plant and Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	7,00,000	By Depreciation A/c	35,000
To Bank A/c (Purchase of Plant and Machinery being Balancing figure)	1,60,000	By Bank A/c (Sale of Plant and Machinery)	45,000
		By Loss on sale of Plant and Machinery A/c	5,000
		By Balance c/d	7,75,000
	8,60,000		8,60,000

2. Calculation of Sale of Land :

Land A/c

Particulars	₹	Particulars	₹
To Balance b/d	3,00,000	By Bank A/c (Sale proceeds being balancing figure)	2,00,000
To Profit on sale of Land A/c	50,000	By Balance c/d	150,000
	3,50,000		3,50,000

Illustration 16

Calculate the cash flows from Investing activities from the information given below:

	31.3.2015	31.3.2016
	₹	₹
Plant and Machinery	25,00,000	37,50,000
Accumulated Depreciation thereon	3,20,000	5,20,000

The plant and machinery costing ₹ 8,50,000 with accumulated depreciation thereon ₹ 6,20,000 was sold for ₹ 2,10,000.

Solution:

Calculation of Cash Flows from Investing Activities

Particulars	₹
Sale Proceeds of Plant and Machinery	2,10,000
Purchase of Plant and Machinery (Working Note -1)	(-) 21,00,000
Net Cash used in Investing activities	(-) 18,90,000

Working Notes:

1. Purchase of plant and machinery :

Plant and Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	25,00,000	By Bank A/c (Sale Proceeds)	2,10,000
To Bank A/c (Purchase of Plant and Machinery being balancing figure)	21,00,000	By Accumulated Depreciation A/c (Depreciation on Plant and Machinery sold)	6,20,000
		By Loss on sale A/c (₹ 8,50,000 - ₹ 6,20,000 - ₹ 2,10,000)	20,000
		By Balance c/d	37,50,000
	46,00,000		46,00,000

2. Calculation of Current year's depreciation:

Accumulated Depreciation A/c

Particulars	₹	Particulars	₹
To Plant and Machinery A/c (transfer of depreciation on sale)	6,20,000	By Balance b/d	3,20,000
To Balance c/d	5,20,000	By Depreciation A/c (Balancing figure being current year's Depreciation)	8,20,000
	11,40,000		11,40,000

Note : Current year's depreciation on Plant and Machinery of ₹ 8,20,000 and loss on sale of ₹ 20,000 will be considered for calculating cash flows from operating activities.

Illustration 17

Calculate cash flows from investing activities from the following particulars of a limited company :

	31.3.2015 ₹	31.3.2016 ₹
Patents	1,75,000	1,20,000
Plant and Machinery	5,60,000	7,15,000
10% Long-term Investment	50,000	1,20,000
Equity shares of company	60,000	60,000

Additional information :

1. Patents were written off to the extent of ₹ 20,000 and some patents were sold at a profit of ₹ 15,000.
2. A machine costing ₹ 90,000 (Depreciation provided thereon ₹ 20,000) was sold for ₹ 60,000. Depreciation charged during the year was ₹ 65,000.

3. On 31.3.2016, 10% Investments were purchased for ₹ 1,00,000 and some investments were sold at a profit of ₹ 12,000. Interest on investment was received on 31.3.2016.

4. Dividend on Equity Shares was received @ 10%.

Solution:

Calculation of Cash Flows from Investing Activities

Particulars	₹
Proceeds from sale of Patents (working note -1)	50,000
Proceeds from sale of Machinery	60,000
Proceeds from sale of Investment (working note 3)	42,000
Purchase of Machinery (working note-2)	(-)2,90,000
Purchase of 10% Long-term Investment	(-) 1,00,000
Interest on Investment received (10% on ₹ 50,000)	5,000
Dividend received on Equity Shares (10% on ₹ 60,000)	6,000
Net Cash used in Investing activities	(-) 2,27,000

Working Notes:

1. Sale Proceeds of Patents :

Patents A/c

Particulars	₹	Particulars	₹
To Balance b/d	175,000	By Statement of	
To Statement of Profit		Profit and Loss (written off)	20,000
and Loss (Profit on Sale)	15,000	By Bank A/c	50,000
		(Balancing figure being sale proceeds)	
		By Balance c/d	1,20,000
	1,90,000		1,90,000

2. Purchase of Machinery:

Plant and Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	5,60,000	By Bank A/c (Sale Proceeds)	60,000
To Bank A/c (Balancing figure being purchase)	2,90,000		
		By Statement of Profit and Loss (loss on sale) ₹ 90,000 - ₹ 20,000 - ₹ 60,000)	10,000
		By Statement of Profit and Loss (Depreciation)	65,000
		By Balance c/d	7,15,000
	8,50,000		8,50,000

3. Sale of Investment :

10% Long-term Investment A/c

Particulars	₹	Particulars	₹
To Balance b/d	50,000	By Bank A/c (sale) (Balancing figure)	42,000
To Bank A/c (Purchase)	1,00,000	By Balance c/d	1,20,000
To Statement of Profit and loss (Profit on sale)	12,000		
	1,62,000		1,62,000

Computation of Cash Flows from Financing Activities:

Financing activities are the activities that result in changes in the size and composition of owner's capital and borrowings of the enterprise. Some examples of cash flows arising from financing activities are :

(i) Cash receipts from issue of shares and debentures, etc.

(ii) Cash receipts from loans raised.

(iii) Cash payments for redemption of preference shares and debentures.

(iv) Buy back of equity shares.

Format for Computation of Cash Flows from Financing Activities:

Particulars	₹
Proceeds from issue of Shares / Debentures	XXX
Proceeds from Long-term Borrowings	XXX
Redemption of Preference Shares	(-)XXX
Redemption of Debentures	(-)XXX
Repayment of Long-term Borrowings	(-)XXX
Interest on Debentures/ Long-term Borrowings paid	(-) XXX
Dividend on shares paid	(-) XXX
Net Cash Flows from (used in) Financing Activities	XXX

Illustration 18

Calculate Cash Flows from Financing Activities from the following information:

	31.3.2016 ₹	31.3.2015 ₹
Equity Share Capital	10,00,000	9,00,000
8% Preferential Capital	–	1,00,000
10% Debentures	50,000	–

Additional information:

(i) Equity Shares were issued at a premium of 10%.

(ii) 8% Preference shares were redeemed at a premium of 5%. Such premium was provided for out of profit.

(iii) Interim dividend paid on equity shares ₹ 50,000.

(iv) Dividend paid on preference shares before redemption ₹ 8,000.

(v) Interest on debentures paid ₹ 2,500.

(vi) Underwriting commission on issue of equity shares ₹ 10,000.

Solution:

Calculation of Cash flows from Financing Activities

Particulars	₹
Proceeds from issue of Equity Shares	1,00,000
(₹ 1,00,000+ Securities Premium ₹ 10,000 – underwriting commission ₹ 10,000)	
Proceeds from issue of Debentures	50,000
Redemption of Preference Shares (₹ 1,00,000+ ₹ 5,000)	(-) 1,05,000
Interim Dividend paid on Equity Shares	(-) 50,000
Dividend paid on Preference Shares	(-) 8,000
Interest paid on debentures	(-) 2,500
Net Cash used in Financing Activities	(-) 15,500

Illustration 19

From the following information, calculate :

(a) Cash flows from operating activities and

(b) Cash flows from financing activities :

	31.3.2015	31.3.2016
	₹	₹
Equity Share capital	5,00,000	8,00,000
12% Preference Share Capital	3,00,000	2,00,000
Securities Premium Reserve	50,000	80,000

10% Debentures	1,00,000	1,50,000
Discount on issue of Debentures	–	5,000
Underwriting Commission on issue of Shares	–	15,000
Bank Overdraft	50,000	60,000
Statement of Profit and Loss	2,50,000	4,00,000

Additional information :

(i) Preference Shares were redeemed on 1.4.2015 at a premium of 5% and such premium has been provided out of profits.

(ii) New shares and debentures were issued on 31.3.2016.

(iii) Dividend on Preference shares and interim dividend @10% were paid on Equity shares on 31.3.2016.

Solution:

(a) Calculation of Cash Flows from Operating Activities

Particulars	₹
Net Profit before Tax (Working Note)	2,24,000
Adjustments for Non-cash and Non- operating items:	
Add : Premium paid on Redemption of Preference shares	5,000
Interest paid on debentures (10% on ₹ 1,00,000)	10,000
Net Cash Flows from Operating Activities	2,39,000

Working Note :

Calculation of Net Profit before Tax:

	₹
Balance of Statement of Profit and Loss on 31.3.2016	4,00,000
Less Balance of Statement of Profit and Loss on 31.3.2015	2,50,000
	1,50,000

Add Dividend paid on Preference shares (12% on ₹ 2,00,000)	24,000
Interim dividend paid on Equity shares (10% on ₹ 5,00,000)	50,000
	2,24,000

(b) Calculation of Cash Flows from Financing Activities

Particulars	₹
Proceeds from issue of Equity shares	3,15,000
(₹ 3,00,000 + Securities Premium ₹ 30,000 –	
underwriting commission ₹ 15,000)	
Redemption of Preference shares (₹ 1,00,000 + ₹ 5,000)	(-) 1,05,000
Proceeds from issue of Debentures (₹ 50,000 – Discount ₹ 5,000)	45,000
Increase in Bank Overdraft	10,000
Dividend on Preference shares (12% on ₹ 2,00,000)	(-) 24,000
Interim dividend paid on Equity shares (10% on ₹ 5,00,000)	(-) 50,000
Interest paid on Debentures (10% on ₹ 1,00,000)	(-) 10,000
Net Cash Flows from Financing Activities	1,81,000

Treatment of some Special Items:

AS – 3 (Revised) provides for the treatment of some special items as given below:

1. **Interest and Dividend –** Cash inflows from interest and dividend and cash out flows due to interest and dividend should be disclosed separately. Cash outflows arising from interest and dividend paid should be classified as cash flows from financing activities. On the other hand, cash inflows on account of interest and dividend received should be shown as cash flows from investing activities. But for financial enterprises, cash flows arising from interest paid, and interest and dividend received should be classified as cash flows from operating activities. Dividend paid should be classified as cash flows from financing activities.

2. **Income tax-** Cash flows arising from income tax should be classified as cash flows from operating activities unless they can be specifically identified with financing and investing activities for example, capital gains tax on sale of fixed assets can be identified with investing activities.

3. **Extra-ordinary items –** Cash flows relating to extra-ordinary items such as , insurance claim, legal claim, cost of winning a law suit, winning from lottery, bad debts recovered , tax refund, etc. should be disclosed separately as arising from operating, investing or financing activities. These items are disclosed separately in the cash flow statement to enable the users to understand their nature and effect on the present as well as future cash flows of the firm. For example amount received from insurance company due to loss of inventory by fire, should be disclosed as cash flow from operating activities. On the other hand, amount received from insurance company due to loss of machinery by fire, should be disclosed as cash flow from investing activities.

4. **Non-cash transactions –** There are some investing and financing activities which do not involve the use of cash or cash equivalents. Although these transactions do affect the capital and assets of the enterprise, they are excluded from the cash flow statement . Examples of such non-cash transactions are :

   Acquisition of assets by issue of shares or debentures, convertion of convertible debentures into shares, acquisition of fixed assets on credit, etc. However ,such significant non-cash transactions should be disclosed outside the cash flow statement.

5. **Provision for tax-** 'Provision for tax' appearing on the liabilities side of previous year's balance sheet, will be treated as payment of tax during the year. Thus, it will be deducted while calculating net cash flow from operating activities.

   'Provision for tax' appearing on the liabilities side of current year's balance sheet will be added back to profit because net profit before tax is to be shown under the heading 'cash flow from operating activities'

   Sometimes, opening and closing amount of 'provision for tax' are given in the question and actual tax paid during the year is also given as additional information. In such a case, 'Provision for tax A/c' is to be opened for ascertaining the amount of provision for tax made during the current year.

In case opening and closing amounts of 'provision for tax' are given in the question and provision for tax made during the current year is also given, the 'Provision for tax A/c' is to be prepared for ascertaing the amount of actual tax paid during the current year.

6. **Proposed dividend** – 'Proposed dividend' appearing on the liabilities side of previous year's balance sheet, must have been paid during the year. It will be shown as 'dividend paid' under the heading 'cash flows from financing activities'.

'Proposed dividend' appearing on the liabilities side of current year's balance sheet, will be added back to profits under the heading 'Cash Flows from Operating Activities'.

If dividend paid is given in adjustments, it will be added back to profits while calculating net profits before tax and will also be shown as 'dividend paid' under the heading 'Cash flows from financing activities'.

Format of Cash Flow Statement

Cash Flow Statement of –

for the year ended –

Particulars	₹	₹
Cash Flows from Operating Activities		
Either		
Cash Receipts from Customers	XXX	
Cash paid to Suppliers, Employees and for other		
Operating expenses	XXX(-)	
Cash generated from operations	XXX	
Income Tax paid	XXX(-)	
Cash Flows before extra-ordinary items	XXX	
Extra-ordinary items	XXX	
(A) = Net Cash Flows from (used in) Operating Activities		XXX

OR		
Net profit before tax and extra-ordinary items	XXX	
Adjustments for non-cash and non-operating items:		
(Individual items like depreciation, loss on sale	XXX	
of fixed assets, interest income, dividend	XXX	
Income, interest expense, etc.)	XXX	
Operating Profit before Working Capital changes	XXX	
Adjustments for changes in current assets and current	XXX	
liabilities (Individual items)	XXX	
Cash generated from (used in) operations before		
Tax and extra-ordinary items	XXX	
Income Tax paid	(-)XXX	
Cash Flow before Extra-ordinary items	XXX	
Extra-ordinary items (such as Insurance claim)	XXX	
(A) = Net Cash Flows from (used in) Operating Activities		XXX
Cash Flows from Investing Activities		
Individual items of cash inflows and outflows from investing activities :		
Purchase of Fixed Assets, sale of Fixed Assets,	XXX	
Purchase or sale of Non-Current Investments,	XXX	
Interest received, Dividend received, etc.	XXX	
(B) = Net Cash Flows from (used in) Investing Activities		XXX

Cash Flows from Financing Activities		
Individual items of cash inflows and outflows from financing activities :		
Proceeds from issue of shares, long-term borrowings,	XXX	
Repayment of long-term borrowing, Interest paid,	XXX	
Dividend Paid, Redemption of Preference shares, etc.	XXX	
(C) = Net Cash Flows from (used in) Financing Activities		XXX
(A+B+C) = Net Increase (Decrease) in Cash and Cash Equivalents		XXX
Cash and Cash Equivalents at the beginning of the year		XXX
Cash and Cash Equivalents at the end of the year		XXX

Illustration 20

Prepare a Cash Flow Statement from the following particulars:

	₹
Opening cash balance	30,000
Closing cash balance	34,000
Decrease in Inventory	16,000
Increase in Bills Payable	24,000
Sale of Fixed Assets	60,000
Repayment of Long-term Loan	1,00,000
Net profit for year before tax	4,000

Solution :

Cash Flow Statement of –

for the year ended –

Particulars	₹	₹
Cash Flows from Operating Activities:		
Net profit before tax	4,000	
Add Decrease in current assets:		
Inventory	16,000	
Add Increase in current liabilities :		
Bills Payable	24,000	
Cash generated from operating activities		
before tax and extra-ordinary items	44,000	
Income tax paid	NIL	
Cash flows before extra-ordinary items	44,000	
Extra-ordinary items	NIL	
(A)=Net Cash Flows from Operating Activities		44,000
Cash Flows from Investing Activities :		
Sale of fixed Assets	60,000	
(B)=Net Cash Flows from Investing Activities		60,000
Cash Flows from Financing Activities :		
Repayment of Long-term Loan	(-) 1,00,000	
(C)=Net Cash used in Financing Activities		(-) 1,00,000
(A+B+C)= Net increase in Cash and Cash Equivalents		4,000
Add Cash and Cash Equivalents in the beginning of the year		30,000
Cash and Cash Equivalents at the end of the year		34,000

Illustration 21

Prepare a Cash Flow Statement of a limited company as per AS- 3 (Revised) using direct method for the year ended 31st March ,2016 from the summary of Cash Account given below :

Dr. Summary of Cash Account Cr.

Particulars	₹	Particular	₹
To Balance b/d (1.4.2015)	20,500	By Sundry Creditors	2,00,000
To Equity Share Capital	2,00,000	By Fixed Assets (Purchase)	1,35,000
(issue of shares)		By Salaries	1,80,000
To Sundry Debtors	4,25,000	By Other Operating Expenses	35,000
To Fixed Assets (Sale)	1,25,000	By Income Tax	5,500
		By Dividend	10,000
		By Bank Loan	60,000
		By Balance c/d (31.3.2016)	1,45,000
	7,70,500		7,70,500

The Company does not have any cash equivalent.

Solution :

Cash Flow Statement of – for the year ended 31st March, 2016

Particulars	₹	₹
Cash Flows from Operating Activities:		
Cash receipts from customers	4,25,000	
Cash paid to suppliers, employees and for other operating		
expenses (₹ 2,00,000 + ₹ 1,80,000 + ₹ 35,000)	(-) 4,15,000	
Cash generated from operations	10,000	
Income Tax paid	(-)5,500	

(A)=Net Cash Flows from Operating Activities		4,500
Cash Flows from Investing Activities :		
Sale of Fixed Assets	1,25,000	
Purchase of Fixed Assets	(-) 1,35,000	
(B)= Net Cash used in Investing Activities		(-)10,000
Cash Flows from Financing Activities:		
Issue of Equity shares	2,00,000	
Dividend paid	(-) 10,000	
Repayment of Bank Loan	(-) 60.000	
(C)= Net Cash Flows from Financing Activities		1,30,000
Net Increase in Cash and Cash Equivalents		1,24,500
Cash and Cash Equivalents on 1.4.2015		20,500
Cash and Cash Equivalents on 31.3.2016		1,45,000

Illustration 22

From the following particulars of Assets and Liabilities and additional information, you are required to prepare a cash flow statement of Mr. X :

Assets:	31.3.2015	31.3.2016
	₹	₹
Cash in hand	10,000	7,000
Sundry Debtors	30,000	50,000
Stock	35,000	25,000
Machinery	80,000	55,000
Land	40,000	50,000
Buildings	35,000	60,000
	2,30,000	2,47,000

Liabilities :		
Sundry Creditors	40,000	44,000
Mrs, A's Loan	25,000	–
Loan from Bank	40,000	50,000
Capital	1,25,000	1,53,000
	2,30,000	2,47,000

During the year 2015-16, a machine costing ₹ 10,000 (accumulated depreciation ₹ 3,000) was sold for ₹ 5,000. The accumulated depreciation on machinery as on 31.3.2015 was ₹ 25,000 and on 31.3.2016 ₹ 40,000. Net profit for the year amounted to ₹ 45,000.

Solution :

Cash Flow Statement of Mr. X. for the year ended 31st March, 2016		
Particulars	₹	₹
Cash Flows from Operating Activities :		
Net profits made during the year	45,000	
Adjustment for non-cash and non-operating items:		
Add : Depreciation on Machinery (working Note-2)	18,000	
Loss on sale of Machinery (working Note -1)	2,000	
Operating Profit before working capital changes	65,000	
Add : Decrease in Stock	10,000	
Increase in Sundry Creditors	4,000	
	79,000	
Less Increase in Sundry Debtors	(-) 20,000	
Cash Flows from Operating Activities before tax	59,000	
Income Tax	NIL	

(A)=Net Cash Flows from Operating Activities		59,000
Cash Flows from Investing Activities :		
Sale of Machinery	5,000	
Purchase of Land (₹ 50,000 – ₹ 40,000)	(-) 10,000	
Purchase of Building (₹ 60,000 – ₹ 35,000)	(-) 25,000	
(B)=Net Cash used in Investing Activities		(-) 30,000
Cash Flows from Financing Activities :		
Loan from Bank raised (₹ 50,000- ₹ 40,000)	10,000	
Repayment of Mrs. A's Loan	(-) 25,000	
Drawings (working note -3)	(-) 17,000	
(C)= Net Cash used in Financing Activities		(-) 32,000
(A+B+C) = Net Decrease in Cash and Cash Equivalents		(-) 3,000
Cash and Cash Equivalents on 31.3.2015		10,000
Cash and Cash Equivalents on 31.3.2016		7,000

Working Notes:1

Machinery A/c (at cost)

Particulars	₹	Particulars	₹
To Balance b/d	1,05,000	By Bank A/c(Sales)	5.000
(₹ 80,000 + ₹ 25,000)		By Profit and Loss A/c(loss)	2,000
		By Accumulated Depreciation	3,000
		(Depreciation on Machine sold)	
		By Balance c/d (₹ 55,000+ ₹ 40,000)	95,000
	1,05,000		1,05,000

2. Accumulated Depreciation A/c

Particulars	₹	Particulars	₹
To Machinery A/c (Depreciation on Machine sold)	3,000	By Balance b/d	25,000
To Balance c/d	40,000	By Profit and Loss A/c (Balancing figure being depreciation provided during the year)	18,000
	43,000		43,000

3. Capital A/c

Particulars	₹	Particulars	₹
To Bank A/c (Drawings) (Balancing figure)	17,000	By Balance b/d	1,25,000
To Balance c/d	1,53,000	By Net Profit	45,000
	1,70,000		1,70,000

Illustration 23

From the following particulars, you are required to prepare a Cash Flow Statement;

Liabilities :	31.3.2015	31.3.2016
	₹	₹
Equity Share Capital	3,00,000	3,50,000
Securities Premium Reserve	–	30,000
General Reserve	45,000	65,000
Statement of Profit and Loss	30,000	80,800
10% Debentures	–	70,000
Sundry Creditors	85,000	90,700

Provision for Taxation	22,500	40,500
Proposed dividend	30,000	35,000
	5,12,500	7,62,000
Assets:		
Land and Buildings	2,30,000	3,90,000
Plant and Machinery	85,400	1,40,000
Furniture	5,500	6,500
Stock	82,400	95,700
Sundry Debtors	75,000	85,500
Cash in hand and at Bank	34,200	44,300
	5,12,500	7,62,000

Additional information :

Depreciation written off during the year:

Land and Building ₹ 60,000

Plant and Machinery ₹ 50,000

Furniture ₹ 1,200

10% Debentures have been issued on 31.3.2016.

Solution :

Cash Flow Statement for the year ended 31st March, 2016

Particulars	₹	₹
Cash Flows from Operating Activities :		
Net profit before Tax (working note – 6)	1,46,300	
Adjustment for non-cash and non-operating items :		
Add Depreciation on Land and Building	60,000	
Depreciation on Plant and Machinery	50,000	

Depreciation on furniture	1,200	
Operating profit before working capital changes	2,57,500	
Add Increase in Current Liabilities :		
Sundry creditors (₹ 90,700 - ₹ 85,000)	5,700	
Less Increase in Current Assets:		
Stock (₹ 95,700 – ₹ 82,400)	(-) 13,300	
Sundry Debtors (₹ 85,500 – ₹ 75,000)	(-) 10,500	
Cash Flows from operations before Tax	2,39,400	
Less income Tax paid	(-) 22,500	
(A)=Net Cash Flows from Operating Activities		2,16,900
Cash Flows from Investing Activities :		
Purchases of Land and Building (working note -1)	(-)2,20,000	
Purchase of Plant and Machinery (working note-2)	(-) 1,04,600	
Purchase of Furniture (working note – 3)	(-) 2,200	
(B)=Net Cash used in Investing Activities		(-) 3,26,800
Cash Flows from Financing Activities :		
Issue of Equity Shares (₹ 3,50,000 – ₹ 3,00,000)	50,000	
Securities premium received (₹ 30,000 – Nil)	30,000	
Issue of Debentures (₹ 70,000 –Nil)	70,000	
	1,50,000	
Dividend paid	(-) 30,000	
(C)=Net Cash Flows from Financing activities		1,20,000
(A+B+C) = Net increase in Cash and Cash Equivalents		10,100
Add Cash and Cash Equivalent on 31.3.2015		34,200
Cash and Cash Equivalents on 31.3.2016		44,300

Working Notes:

1. Land and Buildings A/c

Particulars	₹	Particulars	₹
To Balance b/d	2,30,000	By Depreciation A/c	60,000
To Bank A/c (Balancing figure being Purchase)	2,20,000	By Balance c/d	3,90,000
	4,50,000		4,50,000

2. Plant and Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	85,400	By Depreciation A/c	50,000
To Bank A/c (Balancing figure being Purchase)	1,04,600	By Balance c/d	1,40,000
	1,90,000		1,90,000

3. Furniture A/c

Particulars	₹	Particulars	₹
To Balance b/d	5,500	By Depreciation A/c	1,200
To Bank A/c (Balancing figure being Purchase)	2,200	By Balance c/d	6,500
	7,700		7,700

4. Provision for Taxation A/c

Particulars	₹	Particulars	₹
To Bank A/c (Tax paid)	22,500	By Balance b/d	22,500
To Balance c/d	40,500	By Statement of Profit and Loss (Tax provided during the year)	40,500
	63,000		63,000

5. Proposed Dividend A/c

Particulars	₹	Particulars	₹
To Bank A/c (Dividend paid)	30,000	By Balance b/d	30,000
To Balance c/d	35,000	By Statement of Profit and Loss (proposed dividend for the year)	35,000
	65,000		65,000

6. Net Profit before Tax :

Balance of Statement of Profit and Loss on 31.3.2016		₹ 80,800
Less Balance of Statement of Profit and Loss on 31.3.2015		₹ 30,000
		₹ 50,800
Add Income Tax provided	₹ 40,500	
Transfer to General Reserve (₹ 65,000 – ₹ 45,000)	₹ 20,000	
Proposed Dividend	₹ 35,000	₹ 95,500
Net Profit before Tax		₹ 1,46,300

Illustration 24

From the following particulars, prepare cash flow statement for the year 2015-16:

Liabilities :	31.3.2015	31.3.2016
	₹	₹
Equity Share Capital	3,00,000	4,00,000
8% Redeemable Preference Share Capital	1,50,000	1,00,000
General Reserve	40,000	70,000
Statement of Profit and Loss	30,000	48,000
Sundry Creditors	55,000	83,000

Bills Payable	20,000	16,000
Proposed Dividend	42,000	50,000
Provision for Taxation	40,000	50,000
	6,77,000	8,17,000
Assets:		
Goodwill	1,15,000	90,000
Land and Buildings	2,00,000	1,30,000
Plant	80,000	2,00,000
Sundry Debtors	1,60,000	2,00,000
Bills Receivable	20,000	40,000
Stock	77,000	1,19,000
Cash in hand	15,000	20,000
Cash at Bank	10,000	18,000
	6,77,000	8,17,000

Additional information:

(i) Depreciation of ₹ 20,000 on Land and Buildings and ₹ 10,000 on Plant has been charged during the year 2015-16.

(ii) Interim dividend of ₹ 20,000 has been paid during 2015-16.

(iii) During the year income tax of ₹ 35,000 has been paid.

(iv) Preference shares were redeemed on 31.3 2016.

Solution :

Cash Flow Statement for the year ended 31st March, 2016

Particulars		₹	₹
Cash Flows from Operating Activities:			
Net Profit for the year before tax (Working Note-5)		1,75,000	
Adjustment for non-cash and non-operating items :			
Add Depreciation on Land and Buildings		20,000	
Depreciation on Plant		10,000	
Goodwill written off (₹ 1,15,000 – ₹ 90,000)		25,000	
Operating Profit before working capital changes		2,30,000	
Add Increase in current liabilities:			
Sundry Creditors (₹ 83,000 – ₹ 55,000)		28,000	
		2,58,000	
Less Decrease in current liabilities:			
Bills payable (₹ 20,000 – ₹ 16,000)	4,000		
Less Increase in current assets :			
Sundry Debtors (₹ 2,00,000 – ₹ 1,60,000)	40,000		
Bills Receivable (₹ 40,000 – ₹ 20,000)	20,000		
Stock (₹ 1,19,000 – ₹ 77,000)	42,000	(-) 106,000	
Cash generated from operations before Tax		1,52,000	
Less Tax paid (Working Note 4)		(-) 35,000	
(A)=Net Cash Flows from Operating Activities			1,17,000
Cash Flows from Investment Activities:			
Purchase of Plant (Working Note -2)		(-) 1,30,000	

Sale of Buildings (Working Note-1)	50,000	
(B)=Net Cash used in Investing Activities		(-)80,000
Cash Flows from Financing Activities:		
Issue of Equity Shares (₹ 4,00,000 – ₹ 3,00,000)	1,00,000	
Redemption of 8% Preference Shares (₹ 1,50,000 – ₹ 1,00,000)	(-) 50,000	
Preference dividend paid	(-) 12,000	
Dividend paid (Working Note -3)	(-)42,000	
Interim dividend paid	(-)20,000	
(C)=Net Cash used in Financing Activities		(-) 24,000
(A+B+C)=Net Increase in Cash and Cash Equivalents		13,000
Add Cash and Cash Equivalents on 31.3.2015 (₹ 15,000+ ₹ 10,000)		25,000
Cash and Cash Equivalents on 31.3.2016		38,000

Working Notes:

1. Land and Buildings A/c

Particulars	₹	Particulars	₹
To Balance b/d	2,00,000	By Depreciation A/c	20,000
		By Bank A/c	50,000
		(Balancing figure being Sale)	
		By Balance c/d	1,30,000
	2,00,000		2,00,000

2. Plant A/c

Particulars	₹	Particulars	₹
To Balance b/d	80,000	By Depreciation A/c	10,000
To Bank A/c	1,30,000	By Balance c/d	2,00,000
(Balancing figure being Purchase)			
	2,10,000		2,10,000

3. Proposed Dividend A/c

Particulars	₹	Particulars	₹
To Bank A/c (Dividend Paid)	42,000	By Balance b/d	42,000
To Balance c/d	50,000	By Statement of Profit and Loss	50,000
		(Dividend Provided during the year)	
	92,000		92,000

4. Provision for Taxation A/c

Particulars	₹	Particulars	₹
To Bank A/c (given)	35,000	By Balance b/d	40,000
To Balance c/d	50,000	By Statement of Profit and Loss	45,000
		(Balancing figure being tax provided during the year)	
	85,000		85,000

5. Net Profit before Tax:

			₹
Balance of Statement of Profit and Loss on 31.3.2016			48,000
Less Balance of Statement of Profit and Loss on 31.3.2015			30,000
			18,000
Add	Preference Dividend	₹ 12,000	
	Proposed Dividend	₹ 50,000	
	Interim Dividend paid	₹ 20,000	
	Provision for Tax provided	₹ 45,000	
	Transfer to General Reserve	₹ 30,000	
	(₹ 70,000 – ₹ 40,000)		1,57,000
	Net Profit before Tax		1,75,000

6. Dividend on Preference Shares ₹ 12,000, i.e. 8% on ₹ 1,50,000 and since dividend on Equity Shares has been paid, dividend on Preference Shares also must have been paid prior to dividend on Equity Shares.

Illustration25

From the following information, prepare a Cash Flow Statement for the year ended 31st March, 2016 :

	31.3.2015	31.3.2016
Liabilities:	₹	₹
Equity Share Capital	2,00,000	2,60,000
General Reserve	50,000	60,000
Statement of Profit and Loss	30,400	30,800
Long-Term loan	70,000	–
Trade Creditors	1,50,000	1,35,000

Provision for taxation	30,000	35,000
	5,30,400	5,20,800
Assets:		
Goodwill	–	15,000
Land and Buildings	2,00,000	1,90,000
Machinery	1,50,000	1,69,000
Stock	1,00,000	74,000
Trade Debtors	80,000	64,200
Cash in hand	400	600
Cash at bank	–	8,000
	5,30,400	5,20,800

Additional information:

(i) Dividend of ₹ 23,000 was paid .

(ii) Assets of another company were purchased for a consideration of ₹ 60,000 payable by issue of equity shares. The following assets were purchased:

Stock ₹ 20,000

Machinery ₹ 25,000

(iii) Machinery was further purchased for ₹ 8,000.

(iv) Depreciation written off on Machinery the year ₹ 12,000.

(v) Income tax provided during the year ₹ 33,000

(vi) Loss on sale of Machinery ₹ 200 was written off to General Reserve.

Solution :

Cash Flow Statement for the year ended 31st March , 2016		
Particulars	₹	₹
Cash Flows from Operating Activities :		
Net Profit before Tax (working note 7)	66,600	
Adjustments for non-cash and non-operating items :		
Depreciation on Land and Buildings (working note 4)	10,000	
Depreciation on Machinery	12,000	
Purchase of stock by issue of shares being non-cash	20,000	
Operating profit before working capital changes	1,08,600	
Adjustment for changes in current assets ans liabilities :		
Add Decrease in Current Assets :		
Stock	26,000	
Trade Debtors	15,800	
	1,50,400	
Less Decrease in Current Liabilities :		
Trade Creditors	(-) 15,000	
Cash generated from operations	1,35,400	
Less Income Tax paid (working note 6)	(-) 28,000	
(A)=Net Cash Flows from Operating Activities		1,07,400
Cash Flows from Investing Activities :		
Purchase of Machinery for cash	(-) 8,000	
Sale of Machinery (work note 2)	1,800	

(B)= Net Cash used in Investing Activities		(-) 6,200
Cash Flows from Financing Activities:		
Payment of Long-term loan	(-) 70,000	
Dividend Paid	(-) 23,000	
(C)= Net Cash used in Financing Activities		(-) 93,000
(A+B+C) = Net increase in Cash and Cash Equivalents		8,200
Add Cash and Cash Equivalents on 31.3.2015		400
Cash and cash equivalents on 31.3.2016 (₹ 600+ ₹ 8,000)		8,600

Significant Non-cash Transactions:

Assets of another company were purchased by issue of equity shares. Such assets are:

Machinery	₹ 25,000
Stock	₹ 20,000
Goodwill	₹ 15,000

Working note :

1. Equity Share Capital A/c

Particulars	₹	Particulars	₹
		By Balance b/d	2,00,000
		By Stock A/c (Purchased)	20,000
		By Machinery A/c (Purchased)	25,000
To Balance c/d	2,60,000	By Goodwill (Being Balancing Figure)	15,000
	2,60,000		2,60,000

2. Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	1,50,000	By Depreciation A/c	12,000
To Equity Share Capital A/c	25,000	By General Reserve (loss on sale)	200
To Bank A/c (Purchase)	8,000	By Bank A/c (sale) (Balancing figure)	1,800
		By Balance c/d	169,000
	1,83,000		1,83,000

3. Goodwill A/c

Particulars	₹	Particulars	₹
To Balance b/d	NIL		
To Equity Share Capital A/c (working note -1)	15,000	By Balance c/d	15,000
	15,000		15,000

4. Land and Buildings A/c

Particulars	₹	Particulars	₹
To Balance b/d	2,00,000	By Depreciation A/c (Balancing figure)	10,000
		By Balance c/d	1,90,000
	2,00,000		2,00,000

5. General Reserve A/c

Particulars	₹	Particulars	₹
To Machinery A/c (loss on sale)	200	By Balance b/d	50,000
To Balance c/d	60,000	By Statement of Profit and Loss (Balancing figure)	10,200
	60,200		60,200

6. Provision for Taxation A/c

Particulars	₹	Particulars	₹
To Bank A/c (Tax paid) (Balancing figure)	28,000	By Balance b/d	30,000
		By Statement of Profit and Loss (Provision created during the year)	33,000
To Balance c/d	35,000		
	63,000		63,000

7. Net Profit before Tax :

			₹
Balance of Statement of Profit and Loss on 31.3.2016			30,800
Less Balance of Statement of Profit and Loss on 31.3.2015			30,400
			400
Add :	Income Tax provided during 2015-16	₹ 33,000	
	Dividend Paid	₹ 23,000	
	Transfer to Reserve (working note 5)	₹ 10,000	66,200
Net Profit before Tax			₹ 66,600

Illustration 26

On the basis of the information given in the Balance Sheets of XY Ltd. as at 31st March, 2016 and 2015, prepare a Cash Flow Statement :

Balance Sheet

Particulars	Note no.	31.3.2016	31.3.2015
I. EQUITY AND LIABILITIES :			
1. Shareholders' funds :			
(a) Share Capital		3,50,000	3,00,000
(b) Reserves and Surplus	1	2,20,000	40,000
2. Non-Current Liabilities :			
Long-Term Borrowings		2,50,000	2,50,000
3. Current Liabilities:			
Trade Creditors	2	1,25,000	45,000
TOTAL		9,45,000	6,35,000
II. ASSETS:			
1. Non-Current Assets:			
(a) Fixed Assets			
Tangible Assets		4,90,000	4,20,000
(b) Non-Current Investments		80,000	30,000
2. Current Assets :			
(a) Current Investments		90,000	1,00,000
(b) Inventories		2,45,000	60,000
(c) Cash in hand and at Bank		40,000	25,000
TOTAL		9,45,000	6,35,000

Notes to Accounts:	31.3.2016	31.3.2015
	₹	₹
1. Reserves and Surplus :		
General Reserve	1,50,000	1,00,000
Balance in Statement of Profit and Loss	70,000	(-) 60,000
	2,20,000	40,000
2. Trade Creditors :		
Sundry creditors	1,17,500	32,500
Bills Payable	7,500	12,500
	1,25,000	45,000

Additional information :

1. Depreciation provided on tangible assets during the year 2015-16 ₹ 40,000.
2. Interest paid on Long-term borrowings ₹ 25,000.

Solution:

Cash Flow Statement for the year ended 31st March,2016

Particulars	₹	₹
Cash Flows from Operating Activities :		
Net profit before Tax (working note -1)	1,80,000	
Adjustments for non-cash and non-operating items:		
Add Depreciation on Tangible assets	40,000	
Interest on Long-term Borrowings	25,000	
Operating Profit before working capital changes	2,45,000	
Add Increase in current liabilities:		
Sundry Creditors	85,000	
	3,30,000	

Less Decrease in current liabilities :		
Bills payable ₹ 5,000		
Less Increase in current assets: (Inventories) ₹ 1,85,000	(-) 1,90,000	
(A)=Net Cash Flows from Operating Activities		1,40,000
Cash Flows from Investing Activities :		
Purchase of Tangible Assets (working note-2)	(-) 1,10,000	
Purchase of Non-Current Investments	(-) 50,000	
(₹ 80,000 – ₹ 30,000)		
(B)=Net Cash used in Investing Activities		(-)1,60,000
Cash Flows from Financing Activities ;		
Proceeds from Issue of Share Capital	50,000	
(₹ 3,50,000 - ₹ 3,00,000)		
Interest paid on Long-Term Borrowings	(-)25,000	
(C)=Net Cash Flows from Financing Activities		25,000
(A+B+C) = Net Increase in Cash and Cash Equivalents		5,000
Add Cash and Cash Equivalents on 31.3.2015		1,25,000
(₹ 25,000+ ₹ 1,00,000)		
Cash and Cash Equivalents on 31.3.2016		1,30,000
(₹ 40,000+ ₹ 90,000)		

Working Notes-

1. Calculation of Net Profit before Tax :

	₹
Net profit of the year 2015-16 (₹ 70,000+ ₹ 60,000)	1,30,000
Add Transfer to General Reserve (₹ 1,50,000- ₹ 1,00,000)	50,000
	1,80,000

Negative Balance of Statement of Profit and Loss of ₹ 60,000 appearing in the Balance Sheet on 31.3.2015, represents loss and in the current year 2015-16 after recovering the loss of ₹ 60,000, the Statement of Profit and Loss shows a profit of ₹ 70,000. This means that net profit during the year 2015-16 is ₹ 70,000 + ₹ 60,000 = ₹ 1,30,000

2. Tangible Assets A/c

Particulars	₹	Particulars	₹
To Balance b/d	4,20,000	By Depreciation A/c	40,000
To Bank A/c (Balancing figure being purchase)	1,10,000	By Balance c/d	4,90,000
	5,30,000		5,30,000

3. Cash and Cash Equivalents :

	31.3.2016	31.3.2015
	₹	₹
Cash in hand and at Bank	40,000	25,000
Current Investments	90,000	1,00,000
Cash and Cash Equivalents	1,30,000	1,25,000

Current Investments are treated as Cash and Cash Equivalents.

Illustration 27

Following are the Balance Sheets of a limited company as at 31.3.2015 and 31.3.2016:

Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I. EQUITY AND LIABILITIES:			
1. Shareholders' funds :			
(a) Share Capital		9,50,000	8,00,000
(b) Reserves and Surplus	1	2,32,000	(-) 60,000

2.	Non-current Liabilities :			
	Long-term Borrowings	2	5,00,000	4,00,000
3.	Current Liabilities :			
(a)	Trade Creditors		2,20,000	1,00,000
(b)	Short-term Provisions	3	32,000	20,000
	TOTAL		19,34,000	12,60,000
II.	ASSETS:			
1.	Non- Current Assets :			
	(a) Fixed Assets	4	9,04,000	3,40,000
	(b) Non-current Investments		90,000	80,000
2.	Current Assets:			
	(a) Current Investments		60,000	1,00,000
	(b) Inventories		4,00,000	3,00,000
	(c) Trade Debtors		1,12,000	3,52,000
	(d) Cash in hand and at Bank		3,68,000	88,000
	TOTAL		19,34,000	12,60,000

		31.3.2016	31.3.2015
	Notes to Accounts:	31.3.2016	31.3.2015
		₹	₹
1.	Reserves and Surplus :		
	Securities Premium Reserve	1,20,000	–
	Statement of Profit and Loss	1,12,000	(-) 60,000
		2,32,000	(-) 60,000
2.	Long-Term Borrowings:		
	15% Debentures	5,00,000	4,00,000

3.	Short-term Provisions :		
	Provision for Doubtful Debts	28,000	20,000
	Provision for Repairs	4,000	–
		32,000	20,000
4.	Fixed Assets :		
	Fixed Assets	10,00,000	4,00,000
	Less Accumulated Depreciation	96,000	60,000
		9,04,000	3,40,000

Additional information:

1. Dividend paid during 2015-16 was ₹ 72,000.
2. Non-current Investments costing ₹ 20,000 were sold at a profit of 40%.
3. Fixed assets costing ₹ 40,000. (accumulated depreciation ₹ 16,000) were sold for ₹ 34,000.
4. Additional debentures amounting to ₹ 1,00,000 were issued at par on 1.8.2015. Interest on debentures has been paid regularly.

Prepare a Cash Flow Statement.

Solution:

Cash Flow Statement of ________ Ltd. for the year ended 31st March, 2016

Particulars	₹	₹
Cash Flows from Operating Activities:		
Net profit before Tax (working note – 1)	2,44,000	
Adjustments for non-cash and non-operating items :		
Add Depreciation on Fixed Assets (working note- 3)	52,000	
Provision for doubtful debts (₹ 28,000 – ₹ 20,000)	8,000	
Provision for Repairs (₹ 4,000-Nil)	4,000	

Interest paid on Long-term Borrowings (working note-6)		70,000	
		3,78,000	
Less : Profit on sale of Non-current Investments	₹ 8,000		
Profit on sale of Fixed Assets (working note-2)	₹ 10,000	(-)18,000	
Operating Profit before working capital changes		3,60,000	
Add Decrease in Current Assets :			
Trade Debtors	₹ 2,40,000		
Increase in Current Liabilities:			
Trade Creditors	₹ 1,20,000	3,60,000	
		7,20,000	
Less Increase in Current Assets :			
Inventories		(-) 1,00,000	
(A)=Net Cash Flows from Operating Activities			6,20,000
Cash Flows from Investing Activities :			
Purchase of Fixed Assets (working note 2)		(-) 6,40,000	
Sale of fixed Assets		34,000	
Purchase of Non-current Investments (working note-4)		(-)30,000	
Sale of Non-Current Investments (working note-4)		28,000	
(B)=Net Cash used in Investing Activities			(-) 6,08,000
Cash Flows from Financing Activities :			
Issue of Share Capital (₹ 9,50,000 – ₹ 8,00,000)		1,50,000	
Securities Premium received on issue of shares		1,20,000	
Issue of 15% Debentures		1,00,000	
Dividend paid		(-) 72,000	
Interest on 15% Debentures paid (working note- 6)		(-) 70,000	

(C)=Net Cash flows from Financing Activities	2,28,000
(A+B+C)= Net increase in Cash and Cash Equivalents	2,40,000
Add Cash and Cash Equivalents on 31.3.2015 (working note 5)	1,88,000
Cash and Cash Equivalents on 31.3.2016	4,28,000

Working Notes :

1. Calculation of Net profit before Tax :

	₹
Balance of Statement of Profit and Loss on 31.3.2016	1,12,000
Less Balance of Statement of Profit and Loss on 31.3.2015	(-) 60,000
	1,72,000
Add Dividend paid	72,000
	₹ 2,44,000

Negative balance of the Statement of Profit and Loss amounting to ₹ 60,000 appearing in the Balance Sheet on 31.3.2015 represents loss. In the year 2015-16 after covering the loss of ₹ 60,000, the Profit and Loss Statement shows a profit of ₹ 1,12,000. This means the net profit during 2015-16 is ₹ 1,12,000 + ₹ 60,000 = ₹ 1,72,000.

2. Fixed Assets A/c

Particulars	₹	Particulars	₹
To Balance b/d	4,00,000	By Bank A/c (sale)	34,000
To Profit on Sale			
[₹ 34,000 – (40,000-16,000)]	10,000	By Accumulated Depreciation A/c	16,000
		(Depreciation on Asset sold)	
To Bank A/c (Balancing			
figures being Purchase)	6,40,000	By Balance c/d	10,00,000
	10,50,000		10,50,000

3. Accumulated Depreciation A/c

Particulars	₹	Particulars	₹
To Fixed Assets A/c (transfer of Depreciation on fixed Assets sold)	16,000	By Balance b/d	60,000
To Balance c/d	96,000	By Depreciation A/c (Balancing figure being depreciation for 2015-16)	52,000
	1,12,000		1,12,000

4. Non- Current Investments A/c

Particulars	₹	Particulars	₹
To Balance b/d	80,000	By Bank A/c (Sale) (₹ 20,000+ 40%)	28,000
To Profit on sale (40% on ₹ 20,000)	8,000		
To Bank A/c (Balancing figure being Purchase)	30,000	By Balance c/d	90,000
	1,18,000		1,18,000

5. Cash and Cash Equivalents :

	31.3.2016	31.3.20115
	₹	₹
Cash in hand and at Bank	3,68,000	88,000
Current Investments	60,000	1,00,000
	4,28,000	1,88,000

Current Investments are treated as Cash and Cash Equivalents.

6. Interest paid on Long-Term Borrowings (15% Debentures):

15% on ₹ 4,00,000 for one year =	₹ 60,000
15% on ₹ 1,00,000 for 8 months =	₹ 10,000
	₹ 70,000

Illustration 28

Prepare Cash Flow Statement from the following Balance Sheet of X Ltd.as at 31.3.2016 :

Balance Sheet

	Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I.	EQUITY AND LIABILITIES:			
1.	Shareholders' Funds:			
(a)	Share Capital		5,25,000	3,75,000
(b)	Reserves and Surplus	1	4,25,000	2,50,000
2.	Current Liabilities :			
(a)	Short-term Borrowings	2	1,25,000	75,000
(b)	Trade Creditors	3	1,10,000	87,000
	TOTAL		11,85,000	7,87,000
II.	ASSETS:			
1.	Non-Current Assets :		8,30,000	4,67,000
	Fixed Assets:			
2.	Current Assets :			
(a)	Inventory		1,35,000	1,20,000
(b)	Trade Debtors	4	1,95,000	1,80,000
(c)	Cash and Cash Equivalents		25,000	20,000
			11,85,000	7,87,000

Notes to Accounts:		31.3.2016	31.3.2015
		₹	₹
1.	Reserves and Surplus ;		
	General Reserve	2,75,000	1,50,000
	Balance of Statement of Profit and Loss	1,50,000	1,00,000
		4,25,000	2,50,000
2.	Short-term Borrowings :		
	Bank Overdraft	1,25,000	75,000
3.	Trade creditors:		
	Sundry Creditors	1,00,000	70,000
	Bills Payable	10,000	17,000
		1,10,000	87,000
4.	Trade Debtors :		
	Sundry Debtors	1,80,000	1,80,000
	Bills Receivable	15,000	–
		1,95,000	1,80,000

Additional information :

1. Depreciation charged on Fixed Assets for the year 2015-16 was ₹ 1,00,000.
2. Income Tax of ₹ 25,000 has been paid during the year 2015-16.

Solution:

Cash Flow Statement of X Ltd. for the year ended 31st March, 2016

Particulars		₹	₹
Cash Flows from Operating Activities:			
Net Profit before Tax (working note 1)		2,00,000	
Adjustments for Non-cash and non-operating items :			
Add Depreciation		1,00,000	
Operating Profit before working capital changes		3,00,000	
Add Increase in Current Liabilities :			
Sundry Creditors		30,000	
		3,30,000	
Less Decrease in Current Liabilities :			
Bills Payable	7,000		
Less Increase in Current Assets:			
Inventory	15,000		
Bills Receivable	15,000	(-) 37,000	
Cash generated from operating activities before Tax		2,93,000	
Less Income Tax paid		(-) 25,000	
(A)=Net Cash Flows from Operating Activities			2,68,000
Cash Flows from Investing Activities :			
Purchase of Fixed Assets (working note 2)		(-) 4,63,000	
(B)=Net Cash used in Investing Activities			(-) 4,63,000
Cash Flows from Financing Activities :			
Issue of Share (₹ 5,25,000 – ₹ 3,75,000)		1,50,000	
Increase in Bank Overdraft		50,000	
(C)=Net Cash Flows from Financing Activities			2,00,000
(A+B+C)= Net increase in Cash and Cash Equivalents			5,000
Add Cash and Cash Equivalents on 31.3.2015			20,000
Cash and Cash Equivalents on 31.3.2016			25,000

Working Note :

1. Profit before Tax :

Balance of Profit and Loss Statement on 31.3.2016	₹ 1,50,000
Less Balance of Profit and Loss Statement on 31.3.2015	₹ 1.00,000
	₹ 50,000
Add : Income Tax	₹ 25,000
Transfer to General Reserve (₹ 2,75,000 – ₹1,50,000)	₹ 1,25,000
	₹ 2,00,000

2. Fixed Assets A/c

Particulars	₹	Particulars	₹
To Balance b/d	4,67,000	By Depreciation A/c	1,00,000
To Bank A/c (Balancing figure being purchase)	4,63,000	By Balance c/d	8,30,000
	9,30,000		9,30,000

3. Bank Overdraft is treated as financing activity.

Illustration 29

Following are the Balance Sheets of A Ltd as at 31.3.2016 and 31.32015:

Balance Sheets

Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I. EQUITY AND LIABILITIES:			
1. Shareholders' Funds :			
(a) Share capital		3,50,000	2,00,000
(b) Reserves and Surplus	1	(-) 1,67,500	(-) 25,000

2.	Non-Current Liabilities :			
	Long-term Borrowings	2	2,00,000	1,00,000
3.	Current Liabilities :			
(a)	Short-term Borrowings	3	11,000	15,000
(b)	Trade creditors		64,000	40,000
(c)	Other Current Liabilities	4	10,000	5,000
		TOTAL	4,67,500	3,35,000
II.	ASSETS:			
1.	Non-Current Assets:			
(a)	Fixed Assets		2,50,000	1,50,000
(b)	Non-Current Investments		70,000	1,00,000
2.	Current Assets :			
(a)	Inventory		50,000	25,000
(b)	Trade Debtors		85,000	50,000
(c)	Cash and Cash Equivalents		12,500	10,000
		TOTAL	4,67,500	3,35,000

Notes to Accounts :

		31.3.2016	31.3.2015
		₹	₹
1.	Reserves and Surplus :		
	Balance of Profit and Loss Statement	(-) 1,67,500	(-) 25,000
2.	Long-term Borrowings :		
	9% Debentures	2,00,000	1,00,000
3.	Short-term Borrowings :		
	Cash Credit	11,000	15,000

4.	Other Current Liabilities :		
	Outstanding Expenses	10,000	5,000

Additional information :

1. Fixed assets included Machinery costing ₹ 35,000 on which depreciation of ₹ 20,000 was charged, was sold for ₹ 15,000. During the year 2015-16, depreciation was charged on fixed assets amounting to ₹ 70,000.
2. Expenses on issue of shares of ₹ 7,500 were incurred and written off from the Statement of Profit and Loss during 2015-16.

   You are required to prepare a Cash Flow Statement.

Solution :

Cash Flow Statement of A Ltd. for the year ended 31st March , 2016

Particulars		₹	₹
Cash Flows from Operating Activities:			
Net Loss (working note-1)		(-) 1,42,500	
Adjustments for non-cash and non-operating items:			
Add Depreciation on Fixed Assets		70,000	
Interest on Long-Term Borrowing (9% Debentures)		9,000	
(9% on ₹ 1,00,000)			
Expenses on issue of shares		7,500	
Operating loss before working capital changes		(-) 56,000	
Add Increase in Current Liabilities :			
Trade Creditors	₹ 24,000		
Outstanding Expenses	₹ 5,000	29,000	
		(-) 27,000	

Less Increase in Current Assets :			
Inventory	₹ 25,000		
Trade Debtors	35,000	(+) 60,000	
(A)=Net Cash used in Operating Activities			(-) 87,000
Cash Flows from Investing Activities :			
Sale of Fixed Assets		15,000	
Sale of Non-Current Investments (₹ 1,00,000 - ₹ 70,000)		30,000	
Purchase of Fixed Assets (working note-3)		(-) 1,85,000	
(B)=Net Cash used in Investing Activities			(-)1,40,000
Cash Flows from Financing Activities :			
Issue of Shares (₹ 3,50,000 – ₹ 2,00,000)		1,50,000	
Expenses on issue of shares		(-) 7,500	
Issue of 9% debentures		1,00,000	
Interest paid on 9% Debentures (9% on ₹ 1,00,000)		(-) 9,000	
Decrease in Cash Credit		(-) 4,000	
(C)=Net cash Flows from Financing Activities			2,29,500
(A+B+C)= Net increase in Cash and Cash Equivalents			2,500
Add Cash and Cash Equivalents on 31.3.2016			10,000
Cash and Cash Equivalents on 31.3.2016			12,500

Working Notes:

1. Calculation of Profit:	₹
Balance of Statement of Profit and Loss on 31.3.2016	(-) 1,67,500
Less Balance of Statement of Profit and Loss on 31.3.2015	(-) 25,000
Net Loss for 2015-16	(-) 1,42,500

2. It is assumed that new 9 % Debentures of ₹ 1,00,000 have been issued on 31.3.2016.

3. Fixed Assets A/c

Particulars	₹	Particulars	₹
To Balance b/d	1,50,000	By Depreciation A/c	70,000
To Bank A/c (Balancing figure being Purchase)	185,000	By Bank A/c (sale)	15,000
		By Balance c/d	2,50,000
	3,35,000		3,35,000

4. Cash Credit is treated as financing activity .

Illustration 30

You are required to prepare a Cash Flow Statement from the following Balance Sheets of Laxmi:

Liabilities	31.3.2015 ₹	31.3.2016 ₹	Assets	31.3.2015 ₹	31.3.2016 ₹
Capital	6,00,000	4,40,000	Fixed Assets	6,00,000	5,00,000
Sundry Creditors	2,20,000	2,62,000	Inventory	1,60,000	1,20,000
Unpaid Expenses	–	32,000	Sundry Debtors	80,000	84,000
Bank Overdraft	20,000	–	Cash at Bank	–	30,000
	8,40,000	7,34,000		8,40,000	7,34,000

Additional information :

1. No drawings was made and no fresh capital was introduced during the year 2015-16.

2. There was neither any purchase nor sale of fixed assets during the year 2015-16.

Solution :

Cash Flow Statement of Laxmi for the year ended 31st March,2016

Particulars	₹	₹
Cash Flows from Operating Activities :		
Net loss for the year (₹ 4,40,000 - ₹ 6,00,000)	(-) 1,60,000	
Adjustments for non-cash and non-operating items :		
Add Depreciation on fixed Assets	1,00,000	
(₹ 6,00,000 – ₹ 5,00,000)		
Operating loss before working capital changes	(-) 60,000	
Add Decease in Current Assets:		
Inventory	40,000	
Add Increase in Current Liabilities :		
Sundry Creditors	42,000	
Unpaid Expenses	32,000	
	54,000	
Less Increase in Current Assets :		
Sundry Debtors	(-) 4,000	
(A)=Net Cash Flows from Operating Activities		50,000
(B)=Net Cash Flows from Investing Activities		NIL
Cash Flow from Financing Activities :		
Repayment of Bank Overdraft	(-) 20,000	
(C)=Net Cash used in Financing Activities		(-) 20,000
(A+B+C= Net increase in Cash and Cash Equivalents		30,000
Add Cash and Cash Equivalents on 31.3.2015		NIL
Cash and Cash Equivalents on 31.3.2016		30,000

Note: 1. Decrease in proprietor's capital is treated as net loss for the year 2015-16 as no information is given about profit or loss.

2. Bank Overdraft is treated as financing activity.

Illustration 31

You are required to prepare a Cash Flow Statement from the following Balance Sheets of Ram and Balaram:

Balance Sheets

Liabilities	31.3.2015	31.3.2016 ₹	Assets ₹	31.3.2015 ₹	31.3.2016 ₹
Trade Creditors	1,20,000	1,32,000	Cash in hand	30,000	21,000
Mrs. Ram's Loan	75,000	–	Trade Debtors	90,000	1,50,000
Bank Loan	1,20,000	1,50,000	Inventory	1,05,000	75,000
Capital	3,75,000	4,59,000	Machinery	2,40,000	1,65,000
			Land	1,20,000	1,50,000
			Buildings	1,05,000	1,80,000
	6,90,000	7,41,000		6,90,000	7,41,000

During the year a machine costing ₹ 30,000 (accumulated depreciation ₹ 9,000) was sold for ₹ 15,000. The provision for depreciation against machinery as on 31.3.2015 and 31.3.2016 were of ₹ 75,000 and ₹ 1,20,000 respectively. Total amount of interest paid during 2015-16 was ₹ 21,000. Net profit for the year 2015-16 amounted to ₹ 1,35,000.

Solution :

Cash Flow Statement of Ram and Balaram for the year ended 31^{st} March , 2016

Particulars	₹	₹
Cash Flows from Operating Activities :		
Net Profit for the year	1,35,000	
Adjustments for non-cash and non-operating items :		
Add Depreciation (working note3)	54,000	
Loss on Sale of Machinery (working note 2)	6,000	
Interest paid	21,000	
Operating profit before working capital changes	2,16,000	
Add Decrease in Current Assets :		
Inventory	30,000	
Add Increase in Current liabilities :		
Trade Creditors	12,000	
	2,58,000	
Less Increase in Current Assets:		
Trade Debtors	(-) 60,000	
(A)=Net Cash Flow from Operating Activities		1,98,000
Cash Flows from Investing Activities :		
Purchase of Land (₹ 1,50,000 – ₹ 1,20,000)	(-) 30,000	
Purchase of Buildings (₹ 1,80,000 – ₹ 105,000)	(-) 75,000	
Sale of Machinery	15,000	
(B)=Net Cash used in Investing Activities		(-) 90,000

Cash Flows from Financing Activities :		
Bank Loan raised (₹ 1,50,000 – ₹ 1,20,000)	30,000	
Payment of Mrs. Ram's Loan	(-) 75,000	
Drawings (working note -1)	(-) 51,000	
Interest paid	(-) 21,000	
(C)=Net Cash used in Financing Activities		(-) 1,17,000
(A+B+C)= Net decrease in Cash and Cash equivalents		(-) 9,000
Add Cash and Cash equivalents on 31.3.2015		30,000
Cash and Cash Equivalents on 31.3.2016		21,000

Working Notes :

1. Calculation of Drawings:

	₹
Capital on 31.3.2015	3,75,000
Add Net Profits during 2015-16	1,35,000
	5,10,000
Less Capital on 31.3.2016	4,59,000
Drawings	51,000

2. Machinery A/c (at cost)

Particulars	₹	Particulars	₹
To Balance b/d (₹ 2,40,000+ Accumulated Depreciation ₹ 75,000)	3,15,000	By Bank A/c (sale)	15,000
		By Profit and Loss A/c (Loss on sale) (₹ 30,000 – ₹ 9,000 - ₹15,000)	6,000
		By Provision for Depreciation A/c (Depreciation on Machine sold)	9,000
		By Balance c/d (₹ 1,65,000 + Accumulated depreciation ₹ 1,20,000)	2,85,000
	3,15,000		3,15,000

3. Provision for Depreciation A/c

Particulars	₹	Particulars	₹
To Machinery A/c (Transfer of depreciation on Machinery sold)	9,000	By Balance b/d	75,000
To Balance c/d	1,20,000	By Profit and Loss A/c (Balancing figure being depreciation for 2015-16)	54,000
	1,29,000		1,29,000

Illustration 32

Prepare Cash Flow Statement of Mr. S from the following particulars :

	31.3.2015	31.3.2016
	₹	₹
Cash in hand	10,000	88,000
Sundry Debtors	50,000	40,000
Inventory	40,000	44,000
Plant and Machinery	2,00,000	1,72,000
Land and Buildings	80,000	1,40,000
	3,80,000	4,84,000
Sundry Creditors	1,00,000	1,44,000
Bank Loan	80,000	20,000
Mr.S's Capital	2,00,000	3,20,000
	3,80,000	4,84,000

Additional information :

1. During the year 2015-16, Mr. S withdrew ₹ 4,000 per month for his personal use.

2. Plant and Machinery costing ₹ 80,000 (accumulated depreciation ₹ 30,000) was sold for ₹ 32,000.
3. Depreciation on Plant and Machinery charged during the year 2015-16 was ₹ 40,000.
4. Interest on Bank loan paid during the year 2015-16 was ₹ 8,000.

Solution :

Cash Flow Statement of Mr.S for the year ended 31.3.2016

Particulars	₹	₹
Cash Flows from Operating Activities :		
Net profit for the year (working note-1)	1,68,000	
Adjustments for non-cash and non-operating items :		
Depreciation on Plant and Machinery	40,000	
Loss on sale of Plant and Machinery	18,000	
Interest on Bank Loan paid	8,000	
Operating profit before working capital changes	2,34,000	
Add Decrease in Current Assets :		
Sundry Debtors	10,000	
Increase in Current Liabilities :		
Sundry Creditors	44,000	
	2,88,000	
Less Increase in Current Assets:		
Inventory	(-) 4,000	
(A)=Net Cash Flows from Operating Activities		2,84,000
Cash Flows from Investing Activities :		
Purchase of Plant and Machinery (working note -2)	(-) 62,000	

Sale of Plant and Machinery	32,000	
Purchase of Land and Buildings (₹ 1,40,000 – ₹ 80,000)	(-) 60,000	
(B)=Net Cash used in Investing Activities		(-)90,000
Cash Flows from Financing Activities :		
Repayment of Bank Loan	(-)60,000	
Drawings	(-) 48,000	
Interest on Bank Loan paid	(-) 8,000	
(C)=Net Cash used in Financing Activities		(-) 1,16,000
(A+B+C) = Net Increase in Cash and Cash Equivalents		78,000
Add Cash and Cash Equivalents on 31.3.2015		10,000
Cash and Cash Equivalents on 31.3.2016		88,000

Working note -1 . Calculation of Net Profit :

	₹
Capital as on 31.3.2016	3,20,000
Add Drawings during the year (₹ 4,000 X 12)	48,000
	3,68,000
Less Capital as on 31.3.2015	2,00,000
Net Profit for the year	1,68,000

2. Plant and Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	2,00,000	By Bank A/c (sale)	32,000
To Bank A/c (Balancing	62,000	By Loss on Sale A/c	
figure being Purchase)		(₹80,000- ₹ 30,000 – ₹ 32,000)	18,000
		By Depreciation A/c	40,000
		By Balance c/d	1,72,000
	2,62,000		2,62,000

6.10 QUESTIONS

1. From the alternatives given below, write the correct answer along with its serial number against each bit:

(i) Cash Flow Statement classifies the class flows according to :

(a) Operating and non-operating flows.

(b) Investing and non-operating flows.

(c) Operating, investing and financing activities.

(d) Inflows and outflows.

(ii) An example of cash flow from operating activity is :

(a) Purchase of fixed assets for cash.

(b) Purchase of goods for cash.

(c) Issue of equity shares for cash.

(d) Redemption of debentures in cash.

(iii) An example of Cash flow from investing activity is :

(a) Repayment of long-term loan.

(b) Purchase of goods for cash.

(c) Sale of fixed assets for cash.

(d) Issue of debentures for cash.

(iv) An example of cash flow from financing activity is :

(a) Purchase of Plant and Machinery in cash.

(b) Payment of salary to employees.

(c) Dividend received on investments.

(d) Payment of dividend to shareholders.

(v) Cash Flow means :

(a) Inflow or outflow of cash or cash equivalents.

(b) Inflow of cash or cash equivalents only.

(c) Outflow of cash or cash equivalents only.

(d) Neither inflow nor outflow of cash and cash equivalents.

(vi) One of the following which is not considered as cash and cash equivalent, is ;

(a) Cash at bank.

(b) Current investment.

(c) Cheques and drafts on hand.

(d) Long-term investments.

(vii) One of the following transactions which would not result in inflow or outflow of cash and cash equivalents, is:

(a) Purchase of goods for cash

(b) Shares issued for cash

(c) Depreciation on fixed assets

(d) Cash sales.

(viii) One of the following transactions which would result in inflow or outflow of cash and cash equivalents, is :

(a) Purchase of goods on credit.

(b) Purchase of fixed assets by issue of shares.

(c) Issue of fully paid bonus shares.

(d) Issue of debentures for cash.

(ix) One of the following trasactions which would result in inflow or outflow of cash and cash equivalents, is:

(a) Writing off bad debts against the provision for doubtful debts.

(b) Payment of dividend.

(c) Cash withdrawn from bank.

(d) Purchase of marketable securities in cash.

(x) One of the following transactions which would not result in inflow or outflow of cash and cash equivalents, is:

(a) Cash paid to trade creditors.

(b) Cash received from trade creditors.

(c) Interim dividend paid.

(d) Cash deposited into bank.

(xi) One of the following which is not an operating activity is :

(a) Cash purchases.

(b) Cash paid to sundry creditors.

(c) Sale of plant and machinery in cash.

(d) Salaries paid to employees.

(xii) One of the following which is not an investing activity, is :

(a) Issue of shares for cash.

(b) Purchase of fixed assets for cash.

(c) Sale of machinery for cash.

(d) Sale of patents for cash.

(xiii) One of the following which is not a financing activity, is :

(a) Issue of shares for cash.

(b) Redemption of debentures in cash.

(c) Dividend received.

(d) Dividend paid.

(xiv) If net increase in cash and cash equivalents is ₹ 25,000, and cash and cash equivalents at the beginning of the period was ₹ 5,000, then the cash and cash equivalents at the end of the period would be :

(a) ₹ 30,000

(b) ₹ 20,000

(c) ₹ 5,000

(d) ₹ 25,000

(xv) If net decrease in cash and cash equivalents is ₹ 10,000, and cash and cash equivalents at the end of the period is ₹ 15,000, then the cash and cash equivalents at the beginning of the period would be :

(a) ₹ 10,000

(b) ₹ 5,000

(c) ₹ 25,000

(d) ₹ 15,000

[Ans:- (i) c, (ii) b, (iii) c, (iv) d, (v) a, (vi) d, (vii) c, (viii) d, (ix) b, (x) d, (xi) c, (xii) a, (xiii) c, (xiv) a, (xv) c.]

2. Answer the following questions in one word / term each :

(i) State whether redemption of debentures in cash will result in inflow, or outflow or no flow of cash.

(ii) State whether depreciation on fixed assets charged, will result in inflow , outflow or no flow of cash.

(iii) State whether conversion of deventures into equity shares will result in inflow, out flow or no flow of cash.

(iv) State whether the amount received from trade debtors will result in inflow, outflow or no flow of cash.

(v) While preparing a cash flow statement , under which type of activity will you classify 'Payment of bonus to the employees'?

(vi) Under which type of activity , will you classify 'Interest paid on debentures' while preparing cash flow statement ?

(vii) Under which type of activity , will you classify 'Purchase of Building' while preparing cash flow statement ?

(viii) Under which type of activity , will you classify 'Refund of Income Tax received' while preparing cash flow statement ?

(ix) State whether "Short-term deposits in Bank" will result in inflow , outflow or no flow of cash.

(x) State whether 'old furniture written off' would result in inflow, outflow or no flow of cash.

[Ans:- (i) Outflow ,(ii) No flow, (iii) No flow , (iv) Inflow , (v) Operating , (vi) Financing, (vii) Investing, (viii) Operating ,(ix) No flow , (x) No flow .]

3. Answer the following questions in one sentence each :

(i) What is Cash Flow Statement ?

(ii) Under which Accounting Standard, Cash Flow Statement is prepared ?

(iii) State any one objective of Cash Flow Statement .

(iv) Write any one limitation of Cash Flow Statement .

(v) What do you mean by 'Cash Flows'?

(vi) What is meant by Cash Equivalents?

(vii) When does a cash flow arise ?

(viii) State any one example of Cash Equivalents.

(ix) What is meant by 'Operating Activities'?

(x) Give any on example of cash flow from operating activities .

(xi) What is 'Investing activities'?

(xii) State any one example of cash flow from investing activities .

(xiii) Give any one example of investing activity which results in inflow of cash .

(xiv) Give any one example of investing activity which results in outflow of cash.

(xv) What do you mean by ' Financing activities'?

(xvi) Give any one example of cash flows from financing activities .

(xvii) State any one example of financing activity which results in inflow of cash .

(xviii) Give any one example of financing activities that results in outflow of cash .

(xix) How do you treat 'depreciation' in calculating cash flows from operating activities?

(xx) How will you treat 'Interest on Debentures' while preparing a cash flow statement ?

(xxi) State why non-cash transactions are ignored while preparing a cash flow statement.

(xxii) Do you think that 'Bank Deposit' with 100 days of maturity will be included in cash and cash equivalents?

(xxiii) How do you treat 'profit or loss on sale of fixed assets' for calculating cash flows from operating activities ?

(xxiv) Why do we add back depreciation to net profit while calculating cash flows from operating activities ?

(xxv) How would you treat 'decrease in prepaid expenses' while calculating cash flows from operating activities ?

4. Correct the underlined portions of the following sentences:

(i) <u>Investing</u> activities are the main revenue generating activities of an enterprise .

(ii) In case of sale of fixed assets, inflow of cash is treated as <u>operating</u> activity.

(iii) <u>Investing</u> activities are the activities that result in change in capital and borrowings of the enterprise.

(iv) 'Interest paid on long-term borrowings' is an example of <u>operating</u> activity.

(v) Bank Overdraft is a short-term borrowing and is treated as <u>operating</u> activity.

(vi) 'Purchase of goodwill' is shown as outflow under 'Cash flows from <u>Financing</u> activities'.

(vii) Bank deposits with maturity period of six months or less are treated as cash equivalents.

(viii) The inflow of cash, when a fixed asset having book value of ₹ 20,000, is sold at a loss of ₹ 15,000, is ₹ 35,000.

(ix) Depreciation on fixed assets is added back to net profit while calculating cash flows from investing activities.

(x) 'Dividend Received' in case of a finance company is considered as an investing activity .

[Ans:- (i) Operating , (ii) Investing , (iii) Financing , (iv) Financing (v) Financing , (vi) Investing , (vii) Three , (viii) ₹ 5,000, (ix) Operating , (x) Operating .]

5. Fill up the blanks :

(i) Cash flow statement is prepared under Accounting Standard —— (Revised) .

(ii) Cash flows mean the inflows and outflows of cash and cash ——.

(iii) A cash flow arises when the net result of a transaction is either increase or decrease in —— or cash equivalents.

(iv) —— activities are the main revevue generating activities of an enterprise.

(v) ——— activities are in respect of purchase and sale of long-term assets .

(vi) ——— activities are those activities that result in changes in capital and borrowings of an enterprise.

(vii) In case of sale of fixed assets, inflow of cash arises in ——— activities.

(viii) Proceeds from sale of patents are classified under ——— activities.

(ix) Profit on sale of fixed assets is ——— from net profit while arriving at the cash flows from operating activities .

(x) Interest paid on debentures is added to net profit while calculating operating profit and will also be shown as outflow under ——— activities.

(xi) Bank deposit with maturity period of ——— months or less are treated as cash equivalent.

(xii) Dividend received in case of finance company, is considered as an —— activity

(xiii) Depreciation is ——— to net profit while calculating cash flows from operating activities .

(xiv) 'Purchase of goodwill' is shown as ——— under cash flows from investing activities.

(xv) ——— in outstanding expenses is added to operating profit while calculating cash flows from operating activities.

[Ans:- (i) 3, (ii) equivalents, (iii) cash , (iv) operating , (v) investing , (vi) financing , (vii) investing, (viii) investing , (ix) deducted , (x) financing , (xi) three ,(xii) operating , (xiii) added, (xiv) outflow, (xv) Increase.]

(6) Answer the following questions within 30 words:

(i) What is meant by 'Cash Flows?

(ii) What is 'Cash Flow Statement ?

(iii) What do you mean by 'Cash Equivalent'?

(iv) State any two features of Cash Flow Statement .

(v) Write any two advantages of Cash Flow Statement .

(vi) State any two limitations of Cash Flow Statement.

(vii) State any one point of distinction between cash flow statement and funds flow statement.

(viii) State any three transactions affecting cash flow statement.

(ix) What is 'Cash Flows from Operating Activities' ?

(x) What do you mean by 'Cash Flows from investing activities'?

(xi) What do you mean by 'Cash Flows from financing activities'?

(xii) Write any three transactions not affecting cash flow statement?

(xiii) State any three examples of operating activities.

(xiv) Write any three examples of investing activities.

(xv) Give any three examples of financing activities.

(xvi) How is ‘bad debt written off’ treated while calculating operating profit ?

(xvii) How will you treat amortisation of fictitious or intangible assets while calculating operating profit ?

(xviii) State any three examples of cash equivalents.

7. Answer the following questions within 50 words :

(i) Write any three objectives of Cash Flow Statement.

(ii) What do you mean by ‘Cash and Cash equivalents’?

(iii) State any three features of Cash Flow Statement.

(iv) Write any three advantages of cash flow statement.

(v) Write any three limitations of cash flow statement.

(vi) State any two points of distinction between cash flow statement and funds flow statement.

(vii) Give any five examples of operating activities.

(viii) Write any five examples of investing activities .

(ix) Give any five examples of financing activities.

(x) Write any five transactions which do not affect cash flow statement.

(xi) Explain in brief , the direct method of computation of flows from operating activities.

(xii) Write in brief, the indirect method of computation of cash flows from operating activities.

(xiii) How will you treat the amortisation of fictitious or intangible assets while calculating cash flows from operating activities ?

(xiv) How will you treat the changes in current assets and current liabilities while calculating cash flows from operating activities?

(xv) How will you treat ‘Prsovision for Tax’ while calculating cash flows from operating activities ?

(xvi) How will you treat 'proposed dividend' while preparing cash flow statement ?

8. What do you mean by 'Cash Flow Statement'? Describe its features .

9. Discuss the objectives of Cash Flow Statement.

10. Write the advantages and limitations of cash flow statement.

11. What are the differences between Cash Flow Statement and Funds Flow Statement ? Describe.

12. Write, in brief, the transactions affecting the cash flow statement.

13. Describe the direct method of computation of cash flows from operating activities.

14. Discuss the indirect method of computation of cash flows from operating activities.

15. Describe, in brief, the process of preparing cash flow statement.

16. How will you treat the following while preparing cash flow statement ?

   (a) Interest and dividend

   (b) Non-Cash transactions

   (c) Provision for taxation

   (d) Proposed dividend .

17. State which of the following transactions would result in inflow or outflow of cash and cash equivalents with reasons:

(i) Purchase of goods on credit.

(ii) Sale of goods costing ₹ 10,000 for ₹12,000 in cash .

(iii) Cash received from Sundry debtors ₹ 18,000, discount allowed ₹ 2,000.

(iv) Purchase of fixed asset on long-term deferred payment basis.

(v) Issue of shares against purchase of fixed assets.

(vi) Fixed assets sold (Book value ₹ 40,000) for ₹ 35,000.

(vii) Bills Receivable endorsed to Sundry Creditors .

(viii) Cash paid to creditor ₹ 5,000 , discount received ₹ 200.

(ix) Payment of interest on debentures.

(x) Cash deposited into bank .

(xi) Declaration of final dividend .

(xii) Declaration of interim dividend.

(xiii) Long-term Loan raised .

(xiv) Conversion of debentures into preference shares.

(xv) Interest due on debentures .

(xvi) Accrued interest received.

(xvii) Buy-back of Equity Shares.

(xviii) Payment for patent purchased.

(xix) Patent written off.

(xx) Sale of Marketable securities for cash .

[Ans- Inflow: (ii), (iii) ,(vi),

Outflow :(viii), (ix) ,(xii) ,(xvii), (xviii),

No effect: (i), (iv), (v), (vii), (x),(xi),(xiv),(xv), (xix), (xx)]

18. Classify the following into (a) Operating Activities , (b) Investing Activities, (c) Financing Activities, and (d) Cash and Cash Equivalents:

(i) Cash received from Trade Debtors.

(ii) Cash sales.

(iii) Issue of shares for cash.

(iv) Cash at Bank .

(v) Selling and distribution expenses.

(vi) Cash paid to Sundry Creditors.

(vii) Sale of machinery for cash.

(viii) Dividend paid.

(ix) Short-term deposits in bank .

(x) Income tax paid.

(xi) Rent paid.

(xii) Redemption of Preference shares.

(xiii) Interest paid on Debentures by a Finance Company .

(xiv) Sale of investment by a Finance Company .

(xv) Dividend received by a Finance Company .

(xvi) Rent received.

(xvii) Investment in Marketable Securities.

(xviii) Cash paid for services availed.

(xix) Income tax paid on gain on sale of buildings .

(xx) Payment of corporate dividend tax on dividend paid.

[Ans- (a) Operating Activities: (i),(ii), (v), (vi), (x), (xi), (xiii),(xiv),(xv),(xviii).

(b)Investing Activities: (vii), (xvi), (xix),

(c) Financing Activities: (iii), (viii), (xii), (xx).

(d) Cash and Cash Equivalents: (iv), (ix), (xvii)

19. Classify the following activities into (a) Operating Activities, (b) Investing Activities, and Financing Activities in case of (A) a Financial Enreprise and (B) a Non- Financial Enterprise:

(i) Purchase of Shares.

(ii) Sale of Shares.

(iii) Brokerage on purchase of shares.

(iv) Loans advanced .

(v) Devidend received on shares .

(vi) Salaries Paid .

(vii) Issue of debentures.

(viii) Dividend paid to shareholders.

(ix)Interest on debentures paid .

(x)Brokerage paid on sale of shares.

[Ans- (A) Operating activities – (i) to (vi), (ix),(x)

(B) Operating activities – (vi)

(A) Investing activities –Nil, (B) Investing activities – (i) to (v),(x)

(A) Financing activities – (vii),(viii), (B) Financing activities- (vii),(viii),(ix).]

20. Compute cash flows from operating activities from the following particulars using Direct Method:

	₹
Sales for the year	12,20,000
Purchases for the year	10,05,000
Trade creditors on 1.4.2015	92,000
Trade debtors on 1.4.2015	1,25,000
Trade creditors on 31.3.2916	86,000
Trade debtors on 31.3.2016	93,000
Salaries and other operating expenses	1,22,000
Prepaid expenses on 1.4.2015	5,000
Prepaid expenses on 31.3.2016	6,000
Outstanding expenses on 1.4.2015	12,000
Outstanding expenses on 31.3.2016	12,500
Income tax paid during the year	2,000

[Ans- Net cash flows from operating activities ₹ 16,500]

21. Compute cash flows from operating activities from the following information :

	₹
Cash Sales	3,25,500
Credit Sales	18,30,000
Cost of goods sold	18,25,000
Salaries and other operating expenses	1,95,000
Sundry Creditor on 1.4.2015	20,200
Sundry Creditor on 31.3.2016	22,300
Sundry Debtors on 1.4.2015	26,000
Sundry Debtors on 31.3.2016	27,500
Prepaid expenses on 1.4.2015	3,500
Prepaid expenses on 31.3.2016	5,000
Outstanding expanses on 1.4.2015	4,200
Outstanding expanses on 31.3.2016	6,300
Provision for Income Tax on 1.4.2015	3,000
Provision for Income Tax on 31.3.2016	4,000
Provision made for Income Tax	5,500
Stock on 1.4.2015	45,000
Stock on 31.3.2016	52,000
Bad debts recovered	5,600

[Ans- Net Cash flows from operating activities ₹ 1,30,800]

22. From the following particulars, calculate cash flows from operating activities :

	31.3.2015	31.3.2016
Liabilities :	₹	₹
Equity Share Capital	8,00,000	10,00,000
General Reserve	56,000	1,20,000
Statement of Profit and Loss	30,000	58,000
8% Debentures	1,50,000	1,50,000
Trade Creditors	50,000	60,000
	10,86,000	13,88,000
Assets:		
Land and Buildings (at cost)	7,00,000	9,50,000
Investments	1,50,000	2,00,000
Inventory	65,000	55,000
Sundry Debtors	72,000	85,000
Bills Receivable	23,000	28,000
Prepaid expenses	22,000	25,000
Cash in hand and at bank	54,000	45,000
	10,86,000	13,88,000

[Ans- Net cash flows from operating activities ₹ 1,03,000]

23. A limited company made a profit of ₹ 75,000 after charging depreciation ₹ 25,000, transfer to General Reserve ₹ 25,000, provision for tax ₹ 3,000 and writing off patents ₹ 5,000. Gain on sale of machinery of ₹ 2,500 was also shown as income in the statement of profit and loss. The other information in respect of changes in the value of current asssets and current liabilities were:

At the end of the year, sundry debtors showed a decrease of ₹ 2,000, sundry creditors a decrease of ₹ 1,500, prepaid expenses a decrease of ₹ 500 and outstanding expencese an increase of ₹ 2,000.

Calculate the cash flows from operating activities .

[Ans – Net Cash flows from operating activities ₹ 1,30,500 assuming income tax paid ₹ 3,000]

24. From the following Statement of Profit and Loss and additional information of A Ltd . for the year ended 31st March , 2016, calculate net cash flows from operating activities by indirect method :

Statement of Profit and Loss

	Particulars	₹
I.	Revenue from operations (sales)	18,00,000
II.	Expenses :	
	Purchases	9,00,000
	Changes in Inventories	90,000
	(Opening Inventories ₹ 4,50,000 – Closing Inventories ₹ 3,60,000)	
	Operating Expenses	5,40,000
	Total Expenses	15,30,000
III.	Profit before Tax (I-II)	2,70,000

Additional information :

(a) Sundry Debtors decreased by ₹ 54,000 during the year.

(b) Sundry Creditors deceased by ₹ 27,000 during the year.

(c) Operating expenses included depreciation of ₹ 45,000.

(d) Outstanding expenses increased by ₹ 5,400 during the year .

(e) Prepaid expenses increased by ₹ 9,000 during the year .

[Ans- Net cash flows from operating activities ₹ 4,28,400]

25.The net profit of B Ltd. for the year ended 31st March , 2016 was ₹ 3,50,000 . Depreciation charged for the year was ₹ 25,000. Profit for the year was arrived at after adjusting for gain of sale of furniture ₹ 1,500, loss on sale of plant ₹ 2,300 and writing off cost of issue of shares ₹ 12,000.

Other information :

	31.3.2016	31.3.2015
	₹	₹
Inventory	1,20,000	1,15,000
Sundry Debtors	2,50,000	2,45,000
Sundry Creditors	1,75,000	1,52,000
Prepaid Expenses	5,000	7,500
Outstanding Expenses	4,000	6,000
Bank overdraft	60,000	40,000
Cash in hand	25,000	20,000

Calculate cash flows from operating activities.

[Ans- Net cash flows from operating activities ₹ 4,01,300]

Hint – Bank overdraft is treated as financing activity .

26.Calculate cash flows from operating activities from the information given below:

	31.3.2015	31.3.2016
	₹	₹
Balance of Statement of Profit and Loss	4,50,000	3,60,000
Provision for Depreciation	1,80,000	2,10,000
Outstanding Expenses	25,000	20,000
Prepaid Expenses	18,000	20,000

Goodwill	50,000	40,000
Provision for Doubtful debts	15,000	22,000
Sundry Debtors	89,000	75,000
Sundry Creditors	60,000	78,000
Cash in hand and at Bank	20,000	12,000

[Ans – Net cash used in operating activities ₹ 18,000]

27.Moon Ltd. earned a profit after tax ₹ 5,75,000 for the year ended 31st March , 2016. The relevant items of balance sheet appeared as follows :

	31.3.2015	31.3.2016
	₹	₹
Sundry Debtors	45,000	62,000
Bills Receivable	25,000	32,000
Sundry Creditors	65,000	70,000
Bills Payable	35,000	41,000
Outstanding expenses	3,000	1,500
Prepaid expenses	–	2,200
Provision for taxation	12,000	33,000

Bad debts written off during the year ₹ 5,000,

Depreciation charged on fixed assets ₹ 41,000 and profit on sale of investments ₹ 10,000 appeared in Statement of Profit and Loss for the year ended 31st March ,2016.

You are required to calculate the cash flows from operating activities

[Ans- Net cash flows from operating activities ₹ 6,10,300]

28.Calculte Cash flows from operating activities from the following information by (a) Direct Method and (b) Indirect Method:

Statement of Profit and Loss for the year ended 31st March , 2016

	Particulars	Note No.	Amount (₹)
I.	Revenue from operations	1	5,60,000
II.	Other Incomes	2	7,000
III.	Total Revenue		5,67,000
IV.	Expenses :		
	Cost of Materials consumed		3,10,000
	Employees' benefits expenses		95,000
	Finance costs		15,200
	Depreciation and Amortisation Expenses	3	31,000
	Other expenses	4	25,000
			4,76,200
v.	Profit before Tax (III –IV)		90,800
	Tax paid		15,000
	Profit for the year		75,800

Notes :

1. Revenue from operations:

Sales	₹ 5,70,000
Less Returns	₹ 10,000
	₹ 5,60,000

2. Other Incomes :

Profit on sale of machinery	₹ 5,000
Interest received	₹ 2,000
	₹ 7,000

3.	Depreciation and Amortisation Expenses :	
	Depreciation	₹ 25,000
	Goodwill written off	₹ 6,000
		₹ 31,000
4.	Other Expenses:	
	Loss on sale of Furniture	₹ 8,000
	Office Expenses	₹ 17,000
		₹ 25,000

Additional information :	31.3.2015	31.3.2016
	₹	₹
Trade Debtors	65,000	73,000
Inventory	30,000	42,000
Sundry creditors	20,000	35,000
Office Expenses outstanding	2,000	1,500

[Ans- Net cash flow from operating activities ₹ 1,17,500]

29.Compute cash flows from operating activities from the following Balance Sheets and additional information :

Balance Sheets of X Ltd. as at 31st March, 2016 and 31st March , 2015

Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I. EQUITY AND LIABILITIES:			
1. Shareholders' Funds:			
Equity share capital		4,00,000	3,00,000
Reserves and Surplus	1	35,000	25,000

2.	Non-Current Liabilities :			
	Long-Term Borrowings	2	3,00,000	2,50,000
3.	Current Liabilities :			
	Trade creditors		30,000	15,000
	TOTAL		7,65,000	5,90,000
II.	ASSETS:			
1.	Non-Current Assets :			
	(a) Fixed Assets :			
	(i) Tangible Assets	3	5,70,000	4,20,000
	(ii) Intangible Assets	4	40,000	50,000
	(b) Non- Current Investments	5	75,000	50,000
2.	Current Assets :			
	Inventory		60,000	55,000
	Cash and Cash Equivalents		20,000	15,000
	TOTAL		7,65,000	6,90,000

Notes : 1. Reserves and Surplus :	31.3.2016	31.3.2015
	₹	₹
General Reserve	28,000	27,000
Statement of Profit and Loss	7,000	(2,000)*
* Bracket denotes negative balance.	35,000	25,000
2. Long-Term Borrowings :		
8% Debentures	3,00,000	2,50,000

3.	Tangible Assets :		
	Plant and Machinery	6,00,000	4,40,000
	Less Provision for Depreciation	30,000	20,000
		5,70,000	4,20,000
4.	Intangible Assets:		
	Good will	40,000	50,000

5. Rate of interest on Non-Current Investments is 10%.

Additional information:

Debentures of ₹ 50,000 were issued on 31.3.2016.

Investments of ₹ 25,000 were made on 31.3.2016

[Ans- Net Cash Flows from Operating activities ₹ 52,000]

30. Calculate cash flows from investing activities from the following particulars:

	Purchased	Sold
	₹	₹
Land and Buildings	5,00,000	2,20,000
Investments	2,70,000	2,50,000
Goodwill	20,000	–
Patents	–	80,000

Interest received on debentures held as investment ₹ 20,000.

Interest paid on debentures issued ₹ 5,000.

Dividend received on shares held as investment ₹ 32,000.

Dividend paid on equity shares issued ₹ 10,000.

A piece of land was purchased out of the surplus funds for investment purposes (included under investment) and was let out for commercial use and rent received ₹ 24,000.

[Ans- Net cash used in Investing activities ₹ 1,64,000]

Hint:- Interest paid on debentures issued and dividend paid on equity shares issued are not considered for calculating cash flows from investing activities as they relate to cash flows from financing activities .

31. Calculate the amount of cash flows from investing activities from the following information :

	31.3.2015	31.3.2016
	₹	₹
Plant and Machinery	10,50,000	12,70,000
Non-Current Investments	75,000	1,00,000
Land (at cost)	3,00,000	50,000

Additional information :

(i) Depreciation Charged on Plant and Machinery was ₹ 1,10,000.

(ii) Plant and Machinery with a book value of ₹ 30,000, was sold for ₹ 25,000.

(iii) Land was sold at a profit of ₹ 1,20,000.

[Ans- Net cash flows from Investing activities ₹ 10,000.]

32. Calculate cash flows from investing activities from the following information :

	31.3.2015	31.3.2016
	₹	₹
Plant and Machinery	20,00,000	32,00,000
Accumulated Depreciation	2,50,000	3,20,000

The Plant and Machinery costing ₹ 5,00,000 with accumulated depreciation thereon ₹ 3,50,000 was sold for ₹ 1,40,000.

[Ans :- Net cash used in Investing activities ₹ 15,60,000]

33. Calculate cash flows from Investing activities from the particulars given below :

	31.3.2015	31.3.2016
	₹	₹
Patents	2,20,000	1,50,000
Plant and Machinery	4,75,000	6,20,000
8% Long-Term Investments	1,00,000	1,50,000
Equity Shares of a company	50,000	50,000

Additional information :

1. Patents were written off to the extent of ₹ 22,000 and some patents were sold at a profit of ₹ 10,000.
2. A machine costing ₹ 75,000 (depreciation provided thereon ₹ 25,000) was sold for ₹ 40,000. Depreciation charged during the year was ₹ 70,000.
3. On 31.3.2016, 8% Investments were purchased at ₹ 70,000 and some investments were sold at a profit of ₹ 20,000. Interest on investments was received on 31.3.2016.
4. Dividend on equity shares was received @12%.

[Ans:- Net cash used in Investing activities ₹ 1,83,000]

34. Calculate cash flows from financing activities from the information given below :

	31.3.2016	31.3.2015
	₹	₹
Equity Share Capital	6,00,000	5,00,000
10% Preference Share Capital	–	50,000
12% Debentures	60,000	–

Additional information :

(i) Equity shares were issued at a premium of 10%.

(ii) 10% Preference Shares were redeemed at a premium of 5%. Such premium was provided for out of profit.

(iii) Interim dividend on equity shares was paid ₹ 40,000.

(iv) Dividend paid on Preference Shares before redemption ₹ 5,000.

(v) Interest on debentures paid ₹ 3,600.

(vi) Underwriting commission on issue of equity shares ₹ 5,000.

[Ans:- Net cash flows from financing activities ₹ 63,900]

35. From the following information, Calculate:

(a) cash flows from operating activities and (b) Cash flows from financing activities :

	31.3.2015	31.3.2016
	₹	₹
Equity Share Capital	8,50,000	10,00,000
10% Preference Share Capital	2,00,000	1,00,000
Securities Premium Reserve	60,000	75,000
8% Debentures	80,000	1,30,000
Discount on issue of Debentures	–	5,000
Underwriting commission on issue of Shares	–	6,000
Bank Overdraft	30,000	40,000
Statement of Profit and Loss	1,60,000	3,00,000

Additional information :

(i) Preference shares were redeemed on 1.4.2015 at a premium of 5% and such premium has been provided out of profits.

(ii) New shares and debentures were issued on 31.3.2016.

(iii) Dividend on Preference shares and Interim dividend @ 10% were paid on equity shares on 31.3.2016.

[Ans- (a) Net cash flows from Operating activities ₹ 2,46,400 (b) Net cash flows from Financing activities ₹ 7,600.]

36. Prepare a Cash Flow Statement from the following particulars:

	₹
Opening cash balance	5,200
Closing cash balance	20,300
Decrease in Inventory	15,000
Increase in Bills Payable	17,100
Sale of Fixed Assets	50,000
Repayment of Long-Term Loan	90,000
Net Profit for the year before Tax	23,000

[Ans- Net Cash Flows from Operating activities ₹ 55,100

Net Cash Flows from Investing activities ₹ 50,000

Net Cash used in Financing activities ₹ 90,000.]

37. Prepare a Cash Flow Statement of X Ltd. as per AS-3(Revised) using direct method for the year ended 31st March, 2016 from the summary of Cash Account given below:

Dr. **Summary of Cash Accounnt** **Cr.**

Particulars	₹	Particulars	₹
To Balance b/d (1.4.2015)	15,200	By Sundry Creditors	2,00,000
		By Fixed Assets (Purchase)	2,50,000
To Equity Share Capital	2,50,000	By Salaries	1,44,000
(Issue of shares)		By Other Operating expenses	30,200
To Sundry Debtors	3,80,000	By Income Tax	5,000

To Fixed Assets (Sale)	2,20,000	By Dividend	15,000
		By Bank Loan	1,70,000
		By Balance c/d (31.3.2016)	51,000
	8,65,200		8,65,200

The Company does not have any cash equivalent.

[Ans :- Net Cash Flows from operating activities ₹ 800

Net Cash used in investing activities ₹ 30,000

Net Cash Flows from financing activities ₹ 65,000]

38. You are required to prepare a Cash Flow Statement of Mr. B from the following particulars :

	31.3.2015	31.3.2016
Assets:	₹	₹
Cash in hand	5,000	12,000
Trade Debtors	60,000	75,000
Inventory	45,000	30,000
Plant and Machinery	1,00,000	75,000
Land and Buildings	2,80,000	3,50,000
	4,90,000	5,42,000
Liabilities :		
Trade Creditors	45,000	55,000
Mrs. X's Loan	30,000	–
Loan from Bank	2,10,000	2,60,000
Capital	2,05,000	2,27,000
	4,90,000	5,42,000

During the year 2015-16, a machine costing ₹ 25,000 (accumulated depreciation ₹ 18,000) was sold for ₹ 5,000. The accumlated depreciation on Plant and Machinary as on 31.3.2015 was ₹ 35,000 and on 31.3.2016 ₹ 45,000.

Net Profit for the year was ₹ 60,000.

[Ans:- Net Cash Flows from Operating Activities ₹ 1,00,000

Net cash used in Investing Activities ₹ 75,000

Net Cash used in Financing Activities ₹ 18,000]

39. You are required to prepare a cash flow statement from the following particulars :

	31.3.2015	31.3.2016
	₹	₹
Liabilities:		
Equity Share Capital	3,50,000	4,50,000
Securities Premium Reserve	–	20,000
General Reserve	30,000	50,000
Statement of Profit and Loss	45,000	75,000
8% Debentures	–	1,00,000
Sundry Creditors	60,000	80,000
Provision for Tax	20,000	30,000
Proposed Dividend	25,000	30,000
	5,30,000	8,35,000
Assets :		
Land and Buildings	2,60,000	3,40,000
Plant and Machinery	1,70,000	3,80,000
Furniture	20,000	30,000
Inventory	7,500	10,000

Sundry Debtors	60,000	70,000
Cash in hand and at bank	12,500	5,000
	5,30,000	8,35,000

Additional information :

Depreciation written off during the year:

Land and Buildings	₹ 20,000
Plant and Machinery	₹ 30,000
Furniture	₹ 7,200

8% Debentures were issued on 31.3.2016.

[Ans- Net Cash Flows from operating activities ₹ 1,49,500

Net Cash used in investing activities ₹ 3,52,000

Net Cash Flows from financing activities ₹ 1,95,000]

40. Prepare a cash flow statement for the year 2015-16 from the following particulars:

	31.3.21015	31.3.2016
Liabilities :	₹	₹
Equity share capital	2,50,000	4,00,000
10% Redeemable Preference share capital	2,00,000	1,50,000
General Reserve	35,000	65,000
Statement of Profit and Loss	20,000	45,000
Sundry Creditors	28,000	59,000
Bills Payable	25,000	17,000
Proposed Dividend	25,000	40,000
Provision for Tax	10,000	15,000
	5,93,000	7,91,000

Assets:		
Goodwill	75,000	50,000
Land and Buildings	1,80,000	1,70,000
Plant	1,20,000	3,00,000
Sundry Debtors	85,000	1,00,000
Bills Receivable	35,000	45,000
Inventory	60,000	90,000
Cash in hand	20,000	15,000
Cash at bank	18,000	21,000
	5,93,000	7,91,000

Additional information :

(i) Depreciation of ₹ 10,000 on Land and Buildings and ₹ 15,000 on Plant was charged during the year 2015-16.

(ii) Interim dividend of ₹ 20,000 has been paid during the year 2015-16.

(iii) During the year, income tax of ₹ 20,000 has been paid.

(iv) Preference shares were redeemed on 31.3.2016

[Ans- Net cash flows from Operating activities ₹ 1,58,000

Net cash used in Investing activities ₹ 1,95,000

Net cash flows from Financing activities ₹ 35,000]

Hint : Dividend on Preference shares ₹ 20,000 and since dividend on Equity shares has been paid, dividend on preference shares also must have been paid prior to dividend on Equity shares.

41. From the following information , prepare a cash flow statement for the year ended 31st March , 2016:

Liabilities :

	31.3.2015	31.3.2016
	₹	₹
Equity Share Capital	3,50,000	4,00,000
General Reserve	60,000	75,000
Statement of Profit and Loss	35,000	40,000
Long-Term Loan	50,000	–
Sundry Creditors	85,000	72,000
Provision for Tax	25,000	32,000
	6,05,000	6,19,000

Assets ;

	31.3.2015	31.3.2016
Goodwill	–	20,000
Land and Buildings	2,20,000	2,10,000
Machinery	1,70,000	1,77,500
Inventory	1,31,000	1,17,500
Sundry Debtors	62,000	52,000
Cash in hand	1,000	2,000
Cash at Bank	21,000	40,000
	6,05,000	6,19,000

Additional information :

(i) Dividend of ₹ 35,000 was paid during the year 2015-16.

(ii) Assets of another company were purchased for a consideration of ₹ 50,000 payable by issue of equity shares. The following assets were purchased :

Inventory ₹ 10,000

Machinery ₹ 20,000.

(iii) Machinery was further purchased for ₹ 10,000.

(iv) Depreciation written off on Machinery ₹ 20,000

(v) Income tax provided during the year 2015-16 ₹ 25,000.

(vi) Loss on sale of Machinery ₹ 500 was written off to General Reserve.

[Ans- Net Cash Flows from Operating activities ₹ 1,13,000

Net Cash used in Investing activities ₹ 8,000

Net Cash used in Financing activities ₹ 85,000]

42. Prepare a cash flow statement on the basis of the information given in the Balance Sheet of P Ltd. as at 31st March, 2016.

Balance Sheet

	Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I.	EQUITY AND LIABILITIES :			
1.	Shareholders' funds :			
(a)	Share Capital		4,50,000	4,00,000
(b)	Reserves and Surplus	1	2,00,000	50,000
2.	Non-Current Liabilities :			
	Long-term Borrowings		1,50,000	1,50,000
3.	Current Liabilities :			
	Trade Creditors	2	80,000	50,000
	TOTAL		8,80,000	6,50,000

II.	ASSETS:		
1.	Non-Current Assets :		
(a)	Fixed Assets :		
	Tangible Assets :	4,00,000	1,80,000
(b)	Non-Current Investments	1,10,000	1,00,000
2.	Current Assets :		
(a)	Current Investments	80,000	1,20,000
(b)	Inventories	2,50,000	2,20,000
(c)	Cash in hand and at bank	40,000	30,000
	TOTAL	8,80,000	6,50,000

Notes to Accounts :

		31.3.2016	31.3.2015
1.	Reserves and surplus :	₹	₹
	General Reserve	1,40,000	70,000
	Statement of Profit and Loss	60,000	(-)20,000
		2,00,000	50,000
2.	Trade Creditors :		
	Sundry Creditors	55,000	18,000
	Bills Payable	25,000	32,000
		80,000	50,000

Additional information :

1. Depreciation provided on tangible assets during the year 2015-16 was ₹ 20,000.
2. Interest paid on long-term borrowing was ₹ 15,000.

[Ans- Net cash flows from operating activities ₹ 1,85,000

Net cash used in Investing activities ₹ 2,50,000

Net cash flows from financing activities ₹ 35,000]

Hint – Current Investments are treated as cash and cash equivalents.

43. Following is the Balance Sheet of X Ltd. as at 31st March, 2016:

Balance Sheet

Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I. EQUITY AND LIABILITIES:			
1. Shareholders' Funds:			
(a) Share Capital		7,00,000	5,00,000
(b) Reserves and Surplus	1	2,35,000	(-)50,000
2. Non-Current Liabilities :			
Long-term Borrowings	2	3,50,000	3,00,000
3. Current Liabilities :			
(a) Trade Creditors		80,000	60,000
(b) Short-term Provisions	3	45,000	30,000
TOTAL		14,10,000	8,40,000
II. ASSETS:			
1. Non-Current Assets :			
(a) Fixed Assets	4	7,10,000	2,60,000
(b) Non-Current Investments		2,50,000	1,00,000
2. Current Assets:			
(a) Current Investments		80,000	1,50,000
(b) Inventories		2,90,000	2,70,000

(c)	Trade Debtors	45,000	50,000
(d)	Cash in hand and at bank	35,000	10,000
	TOTAL	14,10,000	8,40,000

Notes to Accounts :		31.3.2016	31.3.2015
1.	Reserves and Surplus :	₹	₹
	Securities Premium Reserve	20,000	–
	Statement of Profit and Loss	2,15,000	(-) 50,000
		2,35,000	(-)50,000
2.	Long-term Borrowings:		
	10% Debentures	3,50,000	3,00,000
3.	Short-term Borrowings :		
	Provision for Doubtful Debts	35,000	30,000
	Provision for Repairs	10,000	–
		45,000	30,000
4.	Fixed Assets:		
	Fixed Assets	7,70,000	3,00,000
	Less Accumulated Depreciation	60,000	40,000
		7,10,000	2,60,000

Additional information :

1. Dividend paid during 2015- 16 was ₹ 50,000.
2. Non –Current Investment costing ₹ 50,000 were sold at a profit of 20%.
3. Fixed Assets costing ₹ 80,000 (accumulated depreciation thereon ₹ 10,000) were sold for ₹ 75,000.
4. Additional debentures amounting to ₹ 50,000 were issued at par on 1.10.2015. Interest on debentures has been paid regularly.

Prepare a cash flow statement.

[Ans – Net cash flows from Operating activities ₹ 3,82,500

Net cash used in Investing activities ₹ 6,15,000

Net Cash Flows from Financing activities ₹ 1,87,500]

Hint:- Current Investments are treated as cash and cash equivalents.

44. Prepare Cash Flow Statements from the following Balance Sheet of A Ltd . as at 31st March , 2016:

Balance Sheet

	Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I.	EQUITY AND LIABILITIES :			
1.	Shareholders' Funds:			
(a)	Share Capital		5,00,000	3,50,000
(b)	Reserves and Surplus	1	3,50,000	1,50,000
2.	Current Liabilities :			
(a)	Short-term Borrowings	2	45,000	30,000
(b)	Trade Creditors	3	1,20,000	75,000
	TOTAL		10,15,000	6,05,000
II.	ASSETS:			
1.	Non-Current Assets :			
	Fixed Assets		6,00,000	3,75,000
2.	Current Assets :			
(a)	Inventories		1,70,000	1,25,000
(b)	Trade Debtors	4	1,60,000	90,000
(c)	Cash and Cash Equivalents		85,000	15,000
	TOTAL		10,15,000	6,05,000

Notes to Accounts :		31.3.2016	31.3.2015
		₹	₹
1.	Reserves and Surplus :		
	General Reserve	1,70,000	80,000
	Statement of Profit and Loss	1,80,000	70,000
		3,50,000	1,50,000
2.	Short-term Borrowings :		
	Bank Overdraft	45,000	30,000
3.	Trade Creditors :		
	Sundry Creditors	90,000	40,000
	Bills Payable	30,000	35,000
		1,20,000	75,000
4.	Trade Debtors :		
	Sundry Debtors	75,000	75,000
	Bills Receivable	85,000	15,000
		1,60,000	90,000

Additional information :

1. Depreciation in Fixed Assets for the year 2015-16 was ₹ 45,000
2. Income tax of ₹ 10,000 was paid during the year 2015 -16.

[Ans- Net Cash Flows from Operating activities ₹ 1,75,000

Net Cash used in Investing activities ₹ 2,70,000

Net Cash Flows from Financing activities ₹ 1,65,000]

Hint: Bank overdraft is treated as financing activity .

45. Following is the Balance Sheet of Z Ltd. as at 31.3.2016 :

Balance Sheet

	Particulars	Note No.	31.3.2016 ₹	31.3.2015 ₹
I.	**EQUITY AND LIABILTIES :**			
1.	Shareholders' Funds :			
(a)	Share Capital		4,00,000	3,00,000
(b)	Reserves and Surplus	1	(-) 80,000	(-) 20,000
2.	Non-Current Liabilities :			
	Long-term Borrowings	2	1,50,000	1,00,000
3.	Current Liabilities :			
(a)	Short-term Borrowings	3	20,000	32,000
(b)	Sundry Creditors		38,000	30,000
(c)	Other Current Liabilities	4	25,000	20,000
	TOTAL		5,53,000	6,42,000
II.	ASSETS:			
1.	Non-Current Assets:			
(a)	Fixed Assets		3,00,000	2,50,000
(b)	Non –Current Investments		65,000	95,000
2.	Current Assets:			
(a)	Inventory		90,000	80,000
(b)	Trade Debtors		85,000	25,000
(c)	Cash and Cash Equivalents		13,000	12,000
	TOTAL		5,53,000	4,62,000

Notes to Accounts:

		31.3.2016	31.3.2015
1.	Reserves and Surplus :	₹	₹
	Balance of Profit and Loss Statement	(-) 80,000	(-) 20,000
2.	Long-term Borrowings :		
	10% Debentures	1,50,000	1,00,000
3.	Short-term Borrowings :		
	Cash Credit	20,000	32,000
4.	Other Current Liabilities :		
	Outstanding Expenses	25,000	20,000

Additional information :

(i) Fixed Assets included machinery costing ₹ 75,000 on which depreciation of ₹ 55,000 charged, was sold for ₹ 25,000. During the year 2015-16, depreciation was charged on Fixed Assets amounting to ₹ 80,000.

(ii) Expenses on issue of shares of ₹ 6,000 were incurred and written off from the Statement of Profit and Loss during 2015-16.

Prepare a Cash Flow Statement.

[Ans- Net Cash used in operating activities ₹ 26,000

Net Cash used in Investing activities ₹ 95,000

Net Cash flows from financing activities ₹ 1,22,000]

Hints :- 1. It is assumed that 10% Debentures of ₹ 50,000 have been issued on 31.3.2016.

2.Cash Credit is treated as financing activity.

46. You are required to prepare a Cash Flow Statement from the following Balance Sheets of Mr. X :

Balance Sheets

Liabilities	31.3.2015 ₹	31.3.2016 ₹	Assets	31.3.2015 ₹	31.3.2016 ₹
Capital	7,10,000	5,20,000	Fixed Assets	6,20,000	5,90,000
Sundry Creditors	80,000	1,10,000	Inventories	80,000	10,000
Outstanding Expenses	–	25,000	Sundry Debtors	1,05,000	40,000
Bank Overdraft	50,000	–	Cash in hand	5,000	2,000
			Cash at Bank	30,000	13,000
	8,40,000	6,55,000		8,40,00	6,55,000

Additional information :

1. No drawings was made and no fresh capital was introduced during the year 2015-16.
2. There was neither any purchase nor sale of fixed assets during the year 2015-16.

[Ans:- Net Cash flows from Operating activities ₹ 30,000

Net Cash flows / used in Investing activities Nil

Net Cash used in Financing activities ₹ 50,000]

Hints:-

Hints :- 1. Decrease in capital is treated as net loss.

2.Bank overdraft is treated as financing activity.

47. You are required to prepare a Cash Flow Statement from the following Balance Sheets of A and B:

Balance Sheets

Liabilities	31.3.2015 ₹	31.3.2016 ₹	Assets	31.3.2015 ₹	31.3.2016 ₹
Sundry Creditors	1,60,000	1,80,000	Cash in hand	15,000	12,000
Mrs. A's Loan	80,000	–	Sundry Debtors	92,000	1,08,000
Bank Loan	1,30,000	2,00,000	Inventories	1,05,000	95,000
Capital	4,62,000	5,45,000	Plant and Machinery	3,20,000	2,10,000
			Land	1,00,000	1,50,000
			Building	2,00,000	3,50,000
	8,32,000	9,25,000		8,32,000	9,25,000

During the year 2015-16, a machine costing ₹ 65,000 (accumulated depreciation thereon ₹ 22,000) was sold for ₹ 35,000. The Provision for depreciation against Plant and Machinery as on 31.3.2015 and 31.3.2016 were of ₹ 65,000 and ₹ 1,10,000 respectively. Total amount of interest paid during the year 2015-16 was ₹ 20,500. Net profit for the year 2015-16 amounted to ₹ 93,000.

[Ans:- Net Cash flows from Operating activities ₹ 2,02,500

Net Cash used in Investing activities ₹ 1,65,000

Net Cash used in Financing activities ₹ 40,500]

Hint : Drawings ₹ 10,000.

48. Prepare Cash Flow Statement from the following particulars :

	31.3.2015 ₹	31.3.2016 ₹
Cash in hand	25,000	75,000
Trade Debtors	85,000	60,000
Stock-in-trade	75,000	90,000

Plant and Machinery	3,50,000	3,20,000
Land and Buildings	1,20,000	2,10,000
	6,55,000	7,55,000
Trade Creditors	2,10,000	2,60,000
Bank Loan	1,00,000	80,000
Mr. M's Capital	3,45,000	4,15,000
	6,55,000	7,55,000

Additional information :

1. During the year 2015-16 Mr. M withdrew ₹ 5,000 per month for his personal use.
2. Plant and Machinery costing ₹ 65,000 (accumulated depreciation thereon ₹ 20,000) was sold for ₹ 40,000.
3. Depreciation on Plant and Machinery charged during the year 2015-16 was ₹ 45,000.
4. Interest on Bank Loan paid during the year 2015-16 was ₹ 10,000.

[Ans:- Net Cash flows from Operating activities ₹ 2,50,000

Net Cash used in Investing activities ₹ 1,10,000

Net Cash used in Financing activities ₹ 90,000.]