H.D Jain College, Arrah

BBA

Dr. MANJARI SINHA

(M. Com, MBA, PhD)

UNIT 1 MEANING AND SCOPE OF ACCOUNTING

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1.0 INTRODUCTION

The role of the accountant has undergone a revolutionary change with the passage of time. Traditionally, accounting was considered solely a historical description of financial activities. This view is no longer acceptable. Accounting is now considered a service activity and an important tool of management for decision making. The present unit attempts to analyse the role of accounting and the accountant keeping this perspective in view.

1.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Appreciate the need of accounting
- Perceive the development of accounting
- Explain the meaning of accounting
- Name the persons interested in accounting disclosures
- Identify the objectives of accounting
- Explain the relationship of accounting with other disciplines
- Appreciate the role of the accountant in society

1.2 ACCOUNTING: THE LANGUAGE OF BUSINESS

Accounting has rightly been termed as the language of business. The basic function of a language is to serve as a means of communication. Accounting also serves this function. It communicates the result of business operations to various parties who have some stake in the business viz., the proprietor, creditors, investors, Government and other agencies. Though accounting is generally associated with business, it is not only business which makes use of accounting. Persons like housewives, Government and other individuals also make use of accounting. For example, a housewife has to keep a record of the money received and spent by her during a particular period. She can record her receipts of money on one page of her "household diary", while payments for different items such as milk, food, clothing, house, education etc. on some other page or pages of her diary in a chronological order. Such a record will help her in knowing about:

(i) The sources from which she received cash and the purposes for which it was utilised.
(ii) Whether her receipt are more than her payments or vice-versa?
(iii) The balance of cash in hand or deficit, if any at the end of a period.

In case the housewife records her transactions regularly, she can collect valuable information about the nature of her receipts and payments. For example, she can find out the total amount spent by her during a period (say a year) on different items, say milk, food, education, entertainment, etc. Similarly she can find the sources of her receipts such as salary of her husband, rent from property, cash gifts from her near relations, etc. Thus, at the end of a period (say a year) she can judge her financial position i.e. what she owns and what she owes. This will help her in planning her future income and expenses (or making out a budget) to a great extent.

The need for accounting is all the more greater for a person who is running a business. He know: (*i*) What he owns, (*ii*) What he owes, (*iii*) Whether he has earned a profit or suffered a loss on account of running a business, (*iv*) What his is financial position, i.e. whether he will be in a position to meet all his commitments in the near future or he is in the process of becoming a bankrupt.

1.3 DEVELOPMENT OF ACCOUNTING

Accounting is as old as money itself. In India, Chanakya in his *Arthashastra* has emphasized the existence and need of proper accounting and auditing. However, the modern system of accounting owes its origin to Pacoili, who lived in Italy in the 18th century. In those early days the business organizations and transactions were not so complex due to their being small and easily manageable by the proprietor himself. Things have changed fastly during the last fifty years. The advent of industrial revolution resulted in large-scale production, cut-throat competition and widening of the market. This also reduced the effectiveness of personal supervision, resulting in the decentralisation of authority and responsibility. Today there is a greater need for co-ordination and control. The old technique of management by intuition is no longer considered dependable in the situation in which the modern firm operates. Accounting today, therefore, cannot be the same as it used to be about half a century back. It has also grown in importance and change in its structure with the evolution of complex and giant industrial organizations. In the early stages accounting developed as a result of the need of the business firms to keep track of their relationship with outsiders, listing of their assets and liabilities. In recent years changes in technology have also brought a remarkable change in the field of accounting. The whole concept of accounting has changed. "It has come to be recognized as a tool for mastering the various economic problems which a business organization may have to face. It systematically writes the economic history of the organization. It provides information that can be drawn upon by those responsible for decisions affecting the organization's future. This history is written mostly in quantitative terms. It consists partly of files of data, partly of reports summarising various portions of these data, and partly of the plans established by management to guide its operations."[1]

1.4 DEFINITION AND FUNCTIONS OF ACCOUNTING

From the above discussion it is clear that over a period of time the concept of accounting and the role of the accountant has undergone a revolutionary change. The change has been particularly noticeable during the last fifty years.

Earlier accounting was considered simply as a process of recording business transactions and the role of accountant as that of a record-keeper. However, accounting is now considered to be a tool of management providing vital information concerning the organization's future. Accounting today is thus more of an information system rather than a mere recording system.

It will be useful here to give in a chronological order the definitions given by some of the well-established accounting bodies which show how the concept of accounting has undergone a change over a period of time.

In 1941, the American Institute of Certified Public Accountants (AICPA) defined accounting as follows:

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

In 1966, the American Accounting Association (AAA) defined accounting as follows:

"Accounting is the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information."

In 1970, the Accounting Principles Board (APB) of the American Institute of Certified Public Accountants (AICPA) enumerated the functions of accounting as follows:

"The function of accounting is to provide quantitative information, primarily of financial nature, about economic entities, that is needed to be useful in making economic decisions."

[1] Mryon J. Gordon Shillinglaw, "*Accounting: A Management Approach*", p.3, 4th edition.

Thus, accounting may be defined as the process of recording, classifying, summarising, analysing and interpreting the financial transactions and communicating the results thereof to the persons interested in such information.

An analysis of the definition brings out the following functions of accounting:

1. **Recording.** This is the basic function of accounting. It is essentially concerned with not only ensuring that all business transactions of financial character are in fact recorded but also that they are recorded in an orderly manner. Recording is done in the book "Journal". This book may be further sub-divided into various subsidiary books such as Cash Journal (for recording cash transactions), Purchases Journal (for recording credit purchase of goods), Sales Journal (for recording credit sales of goods), etc. The number of subsidiary books to be maintained will be according to the nature and size of the business.

2. **Classifying.** Classification is concerned with the systematic analysis of the recorded data, with a view to group transactions or entries of one nature at one place. The work of classification is done in the book termed as "Ledger". This book contains on different pages individual account heads under which all financial transactions of similar nature are collected. For example, there may be separate account heads for Travelling Expenses, Printing and Stationery, Advertising etc. All expenses under these heads after being recorded in the Journal will be classified under separate heads in the Ledger. This will help in finding out the total expenditure incurred under each of the above heads.

3. **Summarising.** This involves presenting the classified data in a manner which is understandable and useful to the internal as well as external end-users of accounting statements. This process leads to the preparation of the following statements:

(*i*) Trial Balance, (*ii*) Income Statement, and (*iii*) Balance Sheet.

4. **Dealing with financial transactions.** Accounting records only those transactions and events in terms of money which are of a financial character. Transactions which are not of a financial character are not recorded in the books of account. For example, if a company has got a team of dedicated and trusted employees, it is of great use to the business but since it is not of a financial character and capable of being expressed in terms of money, it will not be recorded in the books of the business.

5. **Analysing and Interpreting.** The recorded financial data is analysed and interpreted in a manner that the end-users can make a meaningful judgement about the financial condition and profitability of the business operations. The data is also used for preparing the future plan and framing of policies for executing such plans.

A distinction here can be made between the two terms—'Analysis' and 'Interpretation'. The term 'Analysis' means methodical classification of the data given in the financial statements. The figures given in the financial statements will not help one unless they are put in a simplified form. For example, all items relating to 'Current Assets' are put at one place while all items relating to 'Current Liabilities' are put at another place. The term 'Interpretation' means explaining the meaning and significance of the data so simplified.

However both 'Analysis' and 'Interpretation' are complementary to each other. Interpretation requires Analysis, while Analysis is useless without Interpretation.

6. **Communicating.** The accounting information after being meaningfully analysed and interpreted has to be communicated in a proper form and manner to the proper person. This is done through preparation and distribution of accounting reports, which include, besides the usual income statement and the balance sheet, additional information in the form of accounting ratios, graphs, diagrams, funds flow statements, cash flow statements, etc. The initiative, imagination and innovative ability of the accountant are put to test in this process.

1.5 BOOK-KEEPING AND ACCOUNTING

Some people take book-keeping and accounting as synonymous terms, but they are different from each other. Book-keeping is mainly concerned with recording of financial data relating to the business operations in a significant and orderly manner. A book-keeper may be responsible for keeping all the records of a business or only of a minor segment, such as a position of the Customers' accounts in a departmental store. A substantial portion of the book-keeper's work is of a clerical nature and is increasingly being accomplished through the use of mechanical and electronical devices.

Accounting is primarily concerned with designing the systems for recording, classifying and summarising the recorded data and interpreting them for internal and external end-users. Accountants often direct and review the work of the book-keepers. The larger the firm, the greater is the responsibility of the accountant. The work of an accountant in the beginning may include some book-keeping. An accountant is required to have a much higher level of knowledge, conceptual understanding and analytical skill than what is required for a book-keeper.

The difference between book-keeping and accounting can be well understood with the help of the following example:

If *A* sells goods to *B* on credit, the only fundamental principle involved is of "dual aspect" and to give a true picture of the transaction, both the aspects must be considered. On the one hand, *A* has lost one asset i.e. good and

on the other hand, he has obtained another asset i.e. a "debt due from *B*". The book-keeper should debit *B*'s account in *A*'s books and credit the sales account. However, if at the end of a year, *A* has got some stock of goods with him, they should be properly valued in order to ascertain the true profit of the business. The principle to be followed in valuing the stock and many adjustments that will have to be made before the books of account can be closed and true profit or loss can be ascertained, are all matters of accounting. Thus, book-keeping is more of a routine work and a book-keeper, if instructed properly, can record the routine transactions quite efficiently even if he does not know much about accounting principles.

1.6 IS ACCOUNTING A SCIENCE OR AN ART?

Any organized knowledge based on certain basic principles is a 'science'. Accounting is also a science. It is an organized knowledge based on scientific principles which have been developed as a result of study and experience. Of course, accounting cannot be termed as a "perfect science" like physics or chemistry where experiments are carried out and perfect conclusions drawn. It is a social science depending much on human behaviour and other social and economic factors. Thus, perfect conclusions cannot be drawn. Some people therefore, though not very correctly, do not take accounting as a science.

Art is the technique which helps us in achieving our desired objective. Accounting is definitely an art. The American Institute of Certified Public Accountants also defines accounting as "the art of recording, classifying and summarising the financial transactions". Accounting helps in achieving our desired objective of maintaining proper accounts, i.e., to know the profitability and the financial position of the business, by maintaining proper accounts.

1.7 END-USERS OF ACCOUNTING INFORMATION

Accounting is of primary importance to the proprietors and the managers. However, other persons such as creditors, prospective investors, employees, etc. are also interested in the accounting information.

1. **Proprietors.** A business is done with the objective of making profit. Its profitability and financial soundness are, therefore, matters of prime importance to the proprietors who have invested their money in the business.

2. **Managers.** In a sole proprietary business, usually the proprietor is the manager. In case of a partnership business either some or all the partners participate in the management of the business. They, therefore, act both as managers as well as owners. In case of joint stock companies, the relationship between ownership and management becomes all the more remote. In most cases the shareholders act merely as renters of capital and the management of the company passes into the hands of professional managers. The accounting disclosures greatly help them in knowing about what has happened and what should be done to improve the profitability and financial position of the enterprise in the period to come.

3. **Creditors.** Creditors are the persons who have extended credit to the company. They are also interested in the financial statements because they will help them in ascertaining whether the enterprise will be in a position to meet its commitment towards them both regarding payment of interest and principal.

4. **Prospective Investors.** A person who is contemplating an investment in a business will like to known about its profitability and financial position. A study of the financial statements will help him in this respect.

5. **Government.** The Government is interested in the financial statements of business enterprise on account of taxation, labour and corporate laws. If necessary, the Government may ask its officials to examine the accounting records of a business.

6. **Employees.** The employees are interested in the financial statements on account of various profit sharing and bonus schemes. Their interest may further increase in case they purchase shares of the companies in which they are employed.

7. **Citizen.** An ordinary citizen may be interested in the accounting records of the institutions with which he comes in contact in his daily life, e.g., bank, temple, public utilities such as gas, transport and electricity companies. In a broader sense, he is also interested in the accounts of a Government Company, a public utility concern etc., as a voter and a tax payer.

CHECK YOUR PROGRESS

1. State whether each of the following statement is "True or False"
   - (a) Accounting is the language of business.
   - (b) Accounting can be useful only for recording business transactions.
   - (c) Accounting records only transactions which are of a financial character.
   - (d) Book-keeping and accounting are synonymous terms.
   - (e) Accounting is as old as money itself.

1.8 ACCOUNTING AND OTHER DISCIPLINES

Accounting is closely related with other disciplines. It is, therefore, necessary for the accountant to have a working knowledge of these disciplines for effective performance of his job. The relationship between accounting and some of the other disciplines is discussed in the following pages:

Accounting and Economics

Economics is concerned with rational decision making regarding efficient use of scarce resources for satisfying human wants. The efficient utilisation of resources, particularly when they are scarce, is important both from the viewpoint of a business firm and of the country as a whole.

Accounting is considered to be a system which provides appropriate information to the Management for taking rational decisions. Of course, some non-accounting information is also useful for decision making. However, accounting provides a major and dependable data base for decision making. The basic objective of management of a business organization is to maximise the wealth of its owners. This is also the objective of economics. Efficient use of scarce resources results in maximising the wealth of the nation. Thus, accounting and economics both have a similarity in the sense that both seek optimum utilisation resources of the firm or the nation, as the case may be. Moreover, accountants have got the ideas such as value of assets, income, capital maintenance etc. from economists. Of course, accountants have suitably adapted these ideas keeping in view their own requirements and limitations. For instance, according to economists the value of an asset is the present value of all future earnings that can be derived from the asset. However, it is a real difficult or almost impossible task for one to estimate correctly future earnings, particularly when an asset has a very long life—say 50 years or more. Accountants have therefore adopted a realistic basis for valuation of asset—the cost or the price paid for the acquisition of the asset. Similarly, the accountant's concept of marginal cost is different from the economist's concept of marginal cost. According to the accountants the marginal cost represents the variable cost, i.e., the cost which varies in direct proportion of output. Such cost remains fixed per unit of output. However, according to the economists the marginal cost refers to the cost of the producing one additional unit. Such cost per unit may increase or decrease depending upon the law of returns. For example in the case of the law of increasing returns, the cost per unit would decrease while in the case of the law of decreasing returns, the cost per unit would increase.

Accounting and Statistics

Statistics is the science of numbers. It is concerned with numerical data as well as various statistical techniques which are used for collection, classification, analysis and interpretation of such data. The statistical techniques are now increasingly used for managerial decision making.

Accounting is an important information tool. It provides significant information about the working of a business firm to the outsiders viz. shareholders, creditors, financial institutions, etc. and the insiders, i.e., the management.

Accounting has a close relationship with statistics. A number of statistical techniques are used in collection, analysis and interpretation of the accounting data. For instance, computation of accounting ratios is based on statistical methods particularly averaging. Similarly the technique of regression is being increasingly used for forecasting, budgeting and cost control. The techniques of standard deviation and co-efficient of variation are used for capital budgeting decisions. The technique of index numbers is used for the computation of the present value of an asset in case of accounting for price level changes.

Accounting and Mathematics

Accounting bears a close relationship with mathematics too. As a matter of fact the dual aspect concept which is the basic concept of accounting is expressed in the form of a mathematical equation. It is popularly termed as "accounting equation". The knowledge of mathematics is now considered to be a prerequisite for accounting computations and measurements. For example, computation of depreciation, ascertaining the cash price in case of hire-purchase and instalment systems, determination of the loan instalment, settling of lease rentals—all require the use of mathematical techniques.

The introduction of the computer in accounting has further increased the importance of mathematics for accountants. Accountants are now increasingly making use of statistics and econometric models for decision making. The use of the technique of operation research has made accounting all the more mathematical. In view of these developments, it would not be incorrect to say that a good accountant has to be a good mathematician too.

Accounting and Law

A business entity operates within a legal framework. An accountant records, classifies, summarizes and presents the various transactions. Naturally these transactions have to be in accordance with the rules and regulations applicable to such business

entities. There are laws which are applicable in general to all business transactions, e.g., the Indian Contract Act, the Sale of Goods Act, the Negotiable Instruments Act, etc. There are laws governing specific business entities, e.g., the Companies Act is applicable to joint stock companies, the Banking Regulation Act is applicable to banking companies, the Insurance Act is applicable to insurance companies etc. While preparing the accounts of different business entities, the accountant has to be keep in mind the specific provisions provided by the specific Acts which are applicable to the specific business entities. Similarly, there are a number of industrial laws such as the Factories Act, the Payment of Wages Act, the Minimum Wages Act, the Employees Provident Fund and Misc. Provisions Act, etc. governing payment of wages, salaries or other benefits to employees. The accountant has to abide by the provisions of these Acts and prepare and maintain appropriate records keeping in mind their provisions.

CHECK YOUR PROGRESS

2. The prime function of accounting is to:
   (a) record economic data
   (b) provide the informational basis for action
   (c) classifying and recording business transactions
   (d) attain non-economic goals.
3. The basic function of financial accounting is to:
   (a) record all business transactions
   (b) interpret the financial data
   (c) assist the management in performing functions effectively
4. Management Accounting provides invaluable services to management in performing:
   (a) all management functions.
   (b) interpreting the financial data.
   (c) controlling functions.
5. Book-keeping is mainly concerned with:
   (a) recording of financial data relating to business operations
   (b) designing the systems in recording classifying, summarising the recorded data
   (c) interpreting the data for internal and external end users

1.9 ROLE OF ACCOUNTANT

Accountants are the persons who practice the art of accounting. The Accounting System and the Accountants who maintain it, provide useful services to the Society. Accountants can broadly be classified into two categories:

1. Accountants in Public Practice
2. Accountants in Employment

Accountants in Public Practice

Accountants in public practice offer their services for conducting financial audits, cost audits, designing of accounting systems and rendering other professional services for a fee. Such accountants are usually members of professional bodies. In our country there are two recognised professional bodies for this purpose. They are (*i*) the Institute of Chartered Accountants of India and (*ii*) the Institute of Cost and Works Accountants of India.

The accountants in public practice are also known as professional accountants. Such accountants are the members of professional accounting bodies. These accounting bodies usually require their members to do the following:

(i) Get themselves trained in the prescribed manner over a prescribed period.
(ii) Pass the examination conducted by the professional bodies.
(iii) Undertake to observe the generally accepted accounting principles enunciated by the professional bodies concerned.
(iv) Observe the Code of Ethics laid down by the concerned accounting body.
(v) Subject themselves to disciplinary proceedings whenever it is alleged that the member has violated the Code of Ethics laid down by the concerned body.

Accountants in Employment

These are accountants who are employed in non-business entities or business entities. Non-business entities are a diverse set of organizations including Educational Institutions, Government, Churches, Museums, Hospitals, etc. Their object is not to earn profit. The accountants employed by business entities are frequently called Management Accountants since they report to, and are part of the entity's management. These accountants provide information for the tax returns, of the business, budgeting, routine operating decisions, investment decisions, performance evaluation and external financial reporting. Most of these accountants are also members of a professional Accounting Body, though this is not necessary.

Accountants' Services

The services rendered by accountants to society can be summarised as follows:

1. **Maintenance of Books of Accounts**. An accountant keeps a systematic record of the transactions entered by a business firm or an institution in the normal course of its operation. This helps the organization in ascertaining the profit or loss made for a particular period and also the financial position of the organization as on a particular date.

The advantages derived through maintenance of a systematic record of all transactions can be summarised as follows:

(a) *Help to Management*. Accounting is an important managerial tool since it provides the management with adequate information for its effective functioning. The basic functions of the management are planning, controlling, co-ordinating, motivating and communicating.

Accounting helps the management in planning by making available the relevant data after pruning and analysing it suitably for effective planning and decision-making.

Controlling involves evaluation of performance keeping in view that the actual performance coincides with the planned one and remedial measures are taken in the event of variation between the two. The techniques of budgeting control, standard costing and departmental operating statements greatly help in performing these functions.

Co-ordinating involves interlinking different divisions of the business enterprise in a way so as to achieve the objectives of the organization as a whole. Thus, perfect coordination is required among production, purchase, finance, personnel and sales departments. Effective coordination is achieved through departmental budgets and reports which form the nucleus of Management Accounting.

Motivating involves maintenance of a high degree of morale in the organization. Conditions should be such that each person gives his best to realize the goals of the enterprise. The superior should be in a position to find out whom to promote or demote or to reward or penalise. Periodical departmental profit and loss accounts, budgets and reports go a long way in achieving these objectives.

Communicating involves transmission of data results etc., both to the insiders as well as the outsiders. Accounting provides information both to the insiders, i.e., management and the outsiders i.e. the creditors, prospective investors, shareholders, etc.

(b) *Replacement of memory*. A person cannot remember everything about his business transactions since human memory has its own limitations. It is, therefore, necessary that the transactions are recorded in the books of account at the earliest. This considerably relieves the strain on one's memory.

(c) *Comparative study*. A system of recording the business transactions will help a business entity to make a comparative study and evaluation of its performance.

(d) *Acceptance by tax authorities*. Properly maintained accounting records are accepted by Income Tax or Sales Tax authorities.

(e) *Evidence in court*. Properly maintained accounting records are often taken as good evidence by the court of law.

(f) *Sale of business*. Properly maintained accounting records will help a business entity to fetch a proper price in the event of sale of the business.

2. **Auditing of Accounts**. The function of auditing is also performed by accountants. Auditing is concerned with verification of accounting data for determining the accuracy and reliability of accounting statements and reports. It may be classified into two categories:

(i) Statutory Audit, and

(ii) Internal Audit.

Statutory Audit. Statutory Audit is required to be done because of the provisions of law. For example, under the Companies Act every company has to get its accounts audited by a qualified Chartered Accountant. The Statutory Auditor has to report whether in his opinion the profit and loss account shows the true profit or loss for the year and the balance sheet shows a true and fair view of the state of affairs of the business on the balance sheet date.

Internal Audit. Internal audit is a review of various operations of the company of its records by the staff specially appointed for this purpose. Many large organizations have a system of internal audit within the organization as an integral

part of internal control. They have a separate internal audit department for this purpose. Generally the internal audit department is also headed by a professionally qualified accountant.

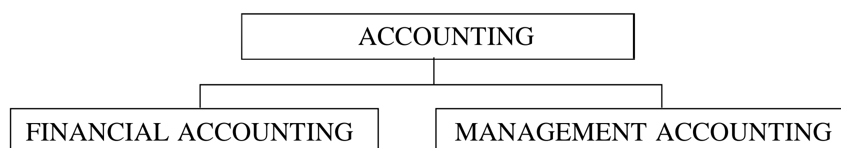
3. **Taxation.** Accountants also handle the taxation matters of a person or a business organization. Since an accountant has comprehensive knowledge about different accounting matters, he is in a position to present the case of his client before the Tax Authorities in the proper perspective. He also assists his client/organization in reducing the tax burden and proper tax planning.

4. **Financial Services.** An accountant, being familiar with legal, accounting and taxation matters, can properly advise individual firms with regard to managing their financial affairs. For instance, he can assist his clients in selecting the most appropriate investment or insurance policy. Professional accountants these days have also started management consultancy services. Such services include designing of Management Information Systems, Corporate Planning, Conducting of Feasibility Studies, Executive Selection Services, etc.

In conclusion it can be said that the accountant is almost a caretaker of the society's resources. He not only sees that proper accounting is kept of the society's resources, but they are also used in the optimum manner. As a matter of fact, accountants will be presented with many opportunities for innovative actions in the global economic environment. In addition to their role of recording business transactions, providing accurate, timely and relevant information, they will also be expected to participate as business consultants and partners with management in the strategic planning process. Thus, there are tremendous possibilities for the accountants to shine as a professional group in the years to come. To fit into this role it is necessary that accountants develops effective communication abilities, adopt a structured approach, flexible accommodation and keep themselves aware with the latest evolving technologies in the profession.

1.10 BRANCHES OF ACCOUNTING

In order to satisfy needs of different people interested in accounting information, different branches of accounting have developed. They can broadly be classified into two categories:



(i) **Financial Accounting.** It is the original form of accounting. It is mainly confined to the preparation of financial statements for the use of outsiders like shareholders, debenture holders, creditors, banks and financial institutions. The financial statements, i.e., the Profit and Loss Account and the Balance Sheet, show them the manner in which operations of the business have been conducted during a specified period.

(ii) **Management Accounting.** It is accounting for the management, i.e., accounting which provides necessary information to the management for discharging its functions. According to the Chartered Institute of Management Accountants, London, "management accounting is the application of professional information in such a way as to assist the management in the formation of policies and in the planning and control of the operations of the undertaking." It covers all arrangements and combinations or adjustments of the orthodox information to provide the Chief Executive with the information from which he can control the business, e.g., information about funds, costs, profits, etc.

Management accounting covers various areas such as cost accounting, budgetary control, inventory control, statistical methods, internal auditing etc.

1.11 DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

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

1. **Objectives.** Financial accounting is designed to supply information in the form of Profit and Loss Account and Balance Sheet to external parties like shareholders, creditors, banks, investors and Government. Information is supplied periodically and is usually such in which the management is not much interested. Management accounting is designed principally for internal use by the management.

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

3. **Data used.** Financial accounting is concerned with the monetary record of past events. It is a post-mortem analysis of past activity and therefore out of date for management action. Management accounting is an accounting for future and, therefore, it supplies detailed and analysed data both for the present and the future in "management language", so that it becomes a basis for management action.

4. **Monetary measurement.** In financial accounting only such economic events find a place which can be described in money. However the management is equally interested in non-monetary economic events, viz. technical innovations, personnel in the organization, changes in the value of money, etc. These events affect the management's decision and therefore management accounting cannot afford to ignore them. For example, a change in the value of money may not find a place in financial accounting on account of "growing concern concept", but while effecting an insurance policy on an asset or providing for replacement of an asset, the management will have to take this factor into account.

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

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

7. **Nature.** Financial accounting is more objective while management accounting is more subjective. This is because management accounting is fundamentally based on judgement rather than on measurement.

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

The above points of difference between financial accounting and management accounting prove that management accounting has a flexible approach as compared to the rigid approach in the case of financial accounting. In brief, financial accounting simply shows how the business has moved in the past while management accounting shows how the business has to move in the future.

1.12 IMPORTANCE OF ACCOUNTING

Accounting has gained immense importance due to increase in the size of business, divorce of ownership from management and increase in the globalization and competition. It has now become an important information tool providing recourse to various individuals for groups about the economic activities of the organization. It is the means by which most business information is communicated to different stakeholders, viz., owners, creditors, employees, prospective investors etc. The importance of accounting can be judged from the following services provided by accounting:

1. **It keeps systematic records.** Accounting is done to keep a systematic record of financial transactions. In the absence of accounting there would be a terrific burden on human memory which, in most cases, would be impossible to bear.

2. **It protects business properties.** Accounting provides protection to business properties from unjustified and unwarranted use. This is possible on account of accounting supplying the following information to the manager or the proprietor:

(i) The amount of the proprietor's funds invested in the business

(ii) How much the business has to pay to others

(iii) How much the business has to recover from others

(iv) How much the business has in the form of (*a*) fixed assets, (*b*), cash in hand, (*c*) cash in the bank, (*d*) stock of raw materials, work-in-progress and finished goods

Information about the above matters helps the proprietor in assuming that the funds of the business are not unnecessarily kept idle or underutilised.

3. **It ascertains the operational profit or loss.** Accounting helps in ascertaining the net profit earned or loss suffered. This is done by keeping a proper record of revenues and expenses of a particular period. The Profit and Loss Account is prepared at the end of a period and if the amount of revenue for the period is more than the expenditure incurred in earning that revenue, there is said to be a profit. In case the expenditure exceeds the revenue, there is said to be a loss.

The Profit and Loss Account will help the management, investors, creditors, etc. in knowing whether running of the business has proved to be remunerative or not. In case it has not proved to be remunerative or profitable, the cause of such a state of affairs will be investigated and necessary remedial steps will be taken.

4. **It ascertains the financial position of business.** The Profit and Loss Account gives the amount of profit or loss made by the business during a particular period. However, it is not enough. The businessman must know about his financial position, i.e., where he stands, what he owes and what he owns? These objectives are served by the Balance Sheet or Position Statement. The Balance Sheet is a statement of assets and liabilities of the business on a particular date. It serves as a barometer for ascertaining the financial health of the business.

5. **It facilitates rational decision making.** Accounting these days has taken upon itself the task of collection, analysis and reporting of information at the required points of time to the required levels of authority in order to facilitate rational decision making. The American Accounting Association has also stressed this point while defining the term 'accounting' when it says that accounting is, "the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information." Of course, this is by no means an easy task. However, accounting bodies all over the world and particularly the International Accounting Standards Committee, have been trying to grapple with this problem and have achieved success in laying down some basic postulates on the basis of which the accounting statements have to be prepared. These postulates have been explained in the next unit.

1.13 SUMMARY

- The concept of accounting and the role of the accountant have undergone a revolutionary change. Accounting, today is more of an information system than a mere recording system.
- Accounting is considered to be both a science and an art.
- Accounting is closely related with other disciplines like economics, statistics, law, financial management etc.
- Accounting aims at providing enough information necessary for the stakeholders to know the profitability and financial position of the business. It also facilitates rational decision making by the management.

1.14 KEY TERMS

- **Accounting**: The process of identifying, measuring and communicating economic information to permit informed judgements and decisions by the users of information.
- **Financial Accounting**: The art of recording, classifying and summarising in a significant manner and in terms of money, transactions and events which are at least in part of a financial character and interpreting the results.
- **Management Accounting**: The presenting of accounting information in such a way as to assist management in the creation of the policy and in the day-to-day operation of the undertaking.

1.15 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (a) T, (b) F, (c) T, (d), F, (e) T
2. (c)
3. (a)
4. (a)
5. (a)

1.16 QUESTIONS AND EXERCISES

1. Define Accounting. State its functions. How does it differ from book-keeping?
2. State the persons who should be interested in accounting information.
3. Explain the role of the accountant in the present-day economy.
4. Why is accounting regarded as an aid to management?

1.17 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 2 ACCOUNTING PRINCIPLES AND STANDARDS

Structure

2.0 Introduction
2.1 Unit Objectives
2.2 Meaning of Accounting Principles
2.3 Accounting Concepts
2.4 Accounting Conventions
2.5 Indian Accounting Standards
2.6 Systems of Book-Keeping
2.7 Systems of Accounting
2.8 Summary
2.9 Key Terms
2.10 Answers to 'Check Your Progress'
2.11 Questions and Exercises
2.12 Practical Problems
2.13 Further Reading

2.0 INTRODUCTION

It has already been stated in Unit 1 that accounting is the language of business through which a business house normally communicates with the outside world. In order to make this language intelligible and commonly understood by all, it is necessary that it should be based on certain uniform and scientifically laid down standards. These standards are termed as accounting principles. The present unit deals with such principles. They are known by different names such as concepts, postulates, prepositions, basic assumptions, underlying principles, fundamental rules, etc. Different authors have given them loose and overlapping meanings. For the purpose of this unit, we are putting them as accounting principles.

2.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Explain the meaning of accounting principles
- Differentiate between accounting concepts and conventions
- Appreciate the importance of different accounting concepts and conventions
- Name the accounting standards issued by the Institute of Chartered Accountants of India
- Describe the different systems of accounting

2.2 MEANING OF ACCOUNTING PRINCIPLES

Accounting principles[1] may be defined as those rules of action adopted by accountants universally while recording accounting transactions. "They are a body of doctrines commonly associated with the theory and procedures of accounting, serving as an explanation of current practices and as a guide for selection of conventions or procedures where alternatives exist." These principles can be classified into two categories:

(i) Accounting Concepts[2]
(ii) Accounting Conventions

Accounting Concepts

The term 'concepts' includes those basic assumptions or conditions upon which the science of accounting is based. The following are the important accounting concepts:

(i) Separate Entity Concept
(ii) Going Concern Concept
(iii) Money Measurement Concept
(iv) Cost Concept
(v) Dual Aspect Concept

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[1] Also termed as 'Accounting Standards'.
[2] Also termed as 'Accounting Postulates'.

(vi) Accounting Period Concept
(vii) Periodic Matching of Cost and Revenue Concept
(viii) Realisation Concept

Accounting Conventions

The term 'conventions' includes those customs or traditions which guide the accountant while preparing the accounting statements. The following are the important accounting conventions.

(i) Convention of Conservatism
(ii) Convention of Full Disclosure
(iii) Convention of Consistency
(iv) Convention of Materiality

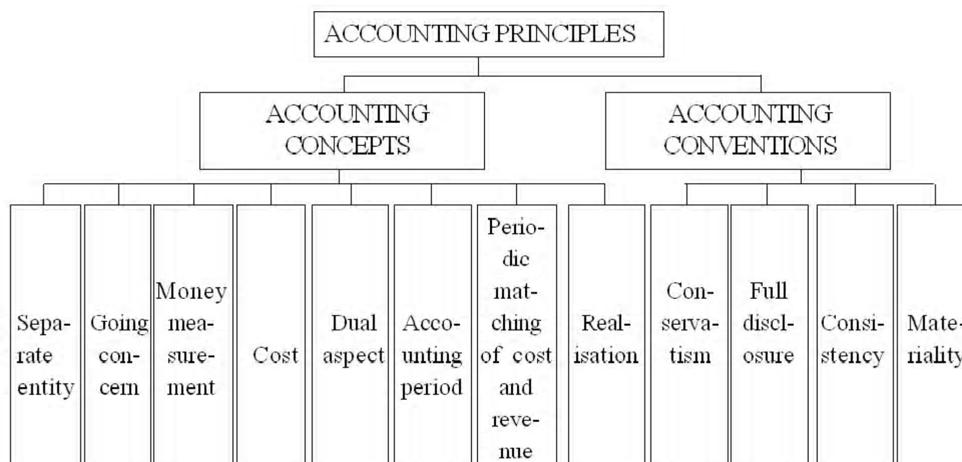

Fig. 2.1 *Accounting Conventions*

Each of the above concepts and conventions are being explained below.

2.3 ACCOUNTING CONCEPTS

1. **Separate entity concept.** In accounting business is considered to be a separate entity from the proprietor(s). It may appear to be ludicrous that one person can sell goods to himself but this concept is extremely helpful in keeping business affairs strictly free from the effect of private affairs of the proprietor(s). Thus, when one person invests Rs 10,000 in business, it will be deemed that the proprietor has given that much money to the business which will be shown as a 'liability' in the books of the business. In case the proprietor withdraws Rs 2,000 from the business, it will be charged to him and the net amount payable by the business will be shown only as Rs 8,000.

The concept of separate entity is applicable to all forms of business organizations. For example, in case of a partnership business or sole proprietorship business, though the partners or sole proprietor are not considered as separate entities in the eyes of law, but for accounting purposes they will be considered as separate entities.

2. **Going concern concept**. According to this concept it is assumed that the business will continue for a fairly long time to come. There is neither the intention nor the necessity to liquidate the particular business venture in the foreseeable future. On account of this concept, the accountant, while valuing the assets, does not take into account the forced sale value of assets. Moreover, he charges depreciation on fixed assets on the basis of their expected lives rather than on their market value.

It should be noted that the 'going concern concept' does not imply permanent continuance of the enterprise. It rather presumes that the enterprise will continue in operation long enough to charge against income, the cost of fixed assets over their useful lives, to amortize over an appropriate period other costs which have been deferred under the actual or matching concept, to pay liabilities when they become due, and to meet contractual commitments. Moreover, the concept applies to the business as a whole. When an enterprise liquidates a branch or one segment of its operations, the ability of the enterprise to continue as a going concern is normally not impaired.

The enterprise will not be considered as a going concern when it has gone into liquidation or it has become insolvent. Of course, the receiver or the liquidator may endeavour to carry on business operations for some period pending arrangement with the creditors or final buyer for the sale of the business as a going concern. The going concern status of the concern will stand terminated from the date of his appointment or will be at least regarded as suspended, pending the results of his efforts.

3. **Money measurement concept**. Accounting records only monetary transactions. Events or transactions which cannot be expressed in money do not find place in the books of accounts though they may be very useful for the business. For example, if a business has got a team of dedicated and trusted employees, it is definitely an asset to the business but since their monetary measurement is not possible, they are not shown in the books of the business.

Measurement of a business event in money helps in understanding the state of affairs of the business in a much better way. For example, if a business owns Rs 10,000 of cash, 600 kg of raw materials, two trucks, 1,000 square feet of building space etc., these amounts cannot be added together to produce a meaningful total of what the business owns. However, if these items are expressed in monetary terms such as Rs 10,000 of cash, Rs 12,000 of raw materials, Rs 2,00,000 of trucks and Rs 50,000 of building, all such items can be added and a much more intelligible and precise estimate about the assets of the business will be available.

4. **Cost concept**. The concept is closely related to going concern concept. According to this concept:

(a) an asset is ordinarily entered in the accounting records at the price paid to acquire it, and

(b) this cost is the basis for all subsequent accounting for the assets.

If a business buys a plot of land for Rs 50,000, the asset would be recorded in the books at Rs 50,000 even if its market value at that time happens to be Rs 60,000. In case, a year later, the market value of this asset comes down to Rs 40,000, it will ordinarily continue to be shown at Rs 50,000 and not at Rs 40,000.

The cost concept does not mean that the asset will always be shown at cost. It has also been stated above that cost becomes the basis for all future accounting for the asset. It means that the asset is recorded at cost at the time of its purchase, but it may systematically be reduced in its value by charging depreciation.

The cost concept has the advantage of bringing objectivity into the preparation and presentation of financial statements. In the absence of this concept the figures shown in the accounting records would have depended on the subjective views of a person. However, on account of continued inflationary tendencies, the preparation of financial statements on the basis of historical costs, has become largely irrelevant for judging the financial position of the business. This is the reason for the growing importance of inflation accounting.

5. **Dual aspect concept.** This is the basic concept of accounting. According to this concept every business transaction has a dual effect. For example, if *A* starts a business with a capital of Rs 10,000, there are two aspects of the transaction. On the one hand the business has an asset of Rs 10,000, while on the other hand the business has to pay to the proprietor a sum of Rs 10,000 which is taken as proprietor's capital. This expression can be shown in the form of following equation:

Capital (Equities) = Cash (Assets)

10,000 = 10,000

The term 'assets' denotes the resources owned by a business while the term 'Equities' denotes the claims of various parties against the assets, Equities are of two types. They are: owners' equity and outsiders' equity. Owners' equity (or capital) is the claim of owners against the assets of the business while outsiders' equity (for liabilities) is the claim of outside parties, such as creditors, debenture-holders etc., against the assets of the business. Since all assets of the business are claimed by someone (either owners or outsiders), the total assets will be equal to the total liabilities, Thus:

Equities = Assets

or Liabilities + Capital = Assets

In the example given above, if the business purchases furniture worth Rs 5,000 out of the money provided by *A*, the situation will be as follows:

Equities = Assets

Capital Rs 10,000 = Cash Rs 5,000 + Furniture Rs 5,000

Subsequently, if the business borrows Rs 30,000 from a bank, the new position would be as follows:

Equities = Assets

Capital Rs 10,000 + Bank Loan Rs 30,000 = Cash 35,000 + Furniture Rs 5,000.

The term 'accounting equation' is also used to denote the relationship of equities to assets. The equation can be technically stated as "for very debit, there is an equivalent credit". As a matter of fact the entire system of double entry book-keeping is based on this concept. This has been explained in detail later in the chapter.

6. **Accounting period concept**. According to this concept, the life of the business is divided into appropriate segments for studying the results shown by the business after each segment. This is because though the life of the business is considered to be indefinite (according to going concern concept), the measurement of income and studying the financial position of the business after a very long period would not be helpful in taking proper corrective steps at the appropriate time. It is, therefore, absolutely necessary that after each segment or time interval the businessman must 'stop' and 'see back', how things are going. In accounting, such a segment or time interval is called 'accounting period'. It is usually of a year.

At the end of each accounting period an Income Statement and a Balance Sheet are prepared. The Income Statement discloses the profit or loss made by the business during the accounting period while the Balance Sheet depicts the financial

position of the business as on the last day of the accounting period. While preparing these statements a proper distinction has to be made between capital and revenue expenditure.

7. **Periodic matching of costs and revenue concept**. This is based on the accounting period concept. The paramount objective of running a business is to earn profit. In order to ascertain the profit made by the business during a period, it is necessary that 'revenues' of the period should be matched with the costs (expenses) of the period. The term matching, means appropriate association of related revenues and expenses. In other words income made by the business during a period can be measured only when the revenue earned during a period is compared with the expenditure incurred for earning that revenue. The question when the payment was received or made is 'irrelevant'. For example, if a salesman is paid commission in January, 1999, for sales made by him in December, 1998, the commission paid to the salesman in January, 1999 should be taken as the cost for sales made by him in December, 1998. This means that revenues of December, 1998 (*i.e.*, sales) should be matched with the costs incurred for earning that revenue (*i.e.*, salesman's commission) in December, 1998 (though paid in January, 1999). On account of this concept, adjustments are made for all outstanding expenses, accrued incomes, prepaid expenses and unearned incomes, etc., while preparing the final accounts at the end of the accounting period.

8. **Realisation concept**. According to this concept revenue is recognised when a sale is made. Sale is considered to be made at the point when the property in goods passes to the buyer and he becomes legally liable to pay. This can be well understood with the help of the following example:

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

However, there are certain exceptions to this concept:

(i) In case of hire-purchase, the ownership of the goods passes to the buyer only when the last instalment is paid, but sales are presumed to have been made to the extent of instalments received and instalments outstanding (*i.e.* instalments due but not received).

(ii) In case of contracts accounts though, the contractor is liable to pay only when the whole contract is completed as per terms of the contract; the profit is calculated on the basis of work certified year after year as per certain accepted accounting norms.

CHECK YOUR PROGRESS

1. State whether each of the following statement is 'True' or 'False':

(a) Accounting principles are rules of action or conduct which are adopted by the accountants universally while recording accounting transactions.

(b) It is on the basis of the going concern concept that the assets are always values at market price.

(c) The convention of disclosure implies that all material information should be disclosed in the accounts.

(d) The convention of conservatism takes into account all prospective profits but leaves all prospective losses.

(e) Since the life of the business is assumed to be indefinite, the financial statements of the business should be prepared only when it goes into liquidation.

(f) In accounting all business transactions are recorded as having a dual aspect.

2.4 ACCOUNTING CONVENTIONS

1. **Conservatism**. In the initial stages of accounting, certain anticipated profits which were recorded, did not materialise. This resulted in less acceptability of accounting figures by the end-users. On account of this reason, the accountants follows the rule 'anticipate no profit but provide for all possible losses', while recording business transactions. In other words, the accountant follows the policy of "playing safe". On account of this convention, the inventory is valued "at cost or market price whichever is less". Similarly a provision is made for possible bad and doubtful debts out of the current year's profits. This concept affects principally the category of current assets.

The convention of conservatism has become the target of serious criticism these days especially on the ground that it goes against the convention of full disclosure. It encourages the accountant to create secret reserves (*e.g.*, by creating excess provision for bad and doubtful debts, depreciation etc.), and the financial statements do not deficit a true and fair view of state of affairs of the business. The Income Statement shows a lower net income; the Balance Sheet understates assets and overstates liabilities.

The research studies conducted by the American Institute of Certified Public Accountants have indicated that the conservatism concept needs to be applied with much more caution and care if the results reported are not to be distorted.

2. **Full disclosure**. According to this convention accounting reports should disclose fully and fairly the information they purport to represent. They should be honestly prepared and sufficiently disclose information which is of material interest to proprietors, present and potential creditors and investors. The convention is gaining more importance because most big businesses are run by joint stock companies where ownership is divorced from management. The Companies Act, 1956, not only requires that the Income Statement and Balance Sheet of a company must give a true and fair view of the state of affairs of the company but also gives the prescribed forms in which these statements are to be prepared.[1] The practice of appending notes to the accounting statements (such as about contingent liabilities or market value of investments) is in pursuant to the convention of full disclosure.

3. **Consistency**. According to this convention accounting practices should remain unchanged from one period to another. For example, if stock is valued at “cost or market price whichever is less”, this principle should by followed year after year. Similarly, if depreciation is charged on fixed assets according to the diminishing balance method, it should be done year after year. This is necessary for the purposes of comparison. However, consistency does not mean inflexibility. It does not forbid introduction of improved accounting techniques. However, if adoption of such a technique results in inflating or deflating the figures of profit as compared to the previous period, a note to that effect should be given in the financial statements.

4. **Materiality**. According to this convention the accountant should attach importance to material details and ignore insignificant details. This is because otherwise accounting will be unnecessarily overburdened with minute details. The question of what constitutes a material detail, is left to the discretion of the accountant. Moreover, an item may be material for one purpose while immaterial for another. For example, while sending each debtor “a statement of his account”, complete details have to be given. However, when a statement of outstanding debtors is prepared for sending to the top management, figures may be rounded to the nearest ten or hundred. The Companies Act also permits ignoring of ‘paise’ while preparing financial statements. Similarly for tax purposes, the income has to be rounded to nearest ten.

Thus, the term ‘materiality’ is a subjective term. The accountant should regard an item as material if there is reason to believe that knowledge of it would influence the decision of the informed investor. According to Kohler, “Materiality means the characteristic attaching to a statement, fact or item whereby its disclosure or method of giving it expression would be likely to influence the judgement of a reasonable person.”

It should be noted that accounting is a man-made art designed to help man in achieving certain objectives. “The accounting principles, therefore, cannot be derived from or proven by laws of nature. They are rather in the category of conventions or rules developed by man from experience to fulfill the essential and useful needs and proposes in establishing reliable financial and operating information control for business entities. In this respect, they are similar to principles of commercial and other social disciplines.”

2.5 INDIAN ACCOUNTING STANDARDS

In order to bring about uniformity in terminology, approach and presentation of accounting results, the Institute of Chartered Accountants of India established on 22nd April, 1977, an Accounting Standards Board (ASB). The main function of the ASB was to formulate accounting standards so that such standards would be established by the Council of the Institute of Chartered Accountants. While formulating the accounting standards, the ASB was to give due consideration to the International Accounting Standards and try to integrate them to the extent possible. It was also to take into consideration the applicable laws, customs, usages and the business environments prevailing in India.

2.5.1 Preface to the Statements of Accounting Standards (Revised 2004)

The following are the specific features of the Preface to the Statements of Accounting Standards (Revised 2004), issued by the Council of the Institute of Chartered Accountants of India. With the issuance of this revised Preface, the Preface to the Statements of Accounting Standards, issued in January 1979, stands superseded.

1. Formation of the Accounting Standards Board

(1) The Institute of Chartered Accountants of India (ICAI), recognising the need to harmonise the diverse accounting policies and practices in use in India, constituted the Accounting Standards Board (ASB) on 21st April, 1977.

[1] American Institute of Certified Public Accountants, “Inventory of Generally Accepted Principles for Business Enterprises.”

(2) The composition of the ASB is fairly broad-based and ensures participation of all interest-groups in the standard-setting process. Apart from the elected members of the Council of the ICAI nominated on the ASB, the following are represented on the ASB:

(i) Nominee of the Central Government representing the Department of Company Affairs on the Council of the ICAI

(ii) Nominee of the Central Government representing the Office of the Comptroller and Auditor General of India on the Council of the ICAI

(iii) Nominee of the Central Government representing the Central Board of Direct Taxes on the Council of the ICAI

(iv) Representative of the Institute of Cost and Works Accountants of India

(v) Representative of the Institute of Company Secretaries of India

(vi) Representatives of Industry Associations 1 from Associated Chambers of Commerce and Industry (ASSOCHAM), 1 from Confederation of Indian Industry (CII) and 1 from Federation of Indian Chambers of Commerce and Industry (FICCI)

(vii) Representative of Reserve Bank of India

(viii) Representative of Securities and Exchange Board of India

(ix) Representative of Controller General of Accounts

(x) Representative of Central Board of Excise and Customs

(xi) Representatives of Academic Institutions (1 from Universities and 1 from Indian Institutes of Management)

(xii) Representative of Financial Institutions

(xiii) Eminent professionals co-opted by the ICAI (they may be in practice or in industry, government, education, etc.)

(xiv) Chairman of the Research Committee and the Chairman of the Expert Advisory Committee of the ICAI, if they are not otherwise members of the Accounting Standards Board

(xv) Representative(s) of any other body, as considered appropriate by the ICAI

2. Objectives and Functions of the Accounting Standards Board

The following are the objectives of the Accounting Standards Board:

(i) To conceive of and suggest areas in which Accounting Standards need to be developed

(ii) To formulate Accounting Standards with a view to assisting the Council of the ICAI in evolving and establishing Accounting Standards in India

(iii) To examine how far the relevant International Accounting Standard/International Financial Reporting Standard can be adapted while formulating the Accounting Standard and to adapt the same

(iv) To review, at regular intervals, the Accounting Standards from the point of view of acceptance or changed conditions, and, if necessary, revise the same

(v) To provide, from time to time, interpretations and guidance on Accounting Standards

(vi) To carry out such other functions relating to Accounting Standards

The Accounting Standards are issued under the authority of the Council of the ICAI. The ASB has also been entrusted with the responsibility of propagating the Accounting Standards and of persuading the concerned parties to adopt them in the preparation and presentation of financial statements. The ASB will provide interpretations and guidance on issues arising from Accounting Standards. The ASB will also review the Accounting Standards at periodical intervals and, if necessary, revise the same.

3. General Purpose Financial Statements

(1) For discharging its functions, the ASB will keep in view the purposes and limitations of financial statements and the attest function of the auditors. The ASB will enumerate and describe the basic concept to which accounting principles should be oriented and state the accounting principles to which the practices and procedures should conform.

(2) The ASB will clarify the terms commonly used in financial statements and suggest improvements in the terminology

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wherever necessary. The ASB will examine the various current alternative practices in vogue and endeavour to eliminate or reduce alternatives within the bounds of rationality.

(3) Accounting Standards are designed to apply to the general purpose financial statements and other financial reporting, which are subject to the attest function of the members of the ICAI. Accounting Standards apply in respect of any enterprise (whether organized in corporate, co-operative or other forms) engaged in commercial, industrial or business activities, irrespective of whether it is profit oriented or it is established for charitable or religious purposes. Accounting Standards will not, however, apply to enterprises only carrying on the activities which are not of commercial, industrial or business nature (*e.g.*, an activity of collecting donations and giving them to flood affected people). Exclusion of an enterprise from the applicability of the Accounting Standards would be permissible only if no part of the activity of such enterprise is commercial, industrial or business in nature. Even if a very small proportion of the activities of an enterprise is considered to be commercial, industrial or business in nature, the Accounting Standards would apply to all its activities including those which are not commercial, industrial or business in nature.

(4) The term 'General Purpose Financial Statements' includes balance sheet, statement of profit and loss, a cash flow statement (wherever applicable) and statements and explanatory notes which form part thereof, issued for the use of various stakeholders, Governments and their agencies and the public. References to financial statements in the Preface and in the standards issued from time to time will be construed to refer to General Purpose Financial Statements.

(5) Responsibility for the preparation of financial statements and for adequate disclosure is that of the management of the enterprise. The auditor's responsibility is to form his opinion and report on such financial statements.

4. Scope of Accounting Standards

(1) Efforts will be made to issue Accounting Standards which are in conformity with the provisions of the applicable laws, customs, usages and business environment in India. However, if a particular Accounting Standard is found not to be in conformity with law, the provisions of the said law will prevail and the financial statements should be prepared in conformity with such law.

(2) The Accounting Standards by their very nature cannot and do not override the local regulations which govern the preparation and presentation of financial statements in the country. However, the ICAI will determine the extent of disclosure to be made in financial statements and the auditor's report thereon. Such disclosure may be by way of appropriate notes explaining the treatment of particular items. Such explanatory notes will be only in the nature of clarification and therefore need not be treated as adverse comments on the related financial statements.

(3) The Accounting Standards are intended to apply only to items which are material. Any limitations with regard to the applicability of a specific Accounting Standard will be made clear by the ICAI from time to time. The date from which a particular Standard will come into effect, as well as the class of enterprises to which it will apply, will also be specified by the ICAI. However, no standard will have retroactive application, unless otherwise stated.

5. Procedure for Issuing an Accounting Standard

Broadly, the following procedure is adopted for formulating Accounting Standards:

(1) The ASB determines the broad areas in which Accounting Standards need to be formulated and the priority in regard to the selection thereof

(2) In the preparation of Accounting Standards, the ASB will be assisted by Study Groups constituted to consider specific subjects. In the formation of Study Groups, provision will be made for wide participation by the members of the Institute and others

(3) The draft of the proposed standard will normally include the following

- (a) Objective of the Standard
- (b) Scope of the Standard
- (c) Definitions of the terms used in the Standard
- (d) Recognition and measurement principles, wherever applicable
- (e) Presentation and disclosure requirements

(4) The ASB will consider the preliminary draft prepared by the Study Group and if any revision of the draft is required on the basis of deliberations, the ASB will make the same or refer the same to the Study Group

(5) The ASB will circulate the draft of the Accounting Standard to the Council members of the ICAI and the following specified bodies for their comments:

- (i) Department of Company Affairs (DCA)
- (ii) Comptroller and Auditor General of India (C&AG)

(iii) Central Board of Direct Taxes (CBDT)
(iv) The Institute of Cost and Works Accountants of India (ICWAI)
(v) The Institute of Company Secretaries of India (ICSI)
(vi) Associated Chambers of Commerce and Industry (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI)
(vii) Reserve Bank of India (RBI)
(viii) Securities and Exchange Board of India (SEBI)
(ix) Standing Conference of Public Enterprises (SCOPE)
(x) Indian Banks' Association (IBA)
(xi) Any other body considered relevant by the ASB keeping in view the nature of the Accounting Standard.

(6) The ASB will hold a meeting with the representatives of specified bodies to ascertain their views on the draft of the proposed Accounting Standard. On the basis of comments received and discussion with the representatives of specified bodies, the ASB will finalise the Exposure Draft of the proposed Accounting Standard.

(7) The Exposure Draft of the proposed Standard will be issued for comments by the members of the Institute and the public. The Exposure Draft will specifically be sent to specified bodies (as listed above), stock exchanges, and other interest groups, as appropriate.

(8) After taking into consideration the comments received, the draft of the proposed Standard will be finalised by the ASB and submitted to the Council of the ICAI.

(9) The Council of the ICAI will consider the final draft of the proposed Standard, and if found necessary, modify the same in consultation with the ASB. The Accounting Standard on the relevant subject will then be issued by the ICAI.

(10) For a substantive revision of an Accounting Standard, the procedure followed for formulation of a new Accounting Standard, as detailed above, will be followed.

(11) Subsequent to issuance of an Accounting Standard, some aspect(s) may require revision which are not substantive in nature. For this purpose, the ICAI may make limited revision to an Accounting Standard. The procedure followed for the limited revision will substantially be the same as that to be followed for formulation of an Accounting Standard, ensuring that sufficient opportunity is given to various interest groups and the general public to react to the proposal for limited revision.

6. Compliance with the Accounting Standards

(1) The Accounting Standards will be mandatory from the respective date(s) mentioned in the Accounting standards(s). The mandatory status of an Accounting Standard implies that while discharging their attest functions, it will be the duty of the members of the Institute to examine whether the Accounting Standard is complied with within the presentation of financial statements covered by their audit. In the event of any deviation from the Accounting Standard, it will be their duty to make adequate disclosures in their audit reports so that the users of financial statements may be aware of such deviations.

(2) Ensuring compliance with the Accounting Standards while preparing the financial statements is the responsibility of the management of the enterprise. Statutes governing certain enterprises require of the enterprises that the financial statements should be prepared in compliance with the Accounting Standards, *e.g.*, the Companies Act, 1956 (section 211), and the Insurance Regulatory and Development Authority (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, 2000.

(3) Financial Statements cannot be described as complying with the Accounting Standards unless they comply with all the requirements of each applicable Standard.

Issue of Accounting Standards. The ASB has so far issued twenty-nine definitive standards. The standards are as under:

Table 2.1 *Accounting Standards*

No.			*Title*	*Mandatory from accounting period beginning on or after*
AS	1		Disclosure of Accounting Policies	1.4.1991
AS	2	(Revised)	Valuation of Inventories	1.4.1999
AS	3	(Revised)	Cash Flow Statements	1.4.2001*
AS	4	(Revised)	Contingencies and Events occurring after Balance Sheet Date	1.4.1995
AS	5	(Revised)	Prior Period and Extraordinary Items and Changes in Accounting Policies	1.4.1996
AS	6	(Revised)	Depreciation Accounting	1.4.1995
AS	7		Accounting for Construction Contracts	1.4.2003

AS 8		Accounting for Research and Development	1.4.1991*
AS 9		Revenue Recognition	1.4.1991
AS 10		Accounting for Fixed Assets	1.4.1991
AS 11	(Revised 2003)	Accounting for the Effect of Changes in Foreign Exchange Rates	1.4.2004
AS 12		Accounting for Government Grants	1.4.1995
AS 13		Accounting for Investments	1.4.1995
AS 14		Accounting for Amalgamations	1.4.1994
AS 15		Accounting for Retirement Benefits in the Financial Statements of Employers	1.4.1995
AS 15	(Revised 2005)	Employee Benefits	to be notified
AS 16		Borrowing Costs	1.4.2000
AS 17		Segment Reporting	1.4.2001
AS 18		Related Party Disclosures	1.4.2001
AS 19		Leases	1.4.2001
AS 20		Consolidated Financial Statements	1.4.2001
AS 21		Earnings per share	1.4.2001
AS 22		Accounting for Taxes on Income	1.4.2001
AS 23		Accounting for Investments in Consolidated Finance Statements	1.4.2002
AS 24		Discontinuing Operations	1.4.2004
AS 25		Interim Financial Reporting	1.4.2002
AS 26		Intangible Assets	1.4.2003
AS 27		Financial Reporting of Interest in Joint Ventures	1.4.2002
AS 28		Impairment of Assets	1.4.2004**
AS 29		Provisions, Contingent Liabilities and Contingent Assets	1.4.2004

* discontinued w.e.f. 1.4.2003 since subject is covered by AS 26: Intangible Assets.

** mandatory (*i*) for enterprises whose debt or securities are listed on a recognised stock exchange in India and (*ii*) all other commercial or industrial enterprises whose turnover for the accounting period exceeds Rs 50 crores.

Besides the above twenty-nine Accounting Standards, the ASB had issued the ''Accounting Terminology'' and also prepared a ''Framework for the Preparation and Presentation of Financial Statements''. It has also specified, in consultation with the RBI, modifications with which the Accounting Standards will be applicable to bank and other financial institutions.

ASB also carries out the task of revising the Accounting Standards, issue of clarification and guidance notes. In March 2004, ASB issued clarifications interpreting applicability of AS 9, AS 17, AS 18, AS 21, AS 23, and AS 25. An exposure draft the revise AS 15 ''Employee Benefits'' was issued in September 2004 on which the comments were to be received by October 30, 2004. The revised AS 15 has already been issued. A Guidance Note on ESOP has also be issued.

ASB is thus on the move. Its efforts are directed at establishing accounting standards which will be adopted by the management of different enterprises and will definitely result in the improvement of quality of presentation of financial statements in our country.

AS: 1 Disclosure of Accounting Policies

The main features of the Standard AS: 1 announced by the ASB, regarding Disclosure of Accounting Policies, are as follows:

(1) Fundamental Accounting Assumptions

Certain fundamental accounting assumptions underlie the preparation and presentation of financial statements. They are usually not specifically stated because their acceptance and use are assumed.

(i) Fundamental accounting assumptions are:

(a) *Going concern.* The enterprise is normally viewed as a going concern, *i.e.*, as continuing in operation for the foreseeable future. It is assumed that the enterprise has neither the intention nor the necessity of liquidation or of curtailing materially the scale of its operations.

(b) *Consistency.* It is assumed that accounting policies are consistent from one period to another.

(c) *Accrual.* Revenue and costs are accrued, *i.e.*, recognised as they are earned or incurred (and not as money is received or paid), and recorded in the financial statements of the periods to which they relate (the considerations affecting the process of matching costs with revenues under the accrual assumption are not dealt within this statement).

In case any of the above fundamental accounting assumptions is not followed, the fact should be disclosed in the financial statements together with reasons.

(2) Accounting Policies

(i) Accounting policies refer to the specific accounting principles and methods of applying those principles adopted by enterprises in the preparation and presentation of financial statements. There is no single list of accounting policies which are applicable to all circumstances. The different circumstances in which the enterprises operate in a situation of diverse and complex economic activity make alternative accounting principles and methods of applying those principles acceptable. The choice of the appropriate accounting principle in the specific circumstances of each enterprise calls for considerable judgement by the management of the enterprise.

(ii) The following are the examples of the areas in which different accounting policies may be adopted by different enterprises:

(a) Methods of depreciation, depletion and amortization; (*b*) Treatment of expenditure during the construction; (*c*) Conversion or translation of foreign currency items; (*d*) Valuation of inventories; (*e*) Treatment of goodwill; (*f*) Valuation of investments; (*g*) Treatment of retirement benefits; (*h*) Recognition of profit on long-term contracts; (*i*) Valuation of fixed assets; (*j*) Treatment of contingent liabilities.

The above list of example is not intended to be exhaustive.

(iii) The primary consideration in the selection of accounting policies by an enterprise is that the financial statements prepared and presented on the basis of such accounting policy, should represent a true and fair view of the state of affairs of the enterprise, as on the balance sheet date and of the period ended on that date. For this purpose, the major considerations governing the selection of and application of accounting policies are:

(a) *Prudence.* Uncertainties inevitably surround many transactions. This should be recognised by exercising prudence in preparing financial statements. Prudence does not, however, justify the creation of secret or hidden reserves.

(b) *Substance over form.* Transactions and other events should be accounted for and presented in accordance with their substance and financial reality and not merely with their legal form.

(c) *Materiality.* Financial statements should disclose all items which are material enough to affect evaluation or decisions.

(iv) To ensure proper understanding of financial statements, all significant accounting policies adopted in the preparation should be disclosed.

(v) The disclosure of the significant accounting policies as such should form a part of the financial statements and the significant accounting policies should normally be disclosed at one place.

(vi) Any change in the accounting policy which has a material effect in the current period or which is reasonably expected to have a material effect in the later periods should be disclosed. In the case of a change in the accounting policy which has a material effect in the current period, the amount by which an item, in the financial statement is affected by such a change, should be disclosed to the extent ascertainable. Where such an amount is not ascertainable wholly or in part, the fact should be indicated.

Difference between fundamental accounting presumptions and accounting policies. It is clear from whatever has been stated above that IASC has made distinctions between Fundamental Accounting Assumptions and Accounting Policies. The distinctions are as follows:

1. Fundamental accounting presumptions are assumed to have been used and accepted in the preparation of financial statements while no such presumption can be made in respect of accounting policies.
2. In case of fundamental accounting assumptions, the management has no discretion. They have to be necessarily followed. However, in the case of accounting policies, the management may make a choice. It should use its judgement in selecting and applying such policies which are best suited to the business.
3. In case the fundamental assumptions are not followed, the fact has to be disclosed together with reasons. In case of accounting policies, disclosure has to be made about the policy which has been followed by the management. In case the policy is changed in subsequent years, the reasons for change and the resulting financial consequences have also to be disclosed.

CHECK YOUR PROGRESS

2. Accounting principles are generally based on
   (a) practicability
   (b) subjectivity
   (c) convenience in recording.
3. The system of recording transactions based on dual aspect concept is called
   (a) double account system
   (b) double entry system
   (c) single entry system.
4. The practice of appending notes regarding contingent liabilities in accounting statements is in pursuant to:
   (a) convention of consistency
   (b) money measurement concept
   (c) convention of conservatism
   (d) convention of disclosure.

2.6 SYSTEMS OF BOOK-KEEPING

Book-keeping, as explained earlier, is the art of recording pecuniary or business transactions in a regular and systematic manner. This recording of transactions may be done according to any of the following two systems:

1. **Single entry system**. An incomplete double entry system can be termed as a single entry system. According to Kohler, "it is a system of book-keeping in which as a rule only records of cash and personal accounts are maintained, it is always incomplete double entry, varying with circumstances". This system has been developed by some business houses, who for their convenience, keep only some essential records. Since all records are not kept, the system is not reliable and can be used only by small firms. The working of this system has been discussed in detail later in a separate chapter.

2. **Double entry system**. The system of 'double entry' book-keeping which is believed to have originated with the Venetian merchants of the fifteenth century, is the only system of recording the twofold aspect of the transaction. This has been, to some extent, explained while discussing the 'dual aspect concept' earlier in this chapter. The system recognizes that every transaction have a twofold effect. If someone receives something, them either some other person must have given it, or the first-mentioned person must have lost something, or some service etc. must have been rendered by him.

Double Entry System and Single Entry System

The difference between the double entry system and single entry system can be put as follows:

(a) *Recording of transactions.* In case of the double entry system, the dual aspect concept is completely followed while recording business transactions. In case of the single entry system, the dual aspect concept is not followed for all transactions. In case of some transactions both the aspects are recorded; for some, only one aspect is recorded, while in the case of some other transactions, no recording is at all done.

(b) *Maintenance of books.* In the case of the double entry system, various subsidiary books *viz*. sales book, purchases book, returns book, cash book, etc. are maintained. In case of the single entry system, no subsidiary books except the cash book is maintained.

(c) *Maintenance of books of account.* In the case of the double entry system, all major accounts real, nominal and personal are maintained. However, in the case of the single entry system, only personal accounts are maintained.

(d) *Preparation of trial balance.* In the case of the double entry system, a trial balance is prepared to check the arithmetical accuracy of the books of account. In the case of the single entry system, the trial balance cannot be prepared. Hence, it is not possible to check the accuracy of the books of account.

(e) *Accuracy of profits and financial position.* In the double entry system, the Trading and Profit and Loss Account gives the true profit of the business while the Balance Sheet shows the true and fair financial position of the business. In the single entry system only a rough estimate of profit or loss can be made. The Statement of

Affairs prepared in the single entry system also does not show the true financial position of the business.

(f) *Utility*. The single entry system is used only by very small business units. It has no utility for large business units. As a matter of fact, they have to compulsorily adopt the double entry system.

Accounting Equation

The system of the double entry system of book-keeping can very well be explained by the "accounting equation" given below:

Assets = Equities

It has been explained in the preceding pages that every accounting transaction results in a twofold effect. It may either result in creation of some assets or benefits to the business on the one hand, or some liabilities or loss to the business on the other hand. Thus, in other words, every business transaction results in both creation of an asset with an equivalent liability. This is technically known as an accounting equation as per the double entry system of book-keeping. The equation and its explanation are being given below:

The properties owned by business are called 'assets'. The rights to the properties are called 'equities'. Equities may be subdivided into two principal types: the rights of the creditors and the rights of the owners. The equity of creditors representing debts of the business are called "liabilities". The equity of owners is called "capital", or proprietorship or owner's equity. Thus:

Assets = Liabilities + Capital

or Assets – Liabilities = Capital

The accounting equation can be understood with the help of the following transactions:

Transaction 1. *A* starts business with a capital of Rs 10,000.

There are two aspects of the transaction. The business has received cash of Rs 10,000. It is its asset but on the other hand it has to pay a sum of Rs 10,000 to *A*, the Proprietor.
Thus:

Capital and Liabilities	*Rs*	*Assets*	*Rs*
Capital	10,000	Cash	10,000

Transaction 2. *A* purchases furniture for cash worth Rs 2,000. The position of his business will be as follows:

Capital and Liabilities	*Rs*	*Assets*	*Rs*
Capital	10,000	Cash	8,000
		Furniture	2,000
	10,000		10,000

Transaction 3. *A* purchases cotton bales from *B* at Rs 5,000 on credit. He sells for cash cotton bales costing Rs 3,000 for those of Rs 4,000 and Rs 1,000 for Rs 1,500 on credit to *P*.

As a result of these transactions the business makes a profit of Rs 1,500 (*i.e.*, Rs 5,500–Rs 4,000). This will increase *A*'s Capital from Rs 10,000 to Rs 11,500. The business will have a liability of Rs 5,000 to *B* and two more assets in the form of a debtor *P* for Rs 1,500 and stock of cotton bales of Rs 1,000. The position of his business will now be as follows:

Capital and Liabilities	*Rs*	*Assets*	*Rs*
Creditor (*B*)	5,000	Cash (Rs 8,000 + 4,000)	12,000
Capital	11,500	Stock of Cotton Bales	1,000
		Debtor (*P*)	1,500
		Furniture	2,000
	16,500		16,500

Transaction 4. *A* withdraws cash of Rs 1,000 and cotton bales of Rs 200 for his personal use. The amount and the goods withdrawn will decrease relevant assets and *A*'s capital. The position will be now as follows:

Capital and Liabilities	*Rs*	*Assets*	*Rs*
Creditor (*B*)	5,000	Cash (Rs 12,000 – Rs 1,000)	11,000
Capital		Stock of Cotton Bales	800
(Rs 11,500 – Rs 1,200)	10,300	Debtor (*P*)	1,500
		Furniture	2,000
	15,300		15,300

The above type of statement showing the financial position of a business on a certain date is termed as the balance sheet.

The result of applying the system of double entry may be summarised in the form of the following rule:
"For every debit there must be equivalent credit and vice versa."
The rules of *Debit* and *Credit* are explained in the next Unit.

Illustration 2.1. Anil had the following transactions. Use an accounting equation to show their effect on his assets, liabilities and capital:

		Rs
1.	Started business with cash	5,000
2.	Purchased goods on credit	400
3.	Purchased goods for cash	100
4.	Purchased furniture	50
5.	Withdrew for personal use	70
6.	Paid rent	20
7.	Received Interest	10
8.	Sold goods costing Rs 50 on credit for	70
9.	Paid to creditors	40
10.	Paid for salaries	20
11.	Further capital invested	1,000
12.	Borrowed from P	1,000

Solution:

Accounting Equation: Assets = Liabilities + Capital

No.	*Transaction*	*Assets*	=	*Liabilities*	+	*Capital*
		Rs		*Rs*		*Rs*
1.	Anil started business with cash Rs 5,000	5,000	=	0	+	5,000
2.	Purchased goods on credit for Rs 400	400	=	400	+	0
	New Equation	5,400	=	400	+	5,000
3.	Purchase goods for cash Rs 100	+100				
		–100	=	0	+	0
	New Equation	5,400	=	400	+	5,000
4.	Purchased furniture Rs 50	+50				
		–50	=	0	+	0
	New Equation	5,400	=	400	+	5,000
5.	Withdrew for personal use Rs 70	–70	=	0	–	70
	New Equation	5,330	=	400	+	4,930
6.	Paid rent	–20	=	0	+	–20
	New Equation	5,310	=	400	+	4,910
7.	Received interest Rs 10	+10	=	0	+	10
	New Equation	5,320	=	400	+	4,920
8.	Sold goods consisting Rs 50 on credit	+70				
	for Rs 70	–50	=	0	+	20
	New Equation	5,340	=	400	+	4,940
9.	Paid to creditors Rs 40	– 40	=	– 40	+	0
	New Equation	5,300	=	360	+	4,940
10.	Paid for salaries Rs 20	–20	=	0	–	–20
	New Equation	5,280	=	360	+	4,920
11.	Further capital Invested	1,000	=	0	+	1,000
	New Equation	6,280	=	360	+	5,920
12.	Borrowed from *P* Rs 1,000	1,000	=	1,000	+	0
	New Equation	7,280	=	1,360	+	5,920

CHECK YOUR PROGRESS

5. According to the money measurement concept, the following will be recorded in the books of account of the business:
   (a) health of Managing Director of the company
   (b) quality of company's goods
   (c) value of plant and machinery.
6. The convention of conservatism is applicable:
   (a) in providing discount to creditors
   (b) in making provision for bad and doubtful debts
   (c) in providing for depreciation.
7. The convention of conservatism, when applied to the balance sheet, results in:
   (a) understatement of assets
   (b) understatement of liabilities
   (c) overstatement of capital.

2.7 SYSTEMS OF ACCOUNTING

There are basically two systems of accounting:

(i) **Cash system of accounting.** It is a system in which accounting entries are made only when cash is received or paid. No entry is made when a payment or receipt is merely due. The Government system of accounting is based mostly on the cash system. Certain professional people record their income on cash basis, but while recording expenses they take into account the outstanding expenses also. In such a case, the financial statement prepared by them for determination of their income is termed as Receipts and Expenditure Account.

(ii) **Mercantile or accrual system of accounting.** It is a system in which accounting entries are made on the basis of amounts having become due for payment or receipt. This system recognises the fact that if a transaction or an event has occurred, its consequences cannot be avoided and therefore, should be brought into books in order to present a meaningful picture of profit earned or loss suffered and also of the financial position of the firm concerned.

The difference between the Cash System and Mercantile System of accounting will be clear with the help of the following example:

A firm close its books on 31 December each year. A sum of Rs 500 has become due for payment on account of rent for the year 2000. The amount has, however, been paid in January, 2001.

In this case, if the firm is following the cash system of accounting, no entry will be made for the rent having become due in the books of accounts of the firm in 2000. The entry will be made only in January 2000 when the rent is actually paid. However, if the firm is following the mercantile system of accounting, two entries will made: (*i*) on 31 December, 2000, rent account will be debited while the landlord's account will be credited by the amount of outstanding rent; (*ii*) In January 2000, the landlord's account will be debited while the cash account will be credited with the amount of the rent actually paid. (This has been discussed in detail later while dealing with adjustments relating to final accounts.)

The 'mercantile system' is considered to be better since it takes into account the effects of all transactions already entered into. This system is followed by most of the industrial and commercial firms.

2.8 SUMMARY

- Accounting principles are scientifically laid down accounting standards.
- Accounting principles can be classified as accounting concepts and accounting conventions.
- The Institute of Chartered Accountants of India (ICAI) lays down the accounting standards (principles) in India. It has, so far, issued 29 Accounting Standards.
- Recording of business transactions can be done either according to the single entry system or double entry system. While adopting these systems, the concern may follow either the cash system of accounting or the mercantile system of accounting.
- The double entry system of book-keeping with the mercantile system of accounting is considered better and more reliable for ascertaining the profitability and financial position of the business.

2.9 KEY TERMS

- **Accounting Principles:** Rules of action or conduct adopted by accountants universally while recording accounting transactions.
- **Accounting Concepts:** Basic assumptions or conditions upon which the science of accounting is based.
- **Accounting Conventions:** Customs and traditions which guide accountants while preparing accounting statements.
- **Cash System of Accounting:** A system in which accounting entries are made only when cash is received or paid.
- **Mercantile System of Accounting:** A system in which accounting entries are made on the basis of amounts having become due for payment or receipt. It is also termed as Accrual System of Accounting.

2.10 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (a) T, (b) F, (c) T, (d) F, (e) F, (f) T
2. (a)
3. (b)
4. (d)
5. (c)
6. (b)
7. (a)

2.11 QUESTIONS AND EXERCISES

1. Discuss briefly the basic accounting concepts and fundamental accounting assumptions.

2. What are the accounting concepts and conventions? Name them and explain any two accounting concepts in detail.

3. Explain any three of the following accounting concepts:
   (a) Money measurement concept
   (b) Business entity concept
   (c) Going concern concept
   (d) Realisation concept
   (e) Cost concept

4. Differentiate between Cash and Mercantile Systems of Accounting.

5. Write short notes on
   (a) Accounting Equation
   (b) Dual Aspect Concept
   (c) Periodic Matching of Cost and Revenue Match Concept

6. Explain the term Convention of Conservations

7. Explain the term Convention of Materiality

8. Explain the term Convention of Disclosure

9. Distinguish between "Double Entry 1.30 System and Single Entry System"

10. Explain the Principles of Accounting.

11. What is meant by the term Generally Accepted Accounting Principles? Explain the meaning and significance of any two of the following:
   (i) The Going concern principle
   (ii) Convention of consistency of
   (iii) Matching principle
   (*v*) Substance over form.

12. What do you understand by the "Dual Aspect Concept" of accounting. Explain briefly.

2.12 PRACTICAL PROBLEMS

1. Show the effect of the following transactions on the assets, liabilities and capital of Mr. Abhay Kumar through the accounting equation:
   1. He started business with cash of Rs 20,000.
   2. He purchased goods for cash for Rs 10,000.

3. Purchased goods on credit from Mr. Mohan Lal for Rs 8,000.
4. Sold goods for cash costing Rs 8,000 for Rs 10,000.
5. Withdrew Rs 1,000 from business in cash to pay for his private expenses.
6. Electricity bills paid for Rs 100.
7. He sold goods on credit costing Rs 5,000 to Mr. Surendra for Rs 6,000.
8. Rent outstanding Rs 400.
9. He borrowed Rs 5,000 from Mr. Lalit.
10. Purchased goods for cash Rs 2,000.

2. From the following transactions relating to Mr. Anil Kumar, show the effect on his assets, liabilities and capital by using the accounting equation:

1. Started business with cash Rs 10,000.
2. Purchased goods on credit Rs 8,000.
3. Plant purchased for cash Rs 2,000.
4. Sold goods costing Rs 1,000 for Rs 2,000 for cash.
5. Sold goods on credit to Mahendra costing Rs 800 for Rs 1,500.
6. Drew for personal use Rs 500.
7. Paid for salaries Rs 300.
8. Received cash from Mahendra Rs 700.

3. Show accounting equation on the basis of the following transactions:

1. Laxman started business with cash of Rs 20,000.
2. He purchased goods on credit of Rs 8,000.
3. He sold goods for cash Rs 2,500 for Rs 3,000.
4. He purchased furniture for cash Rs 2,000.
5. He sold goods to Hari costing Rs 400 for Rs 800 on credit.
6. He received cash from Hari Rs 500 towards payment of the price of the goods.
7. He received dividend on securities Rs 200.
8. He paid life insurance premium on his life policy Rs 400.
9. He purchased goods from Mukesh for cash Rs 300.

4. Show the dual effect of the following transactions on the assets and liabilities of business:

(i) Purchased goods for cash Rs 8,000.
(ii) Purchased delivery van on credit for Rs 4,00,000.
(iii) Paid Rs 5,000 to a supplier of goods on credit
(iv) The proprietor withdrew Rs 2,000 from the bank account of business for personal expenses.
(v) Purchased goods from Hamid a credit for Rs 5,000.

2.13 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.
Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 3 JOURNALISING TRANSACTIONS

Structure

3.0 Introduction
3.1 Unit Objectives
3.2 Journal
3.3 Rules of Debit and Credit
3.4 Compound Journal Entry
3.5 Opening Entry
3.6 Summary
3.7 Key Terms
3.8 Answers to 'Check Your Progress'
3.9 Questions and Exercises
3.10 Practical Problems
3.11 Further Reading

3.0 INTRODUCTION

Accounting is the art of recording, classifying and summarising the financial transactions and interpreting the results therefore. Thus, the accounting process or cycle involves the following stages:

1. **Recording of transactions.** This is done in the book termed as 'Journal'.
2. **Classifying the transactions.** This is done in the book termed as 'Ledger'.
3. **Summarising the transactions.** This includes preparation of the trial balance, profit and loss account and balance sheet of the business.
4. **Interpreting the results.** This involves computation of various accounting ratios, etc., to know about the liquidity, solvency and profitability of business. The recording of transactions in the Journal is being explained in this unit.

3.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Identify the stages of the accounting cycle
- Appreciate the role of the Journal in recording business transactions
- Understand the rules of debit and credit applicable to different type of business transactions
- Describe the various categories of accounts
- Pass appropriate entries for recording transactions in the Journal

3.2 JOURNAL

The Journal records all the daily transactions of a business in the order in which they occur. A Journal may therefore be defined as a book containing a chronological record of transactions. It is the book in which the transactions are recorded first of all under the double entry system. Thus, the Journal is the book of original record. A Journal does not replace but precedes the Ledger. The process of recording transactions in a Journal, is termed as Journalising. A pro forma of a Journal is given below:

Date	*Particulars*	*L.F.*	*Debit* *Rs*	*Credit* *Rs*
(1)	(2)	(3)	(4)	(5)

Fig. 3.1 *Pro Forma of a Journal*

1. **Date.** The date on which the transaction was entered is recorded here.
2. **Particulars.** The two aspects of transaction are recorded in this column, *i.e.*, the details regarding accounts which have to be debited and credited.
3. **L.F.** This stands for Ledger Folio. The transactions entered in the Journal are later on posted to the ledger. The relevant ledger folio is entered here. The procedure regarding posting the transactions in the Ledger has been explained in the next chapter.
4. **Debit.** In this column, the amount to be debited is entered.
5. **Credit.** In this column, the amount to be credited is shown.

3.3 RULES OF DEBIT AND CREDIT

The transactions in the Journal are recorded on the basis of the rules of debit and credit. For this purpose business transactions have been classified into three categories:

(i) Transactions relating to persons
(ii) Transactions relating to properties and assets
(iii) Transactions relating to incomes and expenses

On this basis, it becomes necessary for the business to keep an account of:

(i) Each person with whom it deals
(ii) Each property or asset which the business owns
(iii) Each item of income or expense

The accounts falling under the first heading are called 'Personal Accounts'. The accounts falling under the second heading are termed 'Real Accounts'. The accounts falling under the third heading are termed 'Nominal Accounts'. The classification of the accounts, as explained above, can be put in the form of the following chart:

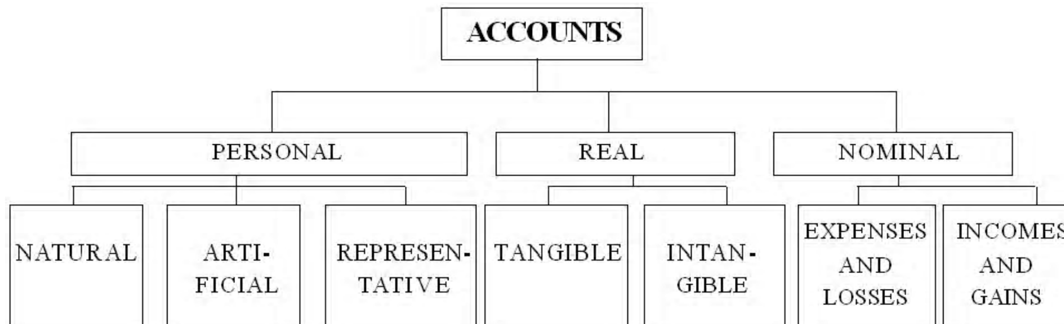

Fig. 3.2 *Classification of Accounts*

Each of the above categories of accounts and the relevant rule for 'debit and credit' have been explained in detail in the following pages:

Personal accounts. Personal accounts include the accounts of persons with whom the business deals. These accounts can be classified into three categories:

1. *Natural Personal Accounts.* The term 'Natural Persons' means persons who are the creation of God. For example, Mohan's Account, Sohan's Account, Abha's Account, etc.

2. *Artificial Personal Accounts.* These accounts include accounts of corporate bodies or institutions which are recognised as persons in business dealings. For example, the account of a Limited Company, the account of a Co-operative Society, the account of a Club, the account of Government, the account of an Insurance Company etc.

3. *Representative Personal Accounts.* These are accounts which represent a certain person or group of persons. For example, if the rent is due to the landlord, an outstanding rent account will be opened in the books. Similarly, for salaries due to the employees (not paid), an outstanding salaries account will be opened. The outstanding rent account represents the account of the landlord to whom the rent is to be paid while the outstanding salaries account represents the accounts of the persons to whom the salaries have to be paid. All such accounts are therefore termed as 'Representative Personal Accounts'.

The rule is:

DEBIT THE RECEIVER CREDIT THE GIVER

For example, if cash has been paid to Ram, the account of Ram will have to be debited. Similarly, if cash has been received from Keshav, the account of Keshav will have to be credited.

Real accounts. Real accounts may be of the following types:

1. *Tangible Real Accounts.* Tangible Real Accounts are those which relate to such things which can be touched, felt, measured etc. Examples of such accounts are cash account, building account, furniture account, stock account, etc. It should be noted that a bank account is a personal account; since it represents the account of the banking company— an artificial person.

2. *Intangible Real Accounts.* These accounts represent such things which cannot be touched. Of course, they can be measured in terms of money. For example, patents account, goodwill account, etc.

The rule is:

DEBIT IS WHAT COMES IN CREDIT IS WHAT GOES OUT

For example, if a building has been purchased for cash, the building account should be debited (since it is coming in the business), while the cash account should be credited (since cash is going out the business). Similarly when furniture is purchased for cash, the furniture account should be debited while the cash account should be credited.

Nominal accounts. These accounts are opened in the books to simply explain the nature of the transactions. They do not really exist. For example, in a business, salary is paid to the manager, rent is paid to the landlord, commission is paid to the salesman, cash goes out of the business and it is something real; while salary, rent or commission as such do not exist. The accounts of these items are opened simply to explain how the cash has been spent. In the absence of such information, it may difficult for the person concerned to explain how the cash at his disposal was utilised.

Nominal Accounts include accounts of all expenses, losses, incomes and gains. The examples of such accounts are rent, rates lighting, insurance, dividends, loss by fire, etc.

The rule is:

DEBIT ALL EXPENSES AND LOSSES CREDIT ALL GAINS AND INCOMES

Tutorial Note. Both Real Accounts and Nominal Accounts come in the category of Impersonal Accounts. The student should note that when some prefix or suffix is added to a Nominal Account, it becomes a Personal Account. A table is being given to explain the above rule:

Table 3.1 *Nominal and Personal Accounts*

Nominal Account	*Personal Account*
1. Rent account	Rent prepaid account, Outstanding rent account.
2. Interest account	Outstanding interest account, Interest received in advance account, Prepaid interest account.
3. Salary account	Outstanding salaries account, Prepaid salaries account.
4. Insurance account	Outstanding insurance account, Prepaid insurance account.
5. Commission account	Outstanding commission account, Prepaid commission account.

Illustration 3.1. From the following transactions find out the nature of account and also state which account should be debited and which account should be credited.

(a) Rent paid
(b) Salaries paid
(c) Interest received
(d) Dividends received
(e) Furniture purchased for cash
(f) Machinery sold
(*g*) Outstanding for salaries
(*h*) Telephone charges paid
(*i*) Paid to Suresh
(*j*) Received from Mohan (the proprietor)
(*k*) Lighting

Solution:

	Transaction	*Accounts involved*	*Nature of Accounts*	*Debit/Credit*
(*a*)	Rent paid	Rent A/c	Nominal A/c	Debit
		Cash A/c	Real A/c	Credit
(*b*)	Salaries paid	Salaries A/c	Nominal A/c	Debit
		Cash A/c	Real A/c	Credit
(*c*)	Interest received	Cash A/c	Real A/c	Debit
		Interest A/c	Nominal A/c	Credit
(*d*)	Dividends received	Cash A/c	Real A/c	Debit
		Interest A/c	Nominal A/c	Credit
(*e*)	Furniture purchased	Furniture A/c	Real A/c	Debit
		Cash A/c	Real A/c	Credit
(*f*)	Machinery sold	Cash A/c	Real A/c	Debit
		Interest A/c	Real A/c	Credit

(*g*)	Salaries A/c	N	
	Outstanding	o	
	Salaries A/c		
Telephone	Telephone Charges A/c	N	
	Cash A/c	o	
(*i*)	Suresh	m	
P	C	in	
aid to Suresh Received	a	al	
from Mohan	s	A	
(the	h	/c	
	A	R	

The journalising of the various transactions is explained now with the help of the following illustration:

Illustration 3.2. Ram starts a business with a capital of Rs 20,000 on January 1, 2000.

In this case there are two accounts involved. They are:

(i) The account of Ram

(ii) Cash Account

1. Ram is natural person and, therefore, his account is a Personal Account. The cash Account is a tangible asset and, therefore, it is a Real Account. As per the rules of Debit and Credit, applicable to Personal Accounts, Ram is the giver and, therefore, his account, *i.e.*, Capital Account should be credited. Cash is coming into the business and, therefore, as per the rules applicable to Real Accounts, it should be debited. The transaction will now be entered in the Journal as follows:

JOURNAL

Date	*Particulars*		*L.F.*	*Debit Rs*	*Credit Rs*
2000					
Jan. 1	Cash Account	Dr.		20,000	
	To Capital Account				20,000
	(Being commencement of business)				

The words put within brackets "Being commencement of business" constitute the narration for the entry passed, since they narrate the transaction.

2. He purchased furniture for cash for Rs 5,000 on January 5, 2000.

The two accounts involved in this transaction are the Furniture Account and the Cash Account. Both are Real Accounts. Furniture is coming in and, therefore, it should be debited while cash is going out and, therefore, it should be credited. The Journal entry will, therefore, be as follows:

JOURNAL

Date	*Particulars*		*L.F.*	*Rs*	*Rs*
2000					
Jan. 5	Furniture Account	Dr.		5,000	
	To Cash Account				5,000
	(Being purchase of furniture)				

3. He paid Rs 2,000 rent for business premises on January 10, 2000.

In this transaction, two accounts involved are the Rent Account and the Cash Account. Rent Account is the Nominal Account. It is an expense and, therefore, it should be debited. Cash Account is a Real Account. It is going out of the business and, therefore, it should be credited. The journal entry will, therefore, be as follows:

JOURNAL

Date	*Particulars*		*L.F.*	*Rs*	*Rs*
2000					
Jan. 10	Rent Account	Dr.		2,000	
	To Cash Account				2,000
	(Being payment of rent)				

4. He purchased goods on credit of Rs 2,000 from Suresh on January 20, 2000.

The two accounts involved in the transaction are those of Suresh and Goods. The account of Suresh is a Personal Account while that of Goods is a Real Account. Suresh is the giver of goods and, therefore, his account should be credited while Goods are coming in the business and, therefore, Goods Account should be debited.

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Date	*Particulars*	*L.F.*	*Rs*	*Rs*
2000				
Jan. 20	Goods Account Dr.		2,000	
	To Suresh			2,000
	(Being purchase of goods on credit)			

Classification of Goods Account. The term goods include articles purchased by the business for resale. Goods purchased by the business may be returned to the supplier. Similarly, goods sold by the business to its customers can also be returned by the customers to the business due to certain reasons. In business, it is desired that a separate record be kept of all sale, purchase and return of goods. Hence, the Goods Accounts can be classified into the following categories:

(i) *Purchases Account.* The account is meant for recording all purchases of goods. Goods "come in" on purchasing of goods and, therefore, the Purchases Account is debited on purchase of goods.

(ii) *Sales Account.* The account is meant for recording of selling of goods. The goods "go out" on selling of goods, and therefore, on sale of goods, the Sales Account is credited.

(iii) *Purchases Returns Account.* The account is meant for recording return of goods purchased. The goods "go out" on returning of goods to the suppliers and, therefore, the account should be credited on returning goods purchased.

(iv) *Sales Returns Account.* The account is meant for recording return of goods sold, by the customers. The goods "come in" and, therefore, the Sales Returns Account should be debited on return of goods.

The above classification of Goods Account can be shown in the form of the following chart:

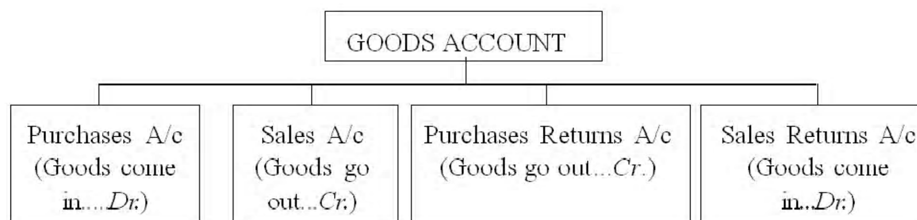

Fig. 3.3 *Goods Account*

CHECK YOUR PROGRESS

1. State under what heading (Personal, Real or Nominal) would you classify each of the following accounts:
   (i) Salary Prepaid Account
   (ii) Salary Outstanding Account
   (iii) Rent Account
   (iv) Bank Account
   (v) Insurance Unexpired
   (vi) Proprietor's Account
   (vii) Bad Debts Account
   (viii) Furniture Account
   (ix) Goodwill Account
   (x) Patents Account

3.4 COMPOUND JOURNAL ENTRY

Sometimes there are a number of transactions on the same date relating to one particular account or of one particular nature. Such transactions may be recorded by means of a single journal entry instead of passing several journal entries. Such an entry regarding recording a number of transactions is termed as a "Compound Journal Entry". It may be recorded in any of the following three ways:

(i) One particular account may be debited while several other accounts may be credited.
(ii) One particular account may be credited while several other accounts may be debited.
(iii) Several accounts may be debited and several other accounts may also be credited.

This has been explained in the following illustration:

Illustration 3.3. Pass a compound journal entry in each of the following cases:

1. Payment made to Ram Rs 1,000. He gave a cash discount of Rs 50.
2. Cash received from Suresh Rs 800 and allowed him Rs 50 as discount.
3. A running business was purchased by Mohan with following assets and liabilities:
   Cash Rs 2,000, Land Rs 4,000, Furniture Rs 1,000, Stock Rs 2,000, Creditors Rs 1,000, Bank Overdraft Rs 2,000.

Solution:

JOURNAL

Sl. No.	*Particulars*	*L.F.*	*Debit Rs*	*Credit Rs*
1.	Ram Dr.		1,050	
	To Cash A/c			1,000
	To Discount A/c			50
	(Being payment made to Ram Rs 1,000, and he allowed Rs 50 as discount)			
2.	Cash A/c Dr.		800	
	Discount A/c Dr.		50	
	To Suresh			850
	(Being cash received from Suresh Rs 800, and discount allowed Rs 50)			
3.	Cash A/c Dr.		2,000	
	Land A/c Dr.		4,000	
	Furniture A/c Dr.		1,000	
	Stock A/cDr.	2,000		
	To Creditors			1,000
	To Bank Overdraft			2,000
	To Capital A/c			6,000
	(Being commencement of business by Mohan by taking over a running business)			

Notes:

1. The total of payment due to Ram was Rs 1,050. A payment of Rs 1,000 has been made to him after he allowed a discount of Rs 50. This means by paying Rs 1,000, a full credit for Rs 1,050 has been obtained. The account of Ram is a Personal Account, and therefore, it has been debited as he is the receiver. The cash has gone out of the business and, therefore, the Cash Account being a Real Account, has been credited. the Discount Account is a Nominal Account; getting a discount is a gain to the business and, therefore, it has been credited.

2. Suresh was to pay sum of Rs 850. He paid Rs 800 and he was allowed a discount of Rs 50. It means by paying Rs 800 only, Suresh could get a full credit of Rs 850. The Cash Account is a Real Account and, therefore, it has been debited since cash is coming in. Since the Discount Account is a Nominal Account, it has been debited since it is a loss to the business. Suresh is the giver. His account being a Personal Account, it has been credited by Rs 850.

3. It is not necessary that a person should start business only with cash. He may bring the assets into the business or he may purchase a running business. In the present case Mohan has purchased the assets of some other business. The net assets (*i.e.* assets—liabilities taken over) will be Mohan's capital. The business is getting various assets and, therefore, the assets accounts have been debited. The business creates certain liabilities in the form of creditors, bank overdraft, and, therefore, these accounts have been credited. Mohan's Account *i.e.*, his Capital Account has been credited by the balance since it represents the capital brought in by him.

Illustration 3.4. Journalise the following transactions. Also state the nature of each account involved in the Journal entry.

1. Dec. 1, 2000, Ajit started business with Cash Rs 40,000.
2. Dec. 3, he paid into the Bank Rs 2,000.
3. Dec. 5, he purchased goods for cash Rs 15,000.
4. Dec. 8, he sold goods for cash Rs 6,000.

5. Dec. 10, he purchased furniture and paid by cheque Rs 5,000.
6. Dec. 12, he sold goods to Arvind Rs 4,000.
7. Dec. 14, he purchased goods from Amrit Rs 10,000.
8. Dec. 15, he returned goods to Amrit Rs 5,000.
9. Dec. 16, he received from Arvind Rs 3,960 in full settlement.
10. Dec. 18, he withdrew goods for personal use Rs 1,000.
11. Dec. 20, he withdrew cash from business for personal use Rs 2,000.
12. Dec. 24, he paid telephone charges Rs.1,000.
13. Dec. 26, cash paid to Amrit in full settlement Rs 4,900.
14. Dec. 31, paid for stationary Rs 200, rent Rs 500 and salaries to staff Rs 2,000.
15. Dec. 31, goods distributed by way of free samples Rs 1,000.

Solution:

JOURNAL

Sl.	*Date*	*Particulars*	*Nature of Account*	*L.F.*	*Debit Rs*	*Credit Rs*
1.	Dec. 1	Cash A/c Dr.	Real A/c		40,000	
		To Capital A/c	Personal A/c			40,000
		(Being commencement of business)				
2.	Dec. 3	Bank A/c Dr.	Personal A/c		20,000	
		To Cash A/c	Real A/c			20,000
		(Being cash deposited in the bank)				
3.	Dec. 5	Purchases A/c Dr.	Real A/c		15,000	
		To Cash A/c	Real A/c			15,000
		(Being purchase of goods for cash)				
4.	Dec. 8	Cash A/c Dr.	Real A/c		6,000	
		To Sales A/c	Real A/c			6,000
		(Being goods sold for cash)				
5.	Dec. 10	Furniture A/c Dr.	Real A/c		5,000	
		To Bank A/c	Personal A/c			5,000
		(Being purchase of furniture, paid by cheque)				
6.	Dec. 12	Arvind Dr.	Personal A/c		4,000	
		To Sales A/c	Real A/c			4,000
		(Being sale of goods)				
7.	Dec. 14	Purchases A/c Dr.	Real A/c		10,000	
		To Amrit	Personal A/c			10,000
		(Being purchase of goods from Amrit)				
8.	Dec. 15	Amrit Dr.	Personal A/c		5,000	
		To Purchases Returns A/c	Real A/c			5,000
		(Being goods returned to Amrit)				
9.	Dec. 16	Cash A/c Dr.	Real A/c		3,960	
		Discount A/c Dr.	Nominal A/c		40	
		To Arvind	Personal A/c			4,000
		(Being cash received from Arvind in full settlement and allowed him Rs 40 as discount)				
10.	Dec. 18	Drawings A/c Dr.	Personal A/c		1,000	
		To Purchases A/c	Real A/c			1,000
		(Being withdrawal of goods for personal use)				

11.	Dec. 20	Drawings A/c Dr. To Cash A/c (Being cash withdrawal from the business for personal use)	Personal A/c Real A/c		2,000	 2,000
12.	Dec. 24	Telephone Expenses A/c Dr. To Cash A/c (Being telephone expenses paid)	Nominal A/c Real A/c		1,000	 1,000
13.	Dec. 26	Amrit Dr. To Cash A/c To Discount A/c (Being cash paid to Amrit and he allowed Rs 100 as discount)	Personal A/c Real A/c Nominal A/c		5,000	 4,900 100
14.	Dec. 31	Stationary Expenses Dr. Rent A/c Dr. Salaries A/c Dr. To Cash A/c (Being expenses paid)	Nominal A/c Nominal A/c Nominal A/c Real A/c		200 500 2,000	 2,700
15.	Dec. 31	Advertisement Expenses A/c Dr. To Purchases A/c (Being distribution of goods by way of free samples)	Nominal A/c Real A/c		1,000	 1,000
		Total			1,21,700	1,21,700

Notes:

Transaction 9. Ajit was to receive Rs 4,000 from Arvind. He accepts only Rs 3,960 in full settlement. It means, he allows Rs 40 as discount to him. The journal entries will be:

(*i*)	Cash A/c	Dr.	3,960	
	To Arvind			3,960
(*ii*)	Discount A/c	Dr.	40	
	To Arvind			40

A single entry may be passed in place of two entries stated above. Cash is a Real Account and, therefore, it should be debited. Discount is a Nominal Account and, therefore, it should also be debited. The account of Arvind is a Personal Account and he is entitled to get a full credit of Rs 4,000 by paying only Rs 3,960. His account should, therefore, be credited by Rs 4,000.

It may be remembered that cash or bank account and discount account go together. It means if cash is debited, the discount account should also be debited. In case the cash is credited, the discount account should also be credited. This is because when cash is received, discount is allowed to debtors. Cash Account is a Real Account and, therefore, it should be debited by the amount of cash actually received. The discount account is a Nominal Account and, therefore, on receipt of cash when discount is allowed, this is a loss which should be debited. Similarly, when cash is paid, discount is earned from the creditors. On payment of cash, therefore, Cash Account should be credited (since cash is a Real Account and it is going out of the business) and Discount Account should be credited (since Discount Account is a Nominal Account and discount received is a gain to the business).

Transaction 10. When goods are withdrawn by the proprietor of the business for his personal use, he is to be charged for them since business and the proprietor are two different persons as per separate entity concept. The problem is at what price should he be charged? He cannot be charged at the selling price for the goods. It will not be fair. He has to be charged at only the cost price of the goods withdrawn by him. It will be, therefore, appropriate to reduce the purchase of the business by the amount of goods withdrawn by the proprietor for his personal use as if the goods were purchased partly for the business and partly for him.

The same rule applies in those cases, where the goods purchased by the business are used for the purpose of business itself. For example in case of a stationery business, some stationery may be used for the business itself. In such case, the following journal entry will be passed:

Stationery Expenses Account	Dr.
To Purchases Account	

The same rule has been followed in case of the last entry given in the illustration.

Transaction 11. In case of this transaction two entries could have been passed as under:

(*i*) Amrit	Dr.	4,900	
To Cash A/c			4,900
(*ii*) Amrit	Dr.	100	
To Discount A/c			100

In place of passing the above two entries a single compound entry has been passed.

Transaction 12. Three entries could have been based as follows:

(*i*) Stationary Expenses A/c	Dr.	200	
To Cash A/c			200
(*ii*) Rent A/c	Dr.	500	
To Cash A/c			500
(*iii*) Salaries A/c	Dr.	2,000	
To Cash A/c			2,000

In place of these three entries, a single compound entry has been passed.

CHECK YOUR PROGRESS

2. The amount brought in by the proprietor in the business should be credited to
   (a) Cash Account
   (b) Capital Account
   (c) Drawing Account
3. The amount of salary paid to Suresh should be debited to
   (a) The account of Suresh
   (b) Salaries Account
   (c) Cash Account
4. The return of goods by a customer should be debited to
   (a) Customer's Account
   (b) Sales Returns Account
   (c) Goods Account
5. Sales made to Mahesh for cash should be debited to
   (a) Cash Account
   (b) Mahesh
   (c) Sales Account

3.5 OPENING ENTRY

In case of a running business, the assets and liabilities appearing in the previous year's balance sheet will have to be brought forward to the current year. This is done by means of a journal entry which is termed as "Opening Entry". All Assets Accounts are debited while all Liabilities Accounts are credited. The excess of assets over liabilities is the proprietor's capital and is credited to his Capital Account. This will be clear with the help of the following illustration:

Illustration 3.5. Pass the Opening Entry on January 1, 1999 on the basis of the following information taken from the business of Mr. Sunil:

	Rs
(*i*) Cash in Hand	2,000
(*ii*) Sundry Debtors	6,000
(*iii*) Stock of Goods	4,000
(*iv*) Plant	5,000
(*v*) Land and Buildings	10,000
(*vi*) Sundry Creditors	10,000

Solution:

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Date	*Particulars*		*L.F.*	*Rs*	*Rs*
1999	Cash A/c	Dr.		2,000	
Jan.1	Sundry Debtors A/c	Dr.		6,000	
	Stock A/c	Dr.		4,000	
	Plant A/c	Dr.		5,000	
	Land and Buildings A/c	Dr.		10,000	
	To Sundry Creditors				10,000
	To Capital A/c (balancing figure)				17,000
	(Being balances brought forward from the last year)				
				27,000	27,000

Illustration 3.6. Journalise the following transactions in the books of a trader. *Debit Balances on Jan. 1, 1999:*

Cash in hand Rs 8,000, Cash at Bank Rs 25,000, Stock of Goods Rs 20,000, Furniture Rs 2,000, Building Rs 10,000. Sundry Debtors : Vijay Rs 2,000, Anil Rs 1,000, and Madhu Rs, 2,000.

Credit Balances on Jan. 1, 1999:

Sundry Creditors: Anand Rs 5,000, Loan from Bablu Rs 10,000

Following were further transactions in the month of January, 1999:

2. Jan. 1, Purchased goods worth Rs 5,000 for cash *less* 20% trade discount and 5% cash discount.
3. Jan. 4, Received Rs 1,980 from Vijay and allowed him Rs 20 as discount.
4. Jan. 6, Purchased goods from Bharat Rs 5,000.
5. Jan. 8, Purchased plant from Mukesh for Rs 5,000 and paid Rs 100 as cartage for bringing the plant to the factory and another Rs 200 as installation charges.
6. Jan. 12, Sold goods to Rahim on credit Rs 600.
7. Jan. 15, Rahim became an insolvent and could pay only 50 paise in a rupee.
8. Jan. 18, Sold goods to Ram for cash Rs 1,000.
9. Jan. 20, Paid salary to Ratan Rs 2,000.
10. Jan. 21, Paid Anand Rs 4,800 in full settlement.
11. Jan. 26, Interest received from Madhu Rs 200.
12. Jan. 28, Paid to Bablu interest on loan Rs 500.
13. Jan. 31, Sold Goods for cash Rs 500.
14. Jan. 31, Withdrew goods from business for personal use Rs 200.

Solution:

JOURNAL

Sl.	*Date*	*Particulars*		*L.F.*	*Debit Rs*	*Credit Rs*
1.	1999					
	Jan. 1	Cash A/c	Dr.		8,000	
		Bank A/c	Dr.		25,000	
		Stock A/c	Dr.		20,000	
		Furniture A/c	Dr.		2,000	
		Building A/c	Dr.		10,000	
		Vijay	Dr.		2,000	
		Anil	Dr.		1,000	
		Madhu	Dr.		2,000	
		To Anand				5,000
		To Bablu's Loan A/c				10,000
		To Capital A/c				55,000
		(Being balances brought forward from last year)				
2.	Jan. 1	Purchases A/c	Dr.		4,000	
		To Cash A/c				3,800
		To Discount A/c				200

		(Being purchase of goods for cash worth Rs 5,000 allowed 20% trade discount and 5% cash discount on Rs 4,000)			
3.	Jan. 4	Cash A/c Dr. Discount A/c Dr. To Vijay (Being cash received from Vijay, allowed Rs 20 as cash discount)		1,980 20	 2,000
4.	Jan. 4	Purchases A/c Dr. To Bharat (Being purchases of goods from Bharat)		5,000	 5,000
5.	Jan. 8	Plant A/c Dr. To Mukesh To Cash A/c (Being purchase of plant for Rs 5,000 and payment of Rs 100 as cartage and Rs 200 as installation charges)		5,300	 5,000 300
6.	Jan. 12	Rahim Dr. To Sales A/c (Being sale of goods to Rahim)		600	 600
7.	Jan. 15	Cash A/c Dr. Bad Debts A/c Dr. To Rahim (Being cash received from Rahim after his being declared as an insolvent. 50% of the amount due has been received and the rest has been taken as a bad debt)		300 300	 600
8.	Jan. 18	Cash A/c Dr. To Sales A/c (Being cash sales)		1,000	 1,000
9.	Jan. 20	Salary A/c Dr. To Cash A/c (Being salary paid)		2,000	 2,000
10.	Jan. 21	Anand Dr. To Cash A/c To Discount (Being cash paid to Anand and he allowed Rs 200 as discount)		5,000	 4,800 200
11.	Jan. 26	Cash A/c Dr. To Interest A/c (Being receipt of interest)		200	 200
12.	Jan. 28	Interest on Loan Dr. To Cash A/c (Being payment of interest on loan)		500	 500
13.	Jan. 31	Cash A/c Dr. To Sales A/c (Being goods sold for cash)		500	 500
14.	Jan. 31	Drawings A/c Dr. To Purchases A/c (Being goods withdrawn for personal use)		200	 200
		Total		96,900	96,900

Illustration 3.7. Journalise the following transactions:

1. Purchased goods from Mukesh & Co. on credit Rs 10,000.
2. On obtaining delivery of goods, it was found that the goods have been damaged to the extent of Rs 1,000.
3. Mukesh & Co. admitted the claim for breakage to the extent of Rs 800.

Solution:

JOURNAL

Sl.	Particulars	L.F.	Debit Rs	Credit Rs
1.	Purchases A/c Dr. To Mukesh & Co. (Being goods purchased from Mukesh & Co.)		10,000	10,000
2.	Loss in Transit A/c Dr. To Purchases A/c (Being damage to the goods purchased in transit)		1,000	1,000
3.	Mukesh & Co. Dr. To Loss in Transit A/c (Being claim admitted for loss in transit by Mukesh & Co.)		800	800

Note:

The entries show that against a loss of Rs 1,000, Mukesh & Co. has admitted a claim of only Rs 800. The loss of Rs 200 will have to be suffered by the proprietor of the business. He will transfer this loss to the Profit and Loss Account at the end of the accounting year:

CHECK YOUR PROGRESS

6. The rent paid to the landlord should be credited to
   (a) Landlord's Account
   (b) Rent Account
   (c) Cash Account
7. The Cash Discount allowed to a debtor should be credited to
   (a) Discount Account
   (b) Customer's Account
   (c) Sales Account
8. In case of a debt becoming bad, the amount should be credited to
   (a) Debtor's Account
   (b) Bad Debts Account
   (c) Sales Account

3.6 SUMMARY

- Journal is the book of prime entry since all transactions are recorded first of all in the journal.
- Business transactions may be of three types: (i) Relating to persons; (ii) Relating to Properties and Assets; and (iii) Relating to Income and Expense.
- The rules for journalizing are as under:
  o Personal Accounts – Debit the receiver, Credit the giver
  o Real Accounts – Debit what comes in, Credit what goes out
- Nominal Accounts – Debit all expenses and losses, Credit all gains and incomes

3.7 KEY TERMS

- **Journal:** A book containing a chronological record of business transactions. It is the book of original records.
- **Compound Journal Entry:** A journal entry recording more than one business transaction.
- **Nominal Accounts:** These are accounts opened in the books simply to explain the nature of the transaction. They include accounts of all incomes/gains and expenses/losses.
- **Opening Journal Entry:** A journal entry passed for bringing forward balances of assets and liabilities of the previous period to the current period.
- **Journalising:** The process of recording transactions in the journal.

- **Personal Accounts:** These are accounts of persons with whom the business deals.
- **Real Accounts:** These are accounts of tangible objects or intangible rights owned by an enterprise and carrying probable future benefits.

3.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*i*) Personal, (*ii*) Personal, (*iii*) Nominal, (*iv*) Personal, (*v*) Personal, (*vi*) Personal, (*vii*) Nominal, (*viii*) Real, (*ix*) Real, (*x*) Real
2. (*b*)
3. (*b*)
4. (*b*)
5. (*a*)
6. (*c*)
7. (*b*)
8. (*a*)

3.9 QUESTIONS AND EXERCISES

1. Explain the different categories in which the accounting transactions can be classified. Also state the rule of 'debit and credit' in this connection.
2. Explain the different rules for journalising the transaction with appropriate illustrations.
3. Explain the meaning of the term "Real Accounts".
4 Explain the term Accounting Cycle.
5. What is an opening entry?
6. Briefly explain the difference between:
(i) Personal and Impersonal Accounts.
(ii) Real Accounts and Nominal Accounts.

3.10 PRACTICAL PROBLEMS

1. Enter the following transactions in the journal of Arun for the month of December 2000:

Dec.		*Rs*
1	Arun commenced his business with a capital of	10,000
1	Bought machinery	300
2	Bought goods for cash from Ram	500
2	Sold goods for cash to Hari	4,000
3	Purchased goods from Jai on credit	2,200
4	Cash sales to Hari	2,000
5	Bought goods from Sunder on credit	1,920
5	Credit sales to Hari	3,200
6	Bought goods from Jai on credit	2,300
8	Bought office furniture for cash from *A* Ltd.	3,050
12	Paid cartage to Golden Transport Co.	70
15	Paid carriage-outward to Hanuman	20
17	Paid trade expenses	10
18	Paid advertisement expenses to Sunil Agencies	200
19	Received interest from Anil	50
20	Deposited cash into bank	1,000
22	Paid rent	150
27	Paid insurance premium	30
29	Paid salary to Nagendra, a clerk	325

2. Journalise the following transactions:

2000		*Rs*
Jan. 1	Girdhari commenced business with cash	7,500
Jan. 3	Goods purchased for cash	1,000
Jan. 4	Bought of Hari	250
Jan. 8	Furniture purchased from Murari for cash	50

Jan. 9 Furniture purchased from Murari 250
Jan. 12 Cash paid to Hari in full settlement of his account 240
Jan. 15 Goods purchased from Anil and he allowed us 10% trade discount 350
Jan. 20 Cash paid to Anil in full satisfaction 300
Jan. 21 Prince Behari bought from us 115
Jan. 22 Cash paid by Price Behari 15
Jan. 25 Prince Behari became insolvent, a final composition of 50 P in the rupee received from his official receiver out of a debit of Rs 100 50
Jan. 26 Paid for Miscellaneous Expenses 25
Jan. 28 Withdrawn by Girdhari for his personal use 100

Pass an opening entry in the Journal on the basis of the following information on April 1, 2000:

Cash in hand	2,000
Sundry Debtors	6,000
Stock of Goods	4,000
Machinery	11,000
Furniture	5,000
Sundry Creditors	1,000

3. Surendra commenced business on 1st January, 1999. His transactions for the month are given below. Journalise them.

2000		*Rs*
Jan. 1	Commenced business with a cash capital	20,000
Jan. 2	Paid into Bank	10,000
Jan. 3	Bought goods from Ramesh & Co.	5,000
Jan. 3	Sold goods to Rajesh	4,000
Jan. 7	Bought goods of Ram Chand	6,000
Jan. 8	Paid wages in cash	200
	Sold goods to Mahesh Chand	5,000
Jan. 10	Received cheque from Rajesh (discount allowed Rs 200)	3,800
Jan. 10	Paid into bank	4,000
Jan. 11	Paid to Ramesh & Co. (discount received Rs 200)	4,000
Jan. 12	Paid rent for three months to March	400
Jan. 13	Bought goods from C. Khare	7,400
Jan. 15	Wages paid in cash	80
Jan. 15	Paid office expenses in cash	70
Jan. 16	Sold goods to Jagdish	3,200
Jan. 17	Sold goods to Rajesh	1,600
Jan. 21	Sold goods to Mahesh Chand	2,500
Jan. 21	Payment received by cheque from Jagdish	3,200
Jan. 22	Paid wages in cash	80
Jan. 22	Paid office expenses in cash	50
Jan. 25	Paid Ram Chand by cheque (discount Rs 200)	5,800
Jan. 26	Received cheque from Mahesh Chand (discount Rs 200)	4,800
Jan. 27	Mahesh Chand returned goods not up to the sample	200
Jan. 29	Paid wages in cash	80
Jan. 31	Paid office expenses in cash	40
Jan. 31	Paid salaries for the month	300
Jan. 31	Cash used at home	400

4. From the following transactions of M/s Read and Write, write up the Journal in proper form:1999

Jan. 1 *Assets*: Cash in hand Rs 2,000 Cash at Bank Rs 68,000, Stock of goods Rs 40,000, Machinery Rs 1,00,000, Furniture Rs 10,000, M/s Surya Bros. owe Rs 15,000, M/s Babu Bros. owe Rs 25,000.

Liabilities: Loan Rs 50,000, Sum owing to Jain Ltd. Rs 20,000.

		Rs
Jan. 2	Bought goods on credit from Samuel & Co.	10,000
Jan. 3	Sold goods for cash to Dhiraj & Co.	4,000
Jan. 4	Sold goods to Surya Bros. on credit	10,000

Jan.	5	Received from Surya Bros. in full settlement of amount due on Jan. 1	14,500
Jan.	6	Payment made to Jain Bros. Ltd. by cheque	9,750
		They allowed discount	250
Jan.	9	Old furniture sold for cash	1,000
Jan.	10	Bought goods for cash	7,500
Jan.	11	Babu Bros. pay by cheque; Cheque deposited in Bank	25,000
		Paid for repairs to machinery	1,000
Jan.	13	Bought goods of Jain Bros. Ltd.	10,000
		Paid carriage on these goods	500
Jan.	16	Received cheque from Surya Bros., cheque deposited in bank	9,500
		Discount allowed to them	500
Jan.	17	Paid cheque to Jain Bros. Ltd.	10,000
Jan.	18	Bank intimates that cheque of Surya Bros. has been returned unpaid	
Jan.	19	Sold good for cash to Key Bros.	6,000
Jan.	21	Cash deposited in bank	5,000
Jan.	24	Paid Municipal Taxes in cash	1,000
Jan.	25	Borrowed from Maheshwari Investment Co. Ltd for constructing own premises. Money deposited with bank for the time being	10,000
Jan.	26	Old newspapers sold	200
Jan.	28	Paid for advertisements	1,000
Jan.	31	Paid rent by cheque	1,500
		Paid salaries for the month	3,000
		Drew out of bank for private use	2,500
		Surya Bros. becomes insolvent, a dividend of 50 P in the rupee is received. An old amount, written off as bad debt in 1997 is recovered	1,500

5. The following entries have been passed by a student. You have to state whether these entries are correctly passed. If not so, pass the correct journal entries.

	Particulars		Dr. Amount	Cr. Amount
(*i*)	Cash Account	Dr.	7,000	
	To Interest Account			7,000
	(Being interest paid)			
(*ii*)	Mohan	Dr.	10,000	
	To Purchases Account			10,000
	(Being purchase of goods from Mohan)			
(*iii*)	Hari	Dr.	5,000	
	To Sales Account			5,000
	(Being credit sales of goods to Hari)			
(*iv*)	Mukesh	Dr.	1,000	
	To Bank Account			1,000
	(Being salary paid to Mukesh)			
(*v*)	Freight Account	Dr.	1,000	
	To Cash Account			1,000
	(Being freight paid)			
(*vi*)	Repairs Account	Dr.	1,000	
	To Cash Account			1,000
	(Being charges paid for overhauling an old machine purchased)			
(*vii*)	Cash Account	Dr.	200	
	To Rakesh			200
	(Being an amount of debt which was written off as bad debt last year, is received during the year)			
(*viii*)	Purchases Account	Dr.	1,000	
	To Hari			1,000
	(Being goods sold to returned by him)			

[**Ans.** (*i*) Wrong, reverse should have been done, (*ii*) Wrong, reverse should have been done, (*iii*) Correct, (*iv*) Wrong, Salary Account should have been debited in place of Mukesh, (*v*) Correct, (*vi*) Wrong, Machine Account should have been debited in place of Repairs Account, (*vii*) Wrong, the amount should have been credited to Bad Debts Recovered account in place of Rakesh (*viii*) Wrong, the amount should have been debited to Sales Returns account in place of Purchases Account]

3.11 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 4 LEDGER POSTING AND TRIAL BALANCE

Structure

4.0 Introduction
4.1 Unit Objectives
4.2 Ledger
4.3 Posting
4.4 Relationship between Journal and Ledger
4.5 Rules Regarding Posting
4.6 Trial Balance
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4.10 Answers to 'Check Your Progress'
4.11 Questions and Exercises
4.12 Practical Problems
4.13 Further Reading

4.0 INTRODUCTION

It has already been explained in an earlier unit that accounting involves recording classifying and summarising the financial transactions. Recording is done in the Journal. This has already been explained in the preceding unit. Classifying of the recorded transactions is done in the Ledger. This is being explained in the present unit.

4.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Understand he role of the Ledger in recording business transactions
- Understand the meaning and rules regarding posting
- Describe the meaning and the objects of preparing a trial balance
- Make posting and prepare a trial balance

4.2 LEDGER

A Ledger is a book which contains various accounts. In other words, a Ledger is a set of accounts. It contains all accounts of the business enterprise whether Real, Nominal or Personal. It may be kept in any of the following two forms:

(i) Bound Ledger, or (*ii*) Loose Leaf Ledger

It is common to keep the Ledger in the form of loose-leaf cards these days. This helps in posting transactions particularly when a mechanised system of accounting is used.

4.3 POSTING

The term "Posting" means transferring the debit and credit items from the Journal to their respective accounts in the Ledger. It should be noted that the exact names of accounts used in the Journal should be carried to the Ledger. For example, if in the Journal, the Expenses Account has been debited, it would not be correct to debit the Office Expenses Account in the Ledger, though, in the Journal, it might have been indicated clearly in the narration that it is an item of office expenses. The correct course would have been to record the amount to the Office Expenses Account in the Journal as well as in the Ledger.

Posting may be done at any time. However, it should be completed before the financial statements are prepared. It is advisable to keep the more active accounts posted to date. The examples of such accounts are the cash account, personal accounts of various parties etc.

The posting may be done by the book-keeper from the Journal to the Ledger by any of the following methods:

(i) He may take a particular side first. For example, he may take the debits first and make the complete postings of all debits from the Journal to the Ledger.

(ii) He may take a particular account and post all debits and credits relating to that account appearing on one particular page of the Journal. He may then take some other accounts and follow the same procedure.

(iii) He may complete postings of each journal entry before proceeding to the next journal entry.

It is advisable to follow the last method. One should post each debit and credit item as it appears in the Journal.

The Ledger Folio (L.F.) column in the Journal is used at the time when debits and credits are posted to the Ledger. The page number of the Ledger on which the posting has been done is mentioned in the L.F. column of the Journal. Similarly, a folio column in the Ledger can also be kept where the page from which the posting has been done from the Journal may be mentioned. Thus, there are cross references in both the Journal and the Ledger.

A proper index should be maintained in the Ledger giving the names of the accounts and the page numbers.

4.4 RELATIONSHIP BETWEEN JOURNAL AND LEDGER

Both the Journal and the Ledger are the most important books used under the Double Entry System of book-keeping. Their relationship can be expressed as follows:

(i) The transactions are recorded first of all in the Journal and then they are posted to the Ledger. Thus, the Journal is the book of first or original entry, while the Ledger is the book of second entry.

(ii) The Journal records transactions in a chronological order, while the Ledger records transactions in an analytical order.

(iii) The Journal is more reliable than the Ledger since it is the book in which the entry is passed first of all.

(iv) The process of recording transactions is termed as "Journalising" while the process of recording transactions in the Ledger is called as "Posting".

4.5 RULES REGARDING POSTING

The following rules should be observed while posting transactions in the Ledger from the Journal:

(i) Separate accounts should be opened in the Ledger for posting transactions relating to different accounts recorded in the Journal. For example, separate accounts may be opened for sales, purchases, sales returns, purchases returns, salaries, rent, cash, etc.

(ii) The concerned account which has been debited in the Journal should also be debited in the Ledger. However, a reference should be made of the other account which has been credited in the Journal. For example, for salaries paid, the salaries account should be debited in the Ledger, but reference should be given of the Cash Account which has been credited in the Journal.

(iii) The concerned account, which has been credited in the Journal should also be credited in the Ledger, but reference should be given of the account, which has been debited in the Journal. For example, for salaries paid, Cash Account has been credited in the Journal. It will be credited in the Ledger also, but reference will be given of the Salaries Account in the Ledger.

Thus, it may be concluded that while making a posting in the Ledger, the concerned account which has been debited or credited in the Journal should also be debited or credited in the Ledger, but reference has to be given of the other account which has been credited or debited in the Journal, as the case may be. This will be clear with the following example.

Suppose salaries of Rs 10,000 have been paid in cash, the following entry will be passed in the Journal:

Salaries Account	(*i*)	Dr.	10,000	
To Cash Account	(*ii*)			10,000

In the Ledger two accounts will be opened (*i*) Salaries Account, and (*ii*) Cash Account. Since Salaries Accounts has been debited in the Journal, it will also be debited in the Ledger. Similarly, since the Cash Account has been credited in the Journal it will also be credited in the Ledger, but reference will be given of the other account involved. Thus the accounts will appear as follows in the Ledger:

Dr. SALARIES ACCOUNT *Cr.*

Particulars	*Rs*	*Particulars*
Cash A/c (*ii*)	10,000	

CASH ACCOUNT

Particulars	*Rs*	*Particulars*	*Rs*
		Salaries A/c (*i*)	10,000

Use of the words "To" and "By"

It is customary to use words "To" and "By" while making posting in the Ledger. The word "To" is used with the accounts which appear on the debit side of a Ledger Account. For example, in the Salaries Account, instead of writing only "Cash" as shown above, the words "To Cash" will appear on the debit side of the account. Similarly, the word "By" is used

with accounts which appear on the credit side of a Ledger Account. For example, in the above case, the words "By Salaries A/c" will appear on the credit side of the Cash Account instead of only "Salaries A/c". The words "To" and "By" do not have any specific meanings. Modern accountants are, therefore, ignoring the use of these words.

The procedure of posting from the Journal to the Ledger will be clear with the help of the illustrations given on the following pages:

Illustration 4.1. Journalise the following transactions and post them in the Ledger:

1. Ram started business with a capital of Rs 10,000.
2. He purchased furniture for cash Rs 4,000.
3. He purchased goods from Mohan on credit Rs 2,000.
4. He paid cash to Mohan Rs 1,000.

Solution:

JOURNAL

		Debit Rs	Credit Rs	
1	Cash Account	10,000		5
2	Furniture Account	4,000		6
3	Purchases Account To Mohan	2,000		7
4	Mohan To Cash Account	1,000	4,000	8

Ledger

CASH ACCOUNT

1	To Capital A/c	10,000	By Furniture A/c	4,000	6
			By Mohan	1,000	8

CAPITAL ACCOUNT

			By Cash A/c		5
2	To Cash A/c	4,000			

PURCHASES

3	To Mohan	2,000		
4	T		1,000 By	7

Balancing of An Account

In business, there may be several transactions relating to one particular account. In a Journal, these transactions appear on different pages in a chronological order while they appear in a classified form under that particular account in the Ledger. At the end of a period (say a month, a quarter or a year), the businessman will be interested in knowing the position of a particular account. This means, he should total the debits and credits of the account separately and find out the net balance. This technique of finding out the net balance of an account, after considering the totals of both debits and credits appearing in the account is known as 'Balancing the Account'. The balance is put on the side of the account which is smaller and a reference is given that it has been carried forward or carried down (*c/f* or *c/d*) to the next period. On the other hand, in the next period a reference is given that the opening has been brought forward or brought down (*b/f* or *b/d*) from the previous period. This will be clear with the help of the following illustration.

Illustration 4.2. Journalise the following transactions, post them in the Ledger and balance the accounts on 31st January.

1. Ram started business with a capital of Rs 10,000.
2. He purchased goods from Mohan on credit Rs 2,000.
3. He paid cash to Mohan Rs 1,000.
4. He sold goods to Suresh Rs 2,000.
5. He received cash from Suresh Rs 3,000.
6. He further purchased goods from Mohan Rs 2,000.
7. He paid cash to Mohan Rs 1,000.
8. He further sold goods to Suresh Rs 2,000.
9. He received cash from Suresh Rs 1,000.

Solution:

JOURNAL

Particulars		*L.F.*	*Debit Amount Rs*	*Credit Amount Rs*
Cash A/c	Dr.		10,000	
To Capital A/c				10,000
(Being commencement of business)				
Purchases A/c	Dr.		2,000	
To Mohan				2,000
(Being purchase of goods on credit)				
Mohan	Dr.		1,000	
To Cash A/c				1,000
(Being payment of cash to Mohan)				
Suresh	Dr.		2,000	
To Sales A/c				2,000
(Being goods sold to Suresh)				
Cash A/c	Dr.		3,000	
To Mohan				3,000
(Being cash received from Suresh)				
Purchases A/c	Dr.		2,000	
To Mohan				2,000
(Being purchase of goods from Mohan)				
Mohan	Dr.		1,000	
To Cash A/c				1,000
(Being payment of cash to Mohan)				
Suresh	Dr.		2,000	
To Sales A/c				2,000
(Being goods sold to Suresh)				
Cash A/c	Dr.		1,000	
To Suresh				1,000
(Being cash received from Suresh)				
Total			24,000	24,000

Ledger

Dr. CASH ACCOUNT *Cr.*

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
	To Capital A/c	10,000		By Mohan	1,000
	To Suresh	3,000		By Mohan	1,000
	To Suresh	1,000	Jan. 31	By Balance c/d	12,000
		14,000			14,000
Feb. 1	To Balance b/d	12,000			

CAPITAL ACCOUNT

Dr.					Cr.
Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Balance c/d	10,000		By Cash A/c	10,000
		10,000			10,000
			Feb. 1	By Balance b/d	10,000

PURCHASES ACCOUNT

Date	Particulars	Rs	Date	Particulars	Rs
	To Mohan	2,000	Jan. 31	By Balance c/d	4,000
	To Mohan	2,000			
		4,000			4,000
Feb.1	To Balance b/d	4,000			

MOHAN

Date	Particulars	Rs	Date	Particulars	Rs
	To Cash	1,000		By Purchases	2,000
	To Cash	1,000		By Purchases	2,000
	To Balance c/d	2,000			
		4,000			4,000
			Feb. 1	By Balance b/d	2,000

SURESH

Date	Particulars	Rs	Date	Particulars	Rs
	To Sales	2,000		By Cash A/c	3,000
	To Sales	2,000		By Cash A/c	1,000
		4,000			4,000

SALES ACCOUNT

Date	Particulars	Rs	Date	Particulars	Rs
Jan. 31	To Balance c/d	4,000		By Suresh	2,000
				By Suresh	2,000
		4,000			4,000
			Feb. 1	By Balance b/d	4,000

It is to be noted the balance of an account is always known by the side which is greater. For example, in the above illustration, the debit side of the Cash Account is greater than the credit side by Rs 12,000. It will be, therefore, said that Cash Account is showing a debit balance of Rs 12,000. Similarly, the credit side of the Capital Account is greater than debit side by Rs 10,000. It will be, therefore, said that the Capital Account is showing a credit balance of Rs 10,000.

CHECK YOUR PROGRESS

1. State whether each of the following statements is True or False:
   - (a) The "Posting" is done in the Journal.
   - (b) Ledger is a set of accounts.
   - (c) Transactions are recorded first of all in the Ledger.
   - (d) A Journal records transactions in a chronological order.
   - (e) A Ledger records transactions in an analytical order.
   - (f) While posting transactions in the ledger, if the account is debited in the Journal, it will be credited in the Ledger.
   - (g) The word "To" is used with the accounts which appear on the Debit side of a ledger account.
   - (h) Trial Balance helps in knowing the arithmetical accuracy of the accounting entries.

4.6 TRIAL BALANCE

In case the various debit balances and the credit balances of the different accounts are taken down in a statement, the statement so prepared is termed as a Trial Balance. In other words, Trial Balance is a statement containing the various ledger balances on a particular date. For example, with the balances of the ledger accounts prepared in Illustration 4.2, the Trial Balance can be prepared as follows:

TRIAL BALANCE

as on 31st January

Particulars	*Debit* *Rs*	*Credit* *Rs*
Cash Account	12,000	
Capital Account		10,000
Purchases Account	4,000	
Mohan		2,000
Sales Account		4,000
	16,000	16,000

Thus, the two sides of the Trial Balance tally. It means the books of accounts is arithmetically accurate.

Objectives of Preparing a Trial Balance

1. *Checking of the arithmetical accuracy of the accounting entries.* As indicated above, a Trial Balance helps in knowing the arithmetical accuracy of the accounting entries. This is because according to the dual aspect concept for every debit, there must be an equivalent credit. Trial Balance represents a summary of all ledger balances and, therefore, if the two sides of the Trial Balance tally, it is an indication of this fact that the books of account are arithmetically accurate. Of course, there may be certain errors in the books of account in spite of an agreed Trial Balance. For example, if a transaction has been completely omitted from the books of account, the two sides of the Trial Balance will tally, in spite of the books of account being wrong. This is discussed in detail later in a separate chapter.
2. *Basis for financial statements.* Trial Balance forms the basis for preparing financial statements such as the Income Statement and the Balance Sheet. The Trial Balance represents all transactions relating to different accounts in a summarised form for a particular period. In case, the Trial Balance is not prepared, it will be almost impossible to prepare the financial statements as stated above to know the profit or loss made by the business during a particular period or its financial position on a particular date.
3. *Summarised ledger.* It has already been stated that a Trial Balance contains the ledger balances on a particular date. Thus, the entire ledger is summarised in the form of a Trial Balance. The position of a particular account can be judged simply by looking at the Trial Balance. The Ledger may be seen only when details regarding the accounts are required.

Methods of preparing a Trial Balance. A trial balance may be prepared according to either of the two methods:

(a) *Totals method.* In case of this method, the totals of debit and credit of the accounts are shown in the trial balance. Trial balance is prepared before the ledger accounts are balanced. The totals of the debit and credit columns of the trial balance must be equal. This method is not popular.

(b) *Balance method.* In case of this method, the balances of the ledger accounts are shown in the respective debit and credit columns of the trial balance. The total of the balance of the debit column must be equal to the total balance of the credit column. This is the most common method of preparing a trial balance.

Illustration 4.3. Prepare the Ledger Accounts and the Trial Balance on the basis of transactions given in Illustration 3.6.

Solution:

Dr. CASH ACCOUNT *Cr.*

Date	*Particulars*	*L.F.*	*Amount* *Rs*	*Date*	*Particulars*	*L.F.*	*Amount* *Rs*
1989				1989			
Jan. 1	To Balance b/d		8,000	Jan. 1	By Purchases A/c		3,800
Jan. 4	To Vijay		1,980	Jan. 8	By Plant A/c		300
Jan. 15	To Rahim		300	Jan. 20	By Salary A/c		2,000

Jan. 18	To Sales A/c	1,000	Jan. 21	By Anand		4,800
Jan. 26	To Interest A/c	200	Jan. 28	By Interest on Loan A/c		500
Jan. 31	To Sales A/c	500	Jan. 31	By Balance c/d		580
		11,980				11,980
Feb. 1	To Balance b/d	580				

INTEREST ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
Jan. 31	To Balance c/d	200	Jan. 26	By Cash A/c	200
		200			200
			Feb. 1	By Balance b/d	200

BANK ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
Jan. 1	To Balance b/d	25,000	Jan. 31	By Balance c/d	25,000
		25,000			25,000
Feb. 1	To Balance b/d	25,000			

STOCK ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
Jan. 1	To Balance b/d	20,000	Jan. 31	By Balance c/d	20,000
		20,000			20,000
Feb. 1	To Balance b/d	20,000			

FURNITURE ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
Jan. 1	To Balance b/d	2,000	Jan. 31	By Balance c/d	2,000
		2,000			2,000
Feb. 1	To Balance b/d	2,000			

BUILDING ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
Jan. 1	To Balance b/d	10,000	Jan. 31	By Balance c/d	10,000
		10,000			10,000
Feb. 1	To Balance b/d	10,000			

VIJAY

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
Jan. 1	To Balance b/d	2,000	Jan. 4	By Cash A/c	1,980
				By Discount A/c	20
		2,000			2,000

ANIL

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 1	To Balance b/d	1,000	Jan. 31	By Balance c/d	1,000
		1,000			1,000
Feb. 1	To Balance b/d	1,000			

MADHU

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 1	To Balance b/d	2,000	Jan. 31	By Balance c/d	2,000
		2,000			2,000
Feb. 1	To Balance b/d	2,000			

ANAND

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 21	To Cash A/c	4,800	Jan. 1	By Balance b/d	5,000
Jan. 21	To Discount A/c	200			
		5,000			5,000

CAPITAL ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Balance c/d	55,000	Jan. 1	By Balance b/d	55,000
		55,000			55,000
			Feb. 1	By Balance b/d	55,000

BABU'S LOAN ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Balance c/d	10,000	Jan. 1	By Balance b/d	10,000
		10,000			10,000
			Feb. 1	By Balance b/d	10,000

PURCHASES ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 1	To Cash A/c	3,800	Jan. 31	By Drawings A/c	200
Jan. 1	To Discount A/c	200	Jan. 31	By Balance c/d	8,800
Jan. 6	To Bharat	5,000			
		9,000			9,000
Feb. 1	To Balance b/d	8,800			

DISCOUNT ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 4	To Vijay	20	Jan. 1	By Purchases A/c	200
Jan. 31	To Balance c/d	380	Jan. 21	By Anand	200
		400			400
			Feb. 1	By Balance b/d	380

BHARAT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Balance c/d	5,000	Jan. 6	By Purchases A/c	5,000
		5,000			5,000
			Feb. 1	By Balance b/d	5,000

PLANT ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 8	To Mukesh	5,000	Jan. 31	By Balance c/d	5,300
Jan. 8	To Cash A/c	300			
		5,300			5,300
Feb. 1	To Balance b/d	5,300			

INTEREST ON LOAN ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 28	To Cash A/c	500	Jan. 31	By Balance c/d	500
		500			500
Feb. 1	To Balance b/d	500			

MUKESH

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Balance c/d	5,000	Jan. 8	By Plant A/c	5,000
		5,000			5,000
			Feb. 1	By Balance d/d	5,000

SALES ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Balance c/d	2,100	Jan. 21	By Rahim	600
			Jan. 18	By Cash A/c	1,000
			Jan. 31	By Cash A/c	500
		2,100			2,100
			Feb. 1	By Balance b/d	2,100

Dr. RAHIM *Cr.*

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 12	To Sales A/c	600	Jan. 15	By Cash A/c	300
			Jan. 15	By Bad Debts A/c	300
		600			600

BAD DEBTS ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 15	To Rahim	300	Jan. 31	By Balance c/d	300
		300			300
Feb. 1	To Balance b/d	300			

SALARY ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 20	To Cash A/c	2,000	Jan. 31	By Balance c/d	2,000
		2,000			2,000
Feb. 1	To Balance b/d	2,000			

DRAWINGS ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
Jan. 31	To Purchases A/c	200	Jan. 31	By Balance c/d	200
		200			200
Feb. 1	To Balance b/d	200			

TRIAL BALANCE

(*as on 31st January, 1999*)

Particulars	Debit Rs	Credit Rs
Cash Account	580	
Interest		200
Bank Account	25,000	
Stock Account	20,000	
Furniture Account	2,000	
Building Account	10,000	
Anil	1,000	
Madhu	2,000	
Capital Account		55,000
Babu's Loan Account		10,000
Purchases Account	8,800	
Discount Account		380
Bharat		5,000
Plant Account	5,300	
Interest on Loan Account	500	
Mukesh		5,000
Sales Account		2,100
Bad Debts Account	300	
Salary Account	2,000	
Drawings Account	200	
	77,680	77,680

CHECK YOUR PROGRESS

2. Fill in the blanks:
   (a) The process of transferring the debit and credit items from a Journal to their respective accounts in the Ledger is termed as............
   (b) Journal is the book of........entry, while Ledger is the book of......... entry.
   (c) The word "By" is used with an account while making posting on the ...... side of an account.
   (d) The technique of finding the net balance of an account after considering the totals of both debits and credits appearing in the account is known as.........
   (e) The statement containing various ledger balances on a particular date is known as..........
   (f) If the two sides of the trial balance tally, it is an indication of the fact that the books of accounts are ...... accurate.

4.7 VOUCHER SYSTEM

In a small organization, it is possible for the proprietor to supervise all important matters personally. However, in case of large organizations, delegation of authority is required and therefore, it is necessary to have a proper internal check system for prevention of errors and frauds in recording the transactions and receiving or making final cash payments. The chances of frauds in case of cash payments are all the more. It is almost impossible for the disbursing official to have all information regarding the goods and services in respect of which he is required to make payments. This is because even in case of organizations of moderate size, the responsibility for issuing purchase orders, inspecting commodities received, verifying contractual and arithmetical details of invoices is divided among the employees of the various departments. The disbursing official should, therefore, have the assurance of all concerned officials before making payments that the terms of the contract have been complied with and he is paying the exact amount of obligation. This is possible only when all the activities mentioned above are properly coordinated and linked with the ultimate issuance of cheques to the creditors. One of the most effective systems employed for this purpose is termed as Voucher System.

The Voucher System may therefore be defined as "a plan and method of procedure for the verification, recording and payment of all items (other than items to be paid from petty cash) which require the disbursement of cash." As a matter fact, it is mainly a plan of internal check for all cash disbursement items. There are three basic requirements of the Voucher System:

(a) A Voucher is to be prepared for each item of expenditure.
(b) No payment shall be made without a properly verified and authorized voucher.
(c) Development of a proper and efficient system for determining the amount to be paid on each day. This helps the disbursing official in determining the amount to be paid and the management in conveniently and continuously forecasting the amount of the cash required to meet maturing obligations.

The following documents are used in the Voucher System:

1. **Vouchers.** In general terms, a Voucher means a documentary evidence in support of a business transaction. It is a documentary evidence by which the accuracy of an entry made in the books of account can be substantiated. It may be a receipt, a counterfoil of a receipt book, an invoice or even correspondence with the concerned parties. The term Voucher has a narrower meaning when applied to the Voucher System. It is a special form on which is recorded the pertinent data about a liability and the particulars of its payments.

Vouchers are generally prepared by the accounting department on the basis of invoices or returns that serve as the evidence of expenditure. This is done after the following comparisons and verifications have been completed and noted on the invoices:

(i) Comparison with the copy of Purchase Order to verify the quantities, prices and terms
(ii) Comparison with the Goods Received Returns to determine the receipt of items recorded in the invoices
(iii) Verification of the arithmetical accuracy of the invoices

After making the above verifications and comparisons, the invoices or other supporting evidence is attached to the voucher and is presented to the concerned official for his final approval.

2. **Voucher Register.** The Voucher Register is a columnar journal giving the details about the Voucher Nos., and different items of expenses in respect of which payments have to be made. A pro forma of a Voucher Register is given later.

The Vouchers are recorded in a numerical sequence. The credit is given to the accounts payable while debit is given to the account or accounts to be charged for expenditure. On making payment, the date of payment and the no. of cheques are inserted in the appropriate columns in the Voucher Register. The objective of such a recording is to provide ready information about determining the amount of individual unpaid vouchers. The total outstanding liability on account of vouchers unpaid at a particular date can be found out by adding up the individual amount of the unpaid vouchers as shown in the Voucher Register.

3. **Unpaid Voucher File.** After the vouchers have been prepared and recorded in the Voucher Register, they are filed in an Unpaid Voucher File. They remain there till they are paid. The amount due on each Voucher represents the credit balance of an account payable. Each Voucher in itself is comparable to an individual account in the Creditors Ledger. Hence, no separate Creditors Ledger is necessary.

4. **Cheque Register.** The payment of a Voucher is recorded in a Cheque Register, the pro forma of which is given below:

VOUCHER REGISTER

Date	Payee	Voucher No.	Paid		Credit	Debit					
			Date	Cheque No.	Voucher Payable	Purchases	Wages	Salaries	Office Expenses	Selling Expenses	Sundries
1995					Rs	Rs	Rs	Rs	Rs	Rs	Rs
May 1	Mohan	501	May 5	430	250	250					
May 8	Kishan	502	–	–	300	300					
May 15	David	503	May 20	431	500	–	500				
					1,050	550	500				

CHEQUE REGISTER

Date	Cheque No.	Payee	Voucher No.	Accounts Payable Dr.	Discount Cr.	Bank Cr.
May 5	430	Mohan	501	250	10	240
May 15	431	David	503	500	5	495
				750	15	735

The Cheque Register is a modified form of Cash Payment Journal and it is so called because it is a complete record of all cheques issued. It is customary to record all cheques in a Cheque Register in the order of their sequence to avoid mistake in their recording.

When a Voucher is to be paid, it is removed from the Unpaid Voucher File. On issue of a cheque, the date, the number of cheque and amount are listed on the back of the Voucher. This helps in recording the payments in the Cheque Register. The paid vouchers and the supporting documents are cancelled through a cancelling stamp to prevent their accidental or intentional reuse.

5. **Paid Voucher File.** After payments, vouchers are generally filed in numerical sequence in the Paid Voucher File. They are then readily available for examination by employees or independent auditors who may require information about a specific expenditure. The paid vouchers are finally destroyed in accordance with the firm's policy concerning the retention of records.

6. **Vouchers Payable Account.** Vouchers Payable Account is similar to Total Creditors Account. It is credited with the total amount payable on account of different vouchers and is debited with the amount of payments made. The balance of the Vouchers Payable account should agree with the total of the Unpaid Vouchers File and also with the sum of unpaid vouchers as shown in the Voucher Register. A proforma of a Vouchers Payable Account is given below:

VOUCHERS PAYABLE ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1986			1986		
May 31	To Cheque Register	735	May 31	By Voucher Register	1,050
	To Discount	15			
	To Balance c/d	300			
		1,050			1,050

Advantages of the Voucher System

The Voucher System offers the following advantages:

(i) *Safeguards cash disbursements.* Voucher System provides for a Systematic plan for the verification and approval of all invoices, bills and other items requiring disbursement of cash. Thus, it safeguards all cash disbursements.

(ii) *Reduces book-keeping work.* The Voucher System considerably reduces the bookkeeping work. The voucher itself works as an account of the creditor and total amount due to the creditors can be found out with the help of the Unpaid Vouchers File.

(iii) *Recording of all current liabilities.* The Voucher System provides for the immediate recording of all current liabilities. It is generally found that firms which do not use Voucher System fail to record bills for items such services and expenses till such time they are actually paid. As a matter of fact, it is desirable to show all liabilities in the books of the business from the time they are incurred.

(iv) *Strengthening of internal check system.* The placing of responsibilities for verification and approvals strengthens the system of internal check.

(v) *Planning future cash requirements.* Voucher System provides continuous information for planning the future cash requirements. This enables the management to make maximum use of cash resources. Invoices in respect of which cash discounts are allowed can be paid within the discount period. Other invoices can be paid in accordance with the credit items. This helps in minimising cost and maintaining a favourable credit standard. Moreover, seasonal borrowings for working capital can also be planned more effectively resulting in saving in interest cost.

Limitations of the Voucher System

The Voucher System has the following limitations:

(i) *Unsuitable for small concerns.* The Voucher System is neither suitable nor necessary for small business enterprises, particularly those with a high degree of proprietary supervision and control.

(ii) *Proper personnel and finances required.* The Voucher System requires sufficient personnel as well as finances for its successful operation. It will be a cumbersome exercise especially for an enterprise which is not well organized. If an enterprise which uses the Voucher System does not have sufficient cash and is not in a position to pay the approved vouchers according to schedule, it may develop an unwieldy file of approved unpaid vouchers.

(iii) *Fails to provide overall creditor's account position.* The system does not provide for giving an overall position of a creditor's account.

(iv) *Difficulties in case of partial payments returns etc.* The system proves a hindrance rather than as a help in case of concerns which have many returns of goods and other corrections after approving and recording of purchase invoices. Such concerns have to make many partial payments of approved vouchers. In some cases, they have to defer payments also.

From the above, it may be concluded that the Voucher System is suitable only for an enterprise which is well equipped both in respect of personnel and finances. It is not suitable for small concerns. Moreover, suitable modifications may have also to be made in the operation of the system as to meet the specific needs of a particular enterprise.

4.8 SUMMARY

- A Ledger posting involves clarification of recorded transactions under an appropriate accounting heading.
- A Trial Balance is a summary of various ledger balances. It helps in checking arithmetical accuracy of the accounting entries.
- A Voucher system ensures that no payment, except that from petty cash, is made without a properly made and authorized voucher.
- A Voucher system reduces the possibility of unauthorized payments by strengthening the internal check system.

4.9 KEY TERMS

- **Ledger:** A book containing different accounts of an entity.
- **Posting:** Transferring the debit and credit items from the Journal to the respective accounts in the Ledger.
- **Trial Balance:** A statement containing the various ledger balances on a particular date.
- **Voucher System:** A plan and method of procedure for the verifications, recording and payment of all items (other than items to be paid from petty cash) which require disbursement of cash.

4.10 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (a) F, (b) T, (c) F, (d) T, (e) T, (f) F, (g) T, (h) T
2. (a) posting, (b) first, second, (c) credit, (d) balancing of an account, (e) trial balance, (f) arithmetically

4.11 QUESTIONS AND EXERCISES

1. Explain the rules regarding posting of transactions in the Ledger.

2. What is a trial balance? Explain its objectives.

4.12 PRACTICAL PROBLEMS

1. Journalise the following transaction and post the entries in the Ledger.

1999			*Rs*
Jan.	1	Surendra started business with cash	5,000
Jan.	2	Goods purchased from Prasad on credit	200
Jan	3	Goods sold to Prem	500
Jan.	4	Good purchased from Sohan for cash	400
Jan.	5	Paid for wages	50
Jan.	15	Goods purchased from Prem	100
Jan.	17	Goods sold to Om	50
Jan.	21	Goods purchased from Charanjit	300
Jan.	23	Paid for interest	15
Jan.	24	Goods purchased from Om	200
Jan.	28	Cash received from Prem	100
Jan.	31	Cash paid to Charanjit	300
Jan.	31	Paid for Rent	10

2. Give journal entries of the following posting in the ledger accounts#

(a) DIVIDENDS

		By Cash	1,500

(b) INSURANCE

To *A*	2,000		

(c) DISCOUNT

To Bank	20		

(d) RENT

To Cash	1,200		

(e) PLANT

To Cash	20,000		
To Manohar	40,000		

(f) SALES

		By Cash	54,000
		By Naresh 37,000	

3. Journalise the following transactions and post them into Ledger:

1999		
September	1	Started business with Rs 50,000, out of which paid into Bank Rs 20,000.
September	2	Bought furniture for Rs 5,000 and machinery for Rs 10,000.
September	3	Purchased goods for Rs 14,000.
September	6	Sold goods for Rs 8,000.
September	8	Purchased goods from Malhotra & Co. Rs 11,000.
September	10	Paid telephone rent for the year by cheque Rs 500.
September	11	Bought one typewriter for Rs 2,100 from Universal Typewriter Co. on credit.
September	15	Sold goods to Keshav Ram for Rs 12,000.
September	17	Sold goods to Rajesh Kumar for Rs 2,000 for cash.
September	19	Amount withdrawn from bank for personal use Rs 1,500.
September	21	Received cash from Keshav Ram 11,900, discount allowed Rs 100.
September	22	Paid into bank Rs 5,800.

September	23	Bought 50 shares in *XY* & Co. Ltd at Rs 60 per share, brokerage paid Rs 20.
September	25	Goods worth Rs 1,000 found defective were returned to Malhotra & Co. and the balance of the amount due to them settled by issuing a cheque in their favour.
September	28	Sold 20 shares of *XY* & Co. Ltd at Rs 65 per share, brokerage paid Rs 20.
September	28	Bought goods worth Rs 2,100 from Ramesh and supplied them to Suresh at Rs 3,000.
September	30	Suresh returned goods worth Rs 100, which in turn were sent to Ramesh.
September	30	Issued a cheque for Rs 1,000 in favour of the landlord for rent for September.
September	30	Paid salaries to staff Rs 1,500 and received from travelling salesman Rs 2,000 for goods sold by him, after deducting the travelling expenses Rs 100.
September	30	Paid for: Charity Rs 101 Stationery Rs 450 Postage Rs 249

4. On 1st January, 1999, the following were the ledger balances of Rajan & Co.: Cash in hand Rs 900; Cash at Bank Rs 21,000; Soni (Cr.) Rs 3,000; Zahir (Dr.) Rs 2,400; Stock Rs 12,000; Prasad (Cr.) Rs 6,000, Sharma (Dr.) Rs 4,500; Lall (Cr.) Rs 2,700; Ascertain Capital.

Transactions during the month were:

1999			*Rs*
Jan.	2	Bought goods of Prasad	2,700
Jan.	3	Sold to Sharma	3,000
Jan.	5	Bought goods of Lall for cash, paid by cheque	3,600
Jan.	7	Took goods for personal use	200
Jan.	13	Received from Zahir in full settlement	2,350
Jan.	17	Paid to Soni in full settlement	2,920
Jan.	22	Paid cash for stationery	50
Jan.	29	Paid to Prasad by cheque	2,650
		Discount allowed by him	50
Jan.	30	Provided interest on capital	100
		Rent due to landlord	200

Journalise the above transactions and post to the ledger and prepare a Trial Balance.

5. Journalise the following transactions, post them in the ledger and prepare a Trial Balance:

January 1, 1999

Assets: Furniture Rs 5,000; Machinery Rs 10,000; Stock Rs 4,000; Cash in hand Rs 550; Cash at bank Rs 7,450; Amount due from Ramesh & Co. Rs 1,000 and amount due from Suresh Rs 2,000.

Liabilities: Amount due to Rama Rs 4,500; Amount due to Ranjeet Rs 2,000; and amount due to Shyam Rs 1,500.

1999			*Rs*
Jan.	1	Purchased goods from Ajay	4,500
Jan.	3	Sold goods for cash	1,500
Jan.	5	Paid to Himanshu by cheque	5,500
Jan.	10	Deposited in bank	2,800
Jan.	13	Sold goods on credit to Mukesh	1,700
Jan.	15	Paid for postage	100
Jan.	16	Received cash from Rakesh	2,200
Jan.	17	Paid telephone charges	250
Jan.	18	Cash sales	1,500

Jan. 20	Purchased Govt. Securities	500
Jan. 22	Purchased goods worth Rs 1,600 *less* 20% trade discount and 5% cash discount from Mahesh and Co. for cash and supplied them to Ramesh and Co. at list price *less* trade discount[1]	
Jan. 25	Cash purchases	16,500
Jan. 27	Goods worth Rs 500 were damaged in transit; a claim was made on the railway authorities for the same[2]	
Jan. 28	Suresh is declared insolvent and a dividend of 50 paise in the rupee is received from him in full settlement	
Jan. 28	Bought a horse for Rs 2,600 and a carriage for Rs 1,200 for delivering goods to customers. Paid by cheque	
Jan. 30	The horse bought on Jan. 29, dies and the carriage was sold for Rs 1,000	
Jan. 31	Allowed interest on capital @ 10% p.a. for one month	
Jan. 31	Paid for: Salaries Rs 150, Rent Rs 60	

4.13 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 5 BANK RECONCILIATION STATEMENT

Structure

5.0 Introduction
5.1 Unit Objectives
5.2 Need for Bank Reconciliation Statement
5.3 Meaning and Objective of Bank Reconciliation Statement
5.4 Importance of Bank Reconciliation Statement
5.5 Technique of Preparing Bank Reconciliation Statement
5.6 Summary
5.7 Key Terms
5.8 Answers to 'Check Your Progress'
5.9 Questions and Exercises
5.10 Practical Problems
5.11 Further Reading

5.0 INTRODUCTION

While explaining the recording of cash transactions in an earlier unit, it has already been stated that a firm may keep account(s) with one or more Banks. The advantages of keeping an account(s) with a Bank(s) are as follows:

1. **Avoidance of risk.** Keeping large cash balances in the office is risky. In case money is deposited from time to time in the Bank such risk can be avoided.

2. **Prevention of fraud and misappropriation.** Deposits of money into the Bank and disbursements of money through the Bank reduces the chances of misappropriation of funds and fraud being played by the employees of the firm. All receipts can immediately be deposited at the end of the day in the Bank. Similarly all payments may be made by means of cheques. Thus, the quantum of cash to be handled by the employees of the business is considerably reduced resulting in less chances of fraud and misappropriations.

3. **Reduction in accounting work.** Depositing of money in the Bank and making payments through a Bank considerably reduces the firm's accounting work. As a matter of fact in case of large business houses or institutions, the Banks open extension counters where all payments can be received and made. Thus, the accounting work at the firm's level is considerably reduced since the firm's cash accounting work is more or less done by the Bank.

5.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Appreciate the utility of keeping an account with a Bank by a business firm
- Identify the causes of difference between the balance shown by the Bank Pass Book and the firm's Cash Book
- Explain the meaning and objectives of preparing a Bank Reconciliation Statement
- Prepare a Bank Reconciliation Statement
- Explain the meaning of certain key terms

5.2 NEED FOR BANK RECONCILIATION STATEMENT

As stated above, the balance shown by the firm's cash book should tally with the cash as shown by the bank's pass book. However, the two balances generally do not tally. In order to ascertain the correctness or otherwise of the two sets of records, *i.e.*, one maintained by the firm and the other maintained by the bank, it is necessary that the causes of difference between the two should be ascertained and a reconciliation statement be prepared.

All transactions relating to the Bank, *i.e.*, deposits or withdrawals of the money in or from the Bank are recorded by the firm in the bank column maintained on each side of the cash book. The deposit of the money into the business bank account is recorded on the debit side of the cash book in the bank column, while the withdrawal of money from the bank is recorded on the credit side in the bank column of the cash book. The bank also maintains the firm's account in its books. A copy of this account, it submits to the firm from time to time. The account so submitted by the bank to the customer is known as the Bank Pass Book or Bank Statement. A pro forma of one page of the Bank Pass Book is given as:

INDIAN OVERSEAS BANK						
SAVINGS BANK ACCOUNT						
.................Branch						
Name of the Depositor(s) ....A/c No....................						
Address..						
Date	*Cheque No.*	*Particulars*	*Debit Rs.*	*Credit Rs.*	*Balance Rs.*	*Initials*

Fig. 5.1 *Pro Forma of Bank Pass Book*

The Pass Book or the Bank Statement is submitted by the bank to the customer for his information and verification. As already stated before, the balance shown by the bank column of the Cash Book and the Bank Pass Book normally do not tally on account of certain reasons. The following are the causes of difference between the balance as shown by the Bank Pass Book and the balance as shown by the Firm's Cash Book.

(i) **Cheques issued but not presented for payment.** The firm issues cheques from time to time for making different payments. As soon as a cheque is issued the firm debits the party's account in whose favour the cheque is issued and credits the bank's account. However, the Bank comes to know of issue of such cheques only when they are presented for payment. The Bank, therefore, debits the firm's account only when the cheque is actually presented for payment. It may, therefore, be possible that on a particular date when the Bank is submitting the firm's statement of account, it may not include certain cheques which have been issued by the firm because they may not have yet been presented. Thus, the balance shown by the Bank's books in the firm's account will be higher than the balance shown by the Firm's books in the Bank account. For example, a firm issues a cheque in favour of a creditor on 28th December, 1990 for a sum of Rs 10,000. The cheque is presented by the creditor on 3rd January, 1991 for payment. In case, the Bank submits a statement of account to the firm upto 31st December, 1990, there will be a difference of Rs 10,000 between the balance as shown by the firm's books and the balance as shown by the Pass Book.

(ii) **Cheques sent for collection but not yet collected.** A firm receives cheques from its customers from time to time and it sends them to its bankers for collection and crediting the proceeds to its account. The firm debits the account of the Bank as soon as it sends the cheques to the Bank for collection. However, the Bank gives credit to the firm only when the cheques are actually collected. Thus, on a particular date it may be possible that certain cheques which were sent for collection by the firm to the Bank may not have been collected by the Bank and, therefore, not credited to the firm's account. The two balances, *i.e.*, the balance as shown by the Bank Pass Book and the firm's Cash Book will, therefore, be different. For example, if a firm sends a cheque of Rs 5,000 on 25th December, 1990 to the Bank for collection which is collected by the Bank on 5th January, 1991, in the statement of account which may be submitted by the Bank for the year ending 31st December, 1990, there will be no credit to the customer for the cheque which it has not yet collected. Thus, the balance shown by the firm's Cash Book will be different from the balance as shown by the Bank Pass Book.

(iii) **Bank charges.** The Bank charges its customers for the services it renders to its customers from time to time. The Bank may charge its customer for remitting funds at his instructions from one place to another. It may also charge for collecting the outstation cheques or bills of exchange of its customer. The Bank debits the customer's account as soon as it renders such a service. However, a customer will know of such charges only when he receives a statement of account from the Bank. Thus, on a particular date, the balance shown by the Bank Pass Book may be different from the balance shown by the Cash Book.

(iv) **Direct collections on behalf of customers.** A banker may receive amounts due to the customer directly from customer's debtors. For example, the banker may get dividends, rents, interest, etc, directly from the persons concerned on account of the standing instructions of the customer to such persons. The Bank gives credit to the customer for such collections as soon as it gets such payments. However, the customer comes to know of such collections only when he receives the statement of accounts from his Banker. Thus, the balance shown by the Bank Pass Book and the Firm's Cash Book may not be the same on account of this reason.

(v) **Errors.** There may be errors in the account maintained by the customer as well as the Bank. A wrong credit or debit may be given by the customer or the Bank. The two balances, therefore, may not tally.

5.3 MEANING AND OBJECTIVE OF BANK RECONCILIATION STATEMENT

A Bank Reconciliation Statement is a statement reconciling the balance as shown by the Bank Pass Book and the balance as shown by the Cash Book. The objective of preparing such a statement is to know the causes of difference between the

two balances and pass necessary correcting or adjusting entries in the books of the firm. It should be noted that every reason of difference does not require an adjusting or correcting entry. Some reasons for difference are automatically adjusted. For example, if a cheque has been sent for collection, but it has not yet been collected, this is a cause of difference between the balance as shown by the Bank Pass Book and the balance as shown by the Cash Book, but no adjusting entry is required in the Cash Book for such a difference even after it has been found out. This is because the Bank will credit the firm's account as soon as the cheque is collected. This is only a question of time. However, if the cheque sent for collection to the Bank has been returned by the Bank on account of its being dishonoured, the firm should pass an adjusting entry for return of such cheque if it has not already been passed. Similarly, the firm has also to pass in its books, the entries for bank charges or direct payments received by the Bank on behalf of the firm.

5.4 IMPORTANCE OF BANK RECONCILIATION STATEMENT

The importance of the Bank Reconciliation Statement can be judged on the basis of the following facts:

(i) It highlights the causes of difference between the bank balance as per cash book and the bank balance as per pass book. Necessary adjustments or corrections can therefore be carried out at the earliest.

(ii) It reduces the chances of fraud by the cash staff. It may be possible that the cashier may not deposit the money in the bank in time though he might have passed the entry in the bank column of the cash book. The Reconciliation Statement will point out such discrepancies.

(iii) There is a moral check an the staff of the organization to keep the cash records always up to date.

CHECK YOUR PROGRESS

1. True or False

(a) Pass Book is the Statement of Account of the customer maintained by the Bank.

(b) The balance as shown by the Bank Pass Book and the balance as shown by the Bank Column of the Cash Book are always equal.

(c) Cheques issued but not presented for payment will reduce the balance as per the Pass Book.

(d) Cheques sent for collection but not yet collected will result in increasing the balance of the Cash Book as compared to the Pass Book.

(e) Direct collections received by the Bank on behalf of its customers will increase the balance as per the Bank Pass Book as compared to the balance as per the Cash Book.

(f) The Bank Reconciliation Statement is prepared to reconcile the balance as shown by the Cash Book and the balance as shown by the Pass Book.

(g) The debit balance of the bank account in the books of the business should be equal to the credit balance of the account of the business in the books of the Bank.

5.5 TECHNIQUE OF PREPARING BANK RECONCILIATION STATEMENT

A Bank Reconciliation statement is prepared usually at the end of a period, *i.e.*, a quarter, a half year or a year, as may be found convenient and necessary by the firm taking into account the number of transactions involved. The following are the steps to be taken for preparing a Bank Reconciliation Statement:

(i) The Cash Book should be completed and the balance as per the Bank column on a particular date should be found out covering the period for which the Bank Reconciliation Statement has to be prepared.

(ii) The Bank should be requested to complete and send to the firm the Bank Pass Book upto the date mentioned in Point (*i*) above.

(iii) The balance as shown by any book (*i.e.,* the Cash Book or the Bank Pass Book) should be taken as the base. This is as a matter of fact the starting point for determining the balance as shown by the other hook after making suitable adjustments taking into account the causes of difference.

(iv) The effect of the particular cause of difference should be studied on the balance shown by the other book.

(v) In case, the cause has resulted in a increase in the balance shown by the other book, the amount of such increase should be added to the balance as per the former book which has been taken as the base.

(vi) In case, the cause has resulted in decrease in balance shown by the other book, the amount of such decrease should be subtracted from the balance as per the former book which has been taken as the base.

In case, the books show an adverse balance (*i.e*., an overdraft) the amount of the overdraft should be put in the minus column. The Reconciliation Statement should then by prepared on the same pattern as if there is a favourable balance instead of their being an overdraft.

The above technique will be clear with the help of the following illustrations.

Where Causes of Difference are given

Illustration 5.1. From the following particulars prepare a Bank Reconciliation Statement as on 31st December, 2000.

(i) Balance as per Cash Book Rs 5,800.

(ii) Cheques issued but not presented for payment Rs 2,000.

(iii) Cheques sent for collection but not collected upto 31st December, 1990 Rs 1,500.

(iv) The Bank had wrongly debited the account of the firm by Rs 200 which was rectified by them after 31st December.

Balance as per Pass Book is Rs 6,100.

Solution:

There is a difference of Rs 300 between the balance as shown by the Cash Book and the balance as shown by the Bank Pass Book. A reconciliation statement can be prepared to reconcile the balances shown by the two books on the following basis:

(i) The balance as shown by the Cash Book will be taken as the starting point.

(ii) The cheques issued but not presented for payment have not been recorded in the Bank Pass Book. The balance as per Pass Book has to be found out. The Bank has not yet passed the entry for the payment of these cheques since they have not been presented for payment. The balance, therefore, in the Pass Book should be more. The amount of Rs 2,000 should, therefore, be added to the balance as shown by the Cash Book.

(iii) Cheques sent for collection but not yet collected must have been entered in the Cash Book but must not have been credited by the Bank to the firm's account since they have not yet been collected. The balance in the Pass Book should therefore, be less as compared to the Cash Book. The amount of Rs 1,500 should, therefore, be deducted out of the balance as shown by the Cash Book.

(iv) The Bank has wrongly debited the firm's account. This must have resulted in reducing balance as per the Bank Pass Book. The amount should, therefore, be deducted out of the balance shown as per the Cash Book.

Bank Reconciliation Statement will now appear as follows:

BANK RECONCILIATION STATEMENT

	Particulars	+ *Rs.*	– *Rs.*
(*i*)	Balance as per Cash Book	5,800	
(*ii*)	*Add*: Cheques issued but not presented for payment	2,000	
(*iii*)	*Less*: Cheques sent for collection hut not yet collected		1,500
(*iv*)	*Less*: Amount wrongly debited by the Bank		200
		7,800	1,700
	Balance as per Bank Pass Book	6,100	

Illustration 5.2. From the following particulars, prepare a Bank Reconciliation Statement showing the balance as per Cash Bank as on 31st December, 2000.

(i) Out of cheques of Rs. 9,000 paid on 29th December, Rs. 4,000 appear to have been credited in the Pass Book under 2nd January, 2001.

(ii) I had issued cheques in December, 2000 amounting in all to Rs. 16,000 of which I find that Rs. 7,000 worth have been cashed in the same month, a cheque of Rs. 5,000 has been cashed on January 3, 2001, and the rest have not been presented at all.

(iii) My Bankers have given me a wrong credit in my Joint Account with my wife in respect of a cheque of Rs. 2,000 paid into my personal account.

(iv) Rs. 1,000 for interest on overdraft charged in the Pass Book on 31st December has been entered in my Cash Book as on 4th January, 2001.

(v) My Pass Book shows a credit of Rs. 1,200 in my account being interest on my securities collected by my Bankers.

(vi) The Bank Balance as per my Pass Book showed an overdraft of Rs. 19,000.

Solution:

BANK RECONCILIATION STATEMENT

(*as an 31st December, 2000*)

	Particulars	+ *Rs.*	– *Rs.*
	Overdraft as per Pass Book		19,000
Add :	Cheques not yet credited	4,000	
Less :	Cheques not yet presented		9,000
Add :	Cheques not yet credited to my personal account	2,000	
Add :	Interest on overdraft charged in the Pass Book on 31st December, not entered in Cash Book	1,000	
Less :	Interest on securities collected by bankers not entered in Cash Book		1,200
		7,000	29,200
	Overdraft as per Cash Book		22,200

Illustration 5.3. Janardan and Co. have bank accounts with two banks, *viz*., Dena Bank and Bank of India. On 31st December, 1998, his Cash Book (bank columns) showed a balance of Rs 5,000 with Dena Bank and an overdraft of Rs 2,250 with Bank of India. On further verification, the following facts were discovered:

(a) A deposit of Rs 1,500 made in Dena Bank on 20th December, 1998 was been entered in the column for Bank of India.

(b) A withdrawal of Rs 500 from Bank of India on 2nd November, 1998 was been entered in the column for Dena Bank.

(c) Two cheques of Rs 500 and Rs 750 deposited in Dena Bank on lst December, 1998 (and entered in the Bank of Indian column) were dishonoured by the Bankers. The entries for dishonour were made in the Bank of India column.

(d) Cheques were issued on 29th December, 1998 on Dena Bank and Bank of India of Rs 10,000 and Rs 1,000 respectively. These were not cashed till 31st December, 1998.

(e) Incidental charges of Rs 10 and Rs 25 charged by Dena Bank and Bank of India respectively were not been entered in the books.

(f) Dena Bank had credited an interest of Rs 50 and Bank of India had charged interest of Rs 275. These had not been recorded in the books.

(g) The deposits of Rs 5,000 and Rs 3,500 made into Dena Bank and Bank of India respectively had not yet been credited by them till 31st December, 1998.

Draw up the two Bank Reconciliation Statements.

Solution :

M/s Janardan & Co.

RECONCILIATION STATEMENT WITH DENA BANK

(*as at 31st December, 1998*)

	Particulars	+ *Rs*	– *Rs*
	Balance as per Cash Book	5,000	
Add :	(*a*) Deposit made on 20.12.1998 but wrongly debited to Bank of India	1,500	
	(*b*) Withdrawal made on 2.11.1998 wrongly entered in the above account instead of Bank of India	500	
	(*c*) These entries have no effect in either account	—	
	(*d*) Cheque issued on 29.12.1998 but not yet encashed with the Bank	10,000	
Less :	(*e*) Incidental charges not yet credited by us		10
Add :	(*f*) Interest credited by Bank but not yet debited by us in our books	50	
Less :	(*g*) Cheque deposited but the proceeds of the same not yet credited of Bank		5,000
		17,050	5,010
	Balance as per Bank Pass Book (favourable)	12,040	

RECONCILIATION STATEMENT WITH BANK OF INDIA

(*as on 31st December, 1998*)

Particulars	+ *Rs.*	– *Rs.*
Overdraft as per Cash Book		2,250
Less : (*a*) Deposit made into Dena Bank on 20.12.1998 but wrongly debited to the above account		1,500
(*b*) Withdrawal made on 21.1.1998, but wrongly entered in Dena Bank Account		500
(*c*) These entries have no effect in either Account		
Add : (*d*) Cheque issued on 29.12.1998 but not yet encashed with the Bank	1,000	
Less : (*e*) Incidental charges not yet credited by us		25
(*f*) Interest charged by Bank but not yet recorded by us in the Books		275
(*g*) Cheques deposited, but the proceeds of the same not yet credited by Bank		3,500
	1,000	8,050
Overdraft as per Bank Pass Book		7,050

Where Cash Book Balance has to be Adjusted

Illustration 5.4. The Cash Book of Mr Gadbadwala shows Rs 8,364 as the balance at the Bank as on 31st December, 2000 but you find that this does not agree with the balance as per the Bank Pass Book. On scrutiny, you find the following discrepancies:

(i) On 15th December, 2000, the payments side of the Cash Book was undercast by Rs 100.

(ii) A cheque for Rs 131 issued on 25th December, 2000 was taken in the Cash column.

(iii) A deposit of Rs 150 was recorded in the Cash Book as if there was no Bank Column therein.

(iv) On 18th December, 2000 the debit balance of Rs 1,526 as on the previous day, was brought forward as credit balance.

(v) Of the total cheques amounting to Rs 11,514 drawn in the last week of December, 2000, cheques aggregating Rs 7,815 were encashed in December.

(vi) Dividends of Rs 250 collected by the Bank and subscription of Rs 100 paid by it were not recorded in the Cash Book.

(vii) One out-going cheque of Rs 350 was recorded twice in the Cash Book.

Prepare a Reconciliation Statement when:

(a) the books are not to be closed on 31st December

(b) the books are to be closed on 31st December

Solution:

If the books are not to be closed on 31st December, 2000

BANK RECONCILIATION STATEMENT

(*as on 31st December, 2000*)

Particulars		+ *Rs.*	– *Rs.*
Balance of Cash Book as given		8,364	
Add : Mistake in bringing forward Rs. 1,526 debit balance as credit the balance on 18.12.2000		3,052	
Cheques issued but not presented :			
Issued	11,514		
Cashed	7,815	3,699	
Dividends directly collected by the bank but not yet entered in the Cash Book		250	
Cheque recorded twice in the Cash Book		350	
Deposit not recorded in the Bank column		150	

Particulars	+ Rs.	– Rs.
Less : Wrong casting in the Cash Book on 15.12.2000		100
Cheques issued but not entered in the Bank column		131
Subscription paid by the Bank directly not yet recorded in the Cash Book		100
	15,865	331
Balance as per Pass Book	15,534	

If the books are to be closed on 31st December, 2000

In such a case necessary corrections for mistake committed will have to be made in the Cash Book and correct balance as per Cash Book will have to be found out. A Bank Reconciliation Statement will then be prepared.

ASCERTAINMENT OF CORRECT BALANCE

Particulars	*Rs.*	*Rs.*
Balance of Cash Books as given		8,364
Add : Mistake in the bringing forward the balance on 18th December		3,052
Dividends collected by the bank		250
Cheque recorded twice in the Cash Book		350
Deposit not recorded in the Bank column		150
		12,166
Less : Wrong casting of the Cash Book on 15th December	100	
Cheques issued but not entered in the Bank column	131	
Subscription paid by the Bank directly not yet recorded in the Cash Book	100	331
Correct Balance as per Cash Book (for Balance Sheet purposes)		11,835

BANK RECONCILIATION STATEMENT

(*as on 31st December, 2000*)

Particulars	*Rs.*	*Rs.*
Balance as per Cash Book (corrected)		11,835
Add: Cheques issued but not yet presented		3,699
Balance as per Pass Book		15,534

Where Abstracts from the Cash Book and the Pass Book are given

In such a case there can be two situations:

(i) *When the abstracts relate to the same period*. In such a case such transactions should be found which are not common in both the abstracts. These constitute the causes of difference (*See Illustration 5.5*).

(ii) *When the pass book relates to the succeeding period*. In such a case compare those transactions which are common in both the abstracts. These constitute causes of difference (*See Illustration 5.6*).

Illustration 5.5. The following are the Cash Book and Bank Pass Book of Niranjan for the month of April, 1998:

CASH BOOK (BANK COLUMN)

Date	*Particulars*	*Rs.*	*Date*	*Particulars*	*Rs.*
1.4.1998	To Balance b/d	12,500	1.4.1998	By Salaries A/c (Ch. No. 183)	4,000
4.4.1998	To Sales A/c	8,000	6.4.1998	By Purchases A/c (Ch. No. 184)	3,200

8.4.1998	To Parimal A/c	1,500	11.4.1998	By Machinery A/c (Ch. No. 185)	6,000
13.4.1998	To Mahim A/c	3,400	15.4.1998	By Om Prakash A/c (Ch. No. 186)	1,000
18.4.1998	To Kamal A/c	4,600	19.4.1998	By Drawing A/c (Ch. No. 187)	800
21.4.1998	To Furniture A/c	1,200	23.4.1998	By Kishore A/c (Ch. No. 188)	2,000
25.4.1998	To Sales A/c	3,800	27.4.1998	By Suresh A/c (Ch. No. 189)	1,000
30.4.1998	To Firoz A/c	3,000	30.4.1998	By Printing A/c (Ch. No. 190)	500
			30.4.1998	By Balance c/d	19,500
		38,000			38,000

BANK PASS BOOK

Date	*Particulars*	*Deposits*	*Withdrawal*	*Balance*
1.4.1989	Balance			12,500
2.4.1989	Cheque 183		4,000	8,500
6.4.1998	Cash	8,000		16,500
6.4.1998	Cheque 184		3,200	13,300
10.4.1998	Cheque	1,500		14,800
16.4.1998	Cheque	3,400		18,200
17.4.1998	Cheque 187		800	17,400
20.4.1998	Cheque	4,600		22,000
24.4.1998	Cheque	3,800		25,800
28.4.1998	Cheque 185		6,000	19,800
28.4.1998	Cheque 189		1,000	18,800
30.4.1998	Interest	100		18,900
30.4.1998	Deposit (Firoz)	3,000		21,900
30.4.1998	Charges		10	21,890

You are required to prepare a Bank Reconciliation Statement as on 30th April, 1998.

Solution:

BANK RECONCILIATION STATEMENT OF NIRANJAN

(*as on 30th April, 1998*)

Particulars		+ *Rs.*	– *Rs.*
Balance as per Cash Book		19,500	
Less: Amount deposited but not credited			1,200
Add: Cheques drawn but not presented			
Cheque No, 186	1,000		
Cheque No. 188	2,000		
Cheque No. 190	500	3,500	
Add: Interest allowed by bank but not posted in Cash Book		100	
Less: Charges debited by bank but not posted in Cash Book			10
		23,100	1,210
Balance as per Pass Book		21,890	

Illustration 5.6. From the following entries in the Bank column of the Cash Book of Mr. A. Kartak and the corresponding Bank Pass Book, prepare Reconciliation Statement as on 31st March, 1999.

CASH BOOK (BANK COLUMN ONLY)

Date	Particulars	Rs.	Date	Particulars	Rs.
1999			1999		
March 1	To Balance b/d	3,400	March 7	By Drawings	1,500
March 10	To Madan & Sons	500	March 8	By Salary	2,200
March 13	To Jerbai	4,000	March 15	By Ardesar & Co.	3,000
March 18	To Cawasji & Co.	1,200	March 28	By Merwan Bros.	1,550
March 28	To Dinshwa & Co.	2,200	March 29	By Raj & Sons	800
March 29	To Dhanbura Co.	5,700	March 30	By Macmillon Radios	400
March 31	To Antony	3,425	March 31	By Chandu, H	1,600
			March 31	By Balance c/d	9,375
		20,425			20,425

BANK PASS BOOK

(*Mr. Kartak in Current Account with Central Bank*)

Date	Particulars	Rs.	Date	Particulars	Rs.
1999			1999		
April 1	To Balance (Overdraft)	750	April 2	By Dividends	500
April 2	To Raj & Sons	800	April 2	By Dinshaw & Co.	2,200
April 4	To Macmillon Radios	400	April 2	By Hosang	200
April 8	To Salary	2,300	April 3	By Dhanbura Co.	5,700
April 10	To Drawings	500	April 3	By Antony	3,425
April 10	To Antony (Cheque dishonoured)	3,425	April 5	By Romy	170

Solution:

BANK RECONCILIATION STATEMENT OF MR. K. KARTAK

(*as on 31st March, 1999*)

Particulars		+ Rs.	– Rs.
Balance as per Cash Book		9,375	
Less: Cheques deposited but not credited:			
Dinshaw & Co.	2,200		
Dhanbura Co.	5,700		
Antony	3,425		11,325
Add: Cheques drawn but not presented:			
Raj & Sons	800		
Macmillon Radios	400	1,200	
		10,575	11,325
Overdraft as per Pass Book			Rs. 750

CHECK YOUR PROGRESS

2. Fill in the blanks

(a) When money is withdrawn from the Bank, the Bank .... the account of the customer.

(b) In case the Pass Book shows a favourable balance and it is taken as the starting point for preparing a Bank Reconciliation Statement, cheques issued but not presented for payment should be ....to find out cash balance.

(c) In case, the overdraft as per the Pass Book is taken as the starting point, it should be put in.......... column of the Bank Reconciliation Statement.

(d) Cheques sent for collection, but not yet collected should be added when favourable balance as per .... is taken as the starting point.

(e) Favourable balance as per Cash Book means .... in the Bank Column of the Cash Book.

5.6 SUMMARY

- A firm keeps an account with a bank for avoidance of risk, prevention of fraud and misappropriation and reduction in accounting work relating to cash transactions.
- Bank column in the cash book records transactions of the firm with the bank. The passbook (or bank statement) records the transactions of the bank with the firm.
- The balance shown by the bank account in the cash book should tally with the balance shown by the bank passbook. However, they never tally because of certain basic causes of difference.
- The causes of difference are cheques issued but not presented for payment, cheques sent for collection but not yet collected, bank charges for services rendered by the bank to the firm, direct collections made by the bank on behalf of its customers and errors.
- Bank reconciliation statement is a statement reconciling the balance as shown by the bank pass book and the balance as shown by the bank.
- The objective of preparing bank reconciliation statement is to identify the causes of difference between the two balances and pass necessary correcting or adjusting entries in the books of the firm.

5.7 KEY TERMS

- **Bank Reconciliation Statement:** A statement reconciling the balance as shown by the Bank Pass Book and the balance as shown by the Cash Book.
- **Pass Book:** It is a copy of the firm's account with a bank.

5.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*a*) True, (*b*) False, (*c*) False, (*d*) True, (*e*) True, (*f*) True, (*g*) True
2. (*a*) debits, (*b*) deducted, (*c*) minus, (*d*) Pass Book, (*e*) debit balance.

5.9 QUESTIONS AND EXERCISES

1. What is a Bank Reconciliation Statement? How is it prepared? Submit a pro forma of a Bank Reconciliation Statement with imaginary figures.
2. "Balance as shown by the Bank Pass Book should tally with the balance as shown by the Cash Book of the business". Do you agree? If not, explain the reasons with suitable examples of difference between the two.
3. What are the advantages of keeping an account with the bank?
4. Identity the causes of difference between balance shown by the firm's cash book with the balance shown by the bank passbook.
5. How does a bank reconciliation statement help an organization?
6. What technique would you follow for preparing a bank reconciliation statement?

5.10 PRACTICAL PROBLEMS

Pass/Cash Book Favourable Balance

1. From the following particulars prepare a bank reconciliation statement of Messrs Krishna & Co. showing the balance as per Bank Pass Book on March 31, 2000.
   (i) On March 31, 2000, the bank balance as per cash book was Rs 9,800.
   (ii) The following cheques were paid into the firm's bank current account in March 2000, but were credited by bank in April, 2000: Raman Rs 400; Chand Ram Rs 300; and Mohan Rs 200.
   (iii) The following cheques were issued by the firm in March, 2000; but were not cashed in April, 2000: Gopalan Rs 500 and Krishnan Rs 250.
   (iv) The pass book shows a credit of Rs 180 for interest and a debit of Rs 40 for bank charges.
   (v) The pass book also contains an entry for Rs 240 being payment made by a customer direct into bank.
   [**Ans.** Balance as per Pass Book Rs 10,030]
2. From the following particulars prepare a Bank Reconciliation Statement as at 31st December, 2000 of M/s *A. B. & Co*. who had cash at bank as per cash book Rs 10,500.40 and as per pass book Rs 12,350.60:
   (a) The following cheques were deposited on 30th and 31st December but were not collected by 31st December, 2000: (*i*) Rs 300.25, (*ii*) Rs 500, (*iii*) Rs 200.15.
   (b) The following cheques were issued but not cashed by 31st December, 2000
   (*i*) Rs 600.25, (*ii*) Rs 200 (*iii*) Rs 489.25, (*iv*) Rs 50.

(c) The bank collected a bill of Rs 1,500 on the 31st December, 2000 but the intimation was received by the firm on 1st January, 2001.
(d) The bank allowed interest Rs 20.30 and a commission was charged Rs 9.20 on 31st December, 2000.

[**Ans.** Balance as per Pass Book Rs 12,350.60]

3. On 31st December, 1998 the Pass Book of a merchant shows a credit balance of Rs 3,357. The cheques and draft sent to the bank but not collected and credited amounted to Rs 790 and three cheques drawn for Rs 300, Rs 150 and Rs 200 respectively were not presented for payment till 31st January next year.
Bank has paid a bill payable amounting to Rs 1,000 but it has bot been entered in the Cash Book and a bill receivable of Rs 500 which was discounted with the bank was dishonoured by the drawee on due date.
The bank has charged Rs 13 as its commission for collecting outstation cheques and has allowed interest Rs 10 on the trader's balance.
Prepare a bank Reconciliation Statement and show the balance as shown by the Cash Book.

[**Ans.** Balance as per Cash Book Rs 5,000]

Pass/Cash Book Overdraft

4. The bank pass book of Mr. X showed an overdraft of Rs 33,575 on 31st March, 1998. On going through the pass book, the accountant found the following:
(i) A cheque of Rs 1,080 credited in the pass book on March 28 being dishonoured is debited again in the pass book on 1st April, 1998. There was no entry in the Cash Book about the dishonour of the cheque until 15th April.
(ii) Bankers had credited his account with Rs 2,800 for interest collected by them on his behalf, but the same had not been entered in his Cash Book.
(iii) Out of Rs 20,500 paid in by Mr. *X* in cash and by cheques on 31st March, cheques amounting to Rs 7,500 were collected on 7th April.
(iv) Out of cheques amounting to Rs 7,800 drawn by him on 27th March, cheques for Rs 2,500 was encashed on 3rd April.
Prepare Bank Reconciliation Statement on March 31, 1999.

[**Ans.** Overdraft as per Cash Book Rs 31,375]

5. Prepare a Bank Reconciliation statement on 31st December, 2000 from the following particulars :
(a) *A*'s overdraft as per Pass Book Rs 12,000 as at 31st December.
(b) On 30th December, cheques had been issued for Rs 70,000 of which cheques worth Rs. 3,000 only had been encashed upto 31st December.
(c) Cheques amounting to Rs 3,500 had been paid into the bank for collection but of these only Rs 500 had been credited in the Pass Book
(d) The Bank has charged Rs 500 as interest on overdraft and the intimation of which has been received on 2nd January, 2001.
(e) The Bank Pass Book shows credit for Rs 1,000 representing Rs 400 paid by debtor of A direct into the Bank and Rs. 600 collected direct by Bank in respect on *A*'s investments. *A* had no knowledge of these items.
(f) A cheque for Rs 200 has been debited in bank column of Cash Book by *A*, but it was not sent to Bank at all.

[**Ans.** Overdraft as per Cash Book Rs 76,300]

6. From the following particulars taken on 31st December, 2000, you are required to prepare a bank reconciliation statement to reconcile the bank balance shown in the Cash Book with that shown in the Pass Book:
(i) Balance as per Pass Book on 3lst December, 2000, O/D Rs 1,027.
(ii) Four cheques drawn on 31st December but not cleared till January following Rs 12; Rs 1,021; Rs 98; and Rs 113.
(iii) Interest on O/D not entered in cash book Rs 51.
(iv) Three cheques received on 30th December and entered in the Bank column of the cash book but not lodged in bank for collection till 3rd January next: Rs 1,160; Rs 2,100; and Rs 2,080.
(v) Cost of cheque book, pass book, etc., Rs 1.50 entered twice erroneously in cash book in November.
(vi) A bill Receivable for Rs 250 due on 29th December, 2000 was passed to the bank for collection on 28th December, 1990 and was entered in cash book forthwith whereas the proceeds were credited in the pass book only in January following.
(vii) Chamber of Commerce subscription Rs 10 paid by bank on 1st December, 2000 had not been entered in the cash book.

(viii) Bank charges of Rs 5 had been debited in the pass book twice erroneously.

[**Ans.** Credit Balance as per Cash Book Rs. 3,383.50]

Comprehensive Problems

7. Ram, a sole trader, maintains two Bank Accounts, No. 1 Account is for his business, No. 2 Account is his private Account. On June 30, 1987, there was a balance of Rs 890 standing to his credit in No. 1 Account. It was discovered that:
   (i) The receipt column of the Cash Book has been overcast by Rs 1,000.
   (ii) Cheques amounting to Rs 3,760 entered in Cash Book as paid into the Bank have not been cleared.
   (iii) Cheques issued amounting to Rs 5,230 have not been presented.
   (iv) Discount allowed Rs 110 has been included through mistake in the Bank column of the Cash Book.
   (v) A trader's credit note of Rs 290 was received in June 1997, but not recorded in the books.
   (vi) A cheque for Rs 100 originally issued in 1996 was replaced when out of date and entered again in the Cash Book, it was still outstanding (and not out of date) on June 30, 1997. Both the cheques were included in the total of unpresented cheques Rs 5,230.
   (vii) The Bank has charged the No. 2 Account with a cheque for Rs 2,000 in error. This should have been charged to No. 1 Account.
   (viii) Make the appropriate adjustment in the Cash Book Balance.
   (ix) Prepare a Bank Reconciliation Statement to show the Bank Balance as per No. 1 Account.

[**Ans.** Adjusted Balance as per Cash Book Rs 170; Balance appearing in the Pass Book Rs 3,540]

8. On 31st December, 19..., the Cash Book of a merchant showed a debit balance of Rs 850. On comparing the Cash Book with the Bank Pass Book, the following discrepancies were noted:
   (a) Cheques issued for Rs 600 were not presented at Bank by 31st December, 19...
   (b) Cheques for Rs 800 were deposited in Bank but were not cleared.
   (c) Rs 2,000 being the proceeds of a Bill Receivable collected appear in the Pass Book but not in the Cash Book.
   (d) A cheque for Rs 100 received from *X* & Co. and deposited in Bank was dishonoured. No advice of non-payment was received from Bank till the 1st of next January. 19...
   (e) The Bank has paid a Bill Payable amounting to Rs 450 but it has not been entered in the Cash Book.
   (f) A Bill Receivable for Rs 800 which was discounted with the Bank was due this month. It was dishonoured by the drawee on due date.
   (g) A cheque for Rs 510 was paid into Bank but the Bank credited the account with Rs 501 by mistake.
   (h) A cheque for Rs 50 was deposited into Bank but the same was credited to a wrong account.
   (i) Rs 200 was deposited by a customer direct into the Bank.
   (j) The Bank received interest on debentures on behalf of the trader the amount being Rs 250.
   (k) A cheque for Rs 150 received from a customer deposited into bank but the same was not entered into the Cash Book.
   (l) The Bank paid Rs 125 by way of Insurance Premium.
   (m) The Bank charged Rs 9 as their commission for collecting outstation cheques and allowed interest of Rs 10 on the trader's balance.
   (n) A cheques for Rs 25 entered into the Cash Book was omitted to be banked.

   Prepare a Bank Reconciliation Statement and show the balance as per Pass Book.

[**Ans.** Balance as per Pass Book Rs 1,692].

9. Prepare a Bank Reconciliation Statement from the following particulars. You are required to ascertain the Bank balance as it would appear in Cash Book of Shri Gobind as at 31st December, 1999. Would the balance be different in case Shri Gobind closes his books on 31st December, 1999 ?
   (a) The Bank Pass Book showed an overdraft of Rs 9,500 on 31st December, 1999.
   (b) Interest on overdraft for six months ending 31st December, 1999 Rs 250 is debited in the Pass Book, but is not entered in the Bank column of Cash Book.
   (c) Cheques issued but not cashed, prior to 31st December, 1999 amounted to Rs 1,500.
   (d) Club bill directly debited to his bank account not yet reflected in the Cash Book Rs 2,700.
   (e) Cheques paid into bank, but not cleared and credited before 31st December, 1999 Rs. 2,500.
   (f) Interest on Investments collected by the Bankers and credited in the Pass Book amounted to Rs 1,800.
   (g) Shri Gobind issued a cheque of Rs 900 for his *LIC* Premium, which was returned as the amount in figure and words was not tallying. Shri Gobind, therefore, paid premium by cash and this way not rectified in his books of accounts.

[**Ans.** Overdraft as per Cash Book Rs 8,250. In case books are closed on 31st December, the overdraft would be Rs 8,500].

10. The Cash Book of a trader showed an overdraft balance of Rs 32,750 on 31st December, 2002. On scrutiny of the Cash Book and Pass Book it was discovered that
    (a) On 22nd December, sundry cheques totalling Rs 6,500 were sent to Bank for collection out of which a cheque for Rs 1,500 was wrongly recorded on the side of the Cash Book and cheques amounting to Rs 3,300 could not be collected by the Bank till 6th January next.
    (b) A cheque for Rs 4,000 was issued to a supplier on 28th December. This cheque was not presented to Bank till 10th January.
    (c) Bank had debited Rs 2,000 towards interest on overdraft and Rs 600 for Bank charges, but the bank advice was sent on 15th January.
    (d) Credit side of the Bank Column of the Cash Book was undercast by Rs 100.
    (e) Cheques for Rs 2,000 drawn for office expenses were not encashed till 2nd January.
    (f) A cheque for Rs 1,000 was issued to a creditor on 27th December and was omitted to be entered in the Cash Book. It was, however, presented to Bank within 31st December.
    (g) Dividends amounting to Rs 500 had been paid direct to the Bank and not entered in the Cash Book.

    You are required to make necessary corrections in the Cash Book and starting with the amended balance, prepare a Bank Reconciliation Statement as at 31st December, 2002.

    [**Ans.** Cash book corrected balance (overdraft) Rs 32,950; Overdraft as per Pass Book Rs 30,250].

11. From the following details, prepare a Bank Reconciliation Statement on 30th June, 2000.

Date	*Particulars Rs.*	*Withdrawals Rs.*	*Deposits*	*Dr. or Cr. Rs.*	*Balance*
2000					
June 1	By Balance b/d			Cr.	11,500
,, 4	By Mahesh Bansal's Cheque		750	Cr.	12,250
,, 7	By Santosh Sood's Cheque		1,000	Cr.	13,250
,, 10	To Ved Prakash	850		Cr.	12,400
,, 15	To Cash	2,400		Cr.	10,000
,, 20	By Vikas Kalra (Cash)		500	Cr.	10,500
,, 23	To Vishal Tandon	700		Cr.	9,800
,, 26	To Insurance Premium	500		Cr.	9,300
,, 30	To Bank Charges	50		Cr.	9,250
,, 30	By Interest		110	Cr.	9,360
,, 30	By Interest on Investments		640	Cr.	10,000

Dr. CASH BOOK (BANK COLUMN ONLY) *Cr.*

Date	*Particulars*	*Amount Rs.*	*Date*	*Particulars*	*Amount Rs.*
2000			1995		
June 1	To Balance b/d	11,500	June 10	By Ravi Raj	900
June 1	To Mahesh Bansal	750	June 12	By Ved Prakash	850
June 5	To Santosh Sood	1,000	June 15	By Cash	2,400
June 18	To Ramesh Kumar	600	June 18	By Vishal Tandon	700
June 26	To Vinay Kumar	400	June 25	By Sunil Gupta	440
			June 28	By Abhey Kumar	660
			June 30	By Balance c/d	8,300
		14,250			14,250
July 1	To Balance b/d	8,300			

12. From the following entries in the bank column of the Cash Book of Mr. *A* and Corresponding bank pass book, prepare a Bank Reconciliations Statement as on 31st March, 2002.

CASH BOOK (BANK COLUMN)

Date	*Particulars*	*Amount Rs.*	*Date*	*Particulars*	*Cheeque Number*	*Amount Rs.*
2002			2002			
March 2	To Balance	3,400	March 5	By Drawings	526	1,500
March 10	To M. Dass—Cheque	500	March 8	By Salaries	527	2,200
March 13	To J. Day—Cash	4,000	March 15	By Purchases	528	3,000
March 18	To C. Lal—Chequeon Delhi	1,200	March 20	By R. Bros.	529	1,550
March 20	To A Boman—Cheque	2,200	March 29	By House Rent	530	800
March 29	To D. Bros—Cheque	5,700	March 30	By K. Bros	531	400
March 31	To A. Jeewan—Cheque	3,425	March 3	By N Koomar	532	1,600
			March 31	By Balance		9.375
		20,425				20,425

BANK PASS BOOK

Date	*Particulars*	*Cheque No.*	*Amount Rs.*	*Date*	*Particulars*	*Amount Rs.*
2002				2002		
April 1	ToBalance (Overdraft)	350		April 1	By Divdend	750
April 2	To C. Ramdas	530	800	April 3	By A. Boman	2,200
April 4	To K. Bros.	531	400	April 4	By J. Jeewan	400
April 8	To Self	534	2,200	April 7	By D. Bose	5,700
April 10	To Self	535	700	April 9	By A. Jeewan	3,425
April 12	N. Koomar	532	1,600	April 11	By C. Lal Cheque on Delhi cleared less charges	1,198
April 15	To Balance c/d		8,323	April 15	Intt. on G.P. Note	700
			14,373			14,373

5.11 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 6 FINAL ACCOUNTS: DETERMINATION OF BUSINESS INCOME & FINANCIAL PORTION

Structure

6.0 Introduction
6.1 Unit Objectives
6.2 Trading and Profit & Loss Account
6.3 Manufacturing Account
6.4 Balance Sheet
6.5 Adjustment Entries
6.6 Worksheet
6.7 Summary
6.8 Key Terms
6.9 Answers to 'Check Your Progress'
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6.0 INTRODUCTION

Accuracy of the books of accounts is determined by means of preparing a Trial Balance. Having determined the accuracy of the books of accounts every businessman is interested in knowing about two more facts. They are: (*i*) Whether he has earned a profit or suffered a loss during the period covered by the Trial Balance, (*ii*) Where does he stand now? In other words, what is his financial position?

The determination of the Profit or Loss is done by preparing a Trading and Profit and Loss Account (or an Income Statement). The financial position is judged by means of preparing a Balance Sheet of the business. The two statements together, *i.e.*, Income Statement and the Balance Sheet are termed as Final Accounts. As the term indicates, Final Accounts means accounts which are prepared at the final stage to give the financial position of the business.

In the present unit we are dealing with the basic principles concerning financial reporting particularly with reference to a non-corporate entity *i.e.* a sole proprietary or a partnership firm.

6.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Identify the stages of the accounting cycle
- Identify the objectives of preparing final accounts
- List the various statements/accounts which comprise final accounts of business entity
- Understand the treatment of different items in preparation of the final accounts
- Appreciate the meaning and importance of different adjustment entries
- Pass appropriate adjustment entries
- Appreciate the role of work sheet in preparing final accounts
- Prepare Trading, Profit & Loss Account and Balance Sheet

6.2 TRADING AND PROFIT & LOSS ACCOUNT

The Trading and Profit and Loss Account is a final summary of such accounts which affect the profit or loss position of the business. In other words, the account contains the items of Incomes and Expenses relating to a particular period. The account is prepared in two parts (*i*) Trading Account, and (*ii*) Profit and Loss Account.

6.2.1 Trading Account

Trading Account gives the overall result of trading, *i.e.*, purchasing and selling of goods. In other words, it explains whether purchasing of goods and selling them has proved to be profitable for the business or not. It takes into account on the one hand the cost of goods sold and on the other the value for which they have been sold. In case the sales value is higher than the cost of goods sold, there will be a profit, while in a reverse case, there will be a loss. The profit disclosed by the Trading Account is termed as Gross Profit, similarly the loss disclosed by the Trading Account is termed as Gross Loss.

This will be clear with the help of the following illustration:

Illustration 6.1. Following figures have been taken from the Trial Balance of a trader:

	Rs
Purchases	30,000
Purchases Returns	5,000
Sales	40,000
Sales Returns	5,000

Calculate the amount of profit or loss made by the trader.

Solution:

The profit or loss made by the trader can be found out by comparing the cost of goods sold with sales value. This has been done as follows:

Particulars	*Amount Rs*	*Amount Rs*
Sales	40,000	
Less Sales Returns	5,000	35,000
Purchases	30,000	
Less Purchases Returns	5,000	25,000
Gross Profit		10,000

Opening and Closing Stocks

In the Illustration 6.1, we have presumed that all goods purchased have been sold away by the trader. However, it does not normally happen. At the end of the accounting year, a trader may be left with certain unsold goods. Such stock of goods with a trader unsold at the end of the accounting period is termed as Closing Stock. Such a stock will become the opening Stock for the next period. For example, if a trader has with himself goods amounting to Rs 5,000 unsold at the end of the year 1998, this stock of Rs 5,000 will be termed as his Closing Stock. For the year 1999, this stock of Rs 5,000 will be termed as his Opening Stock. While calculating the amount of profit or loss on account of trading, a trader will have to take such Opening and Closing Stocks into consideration. This will be clear with the help of the following illustration:

Illustration 6.2. Taking the figures given in Illustration 6.1, calculate the amount of Gross Profit if stock of Rs 5,000 is left at the end of the accounting period.

Solution:

In case all goods purchased have not been sold, goods of Rs 5,000 are still left with the trader. Stock of such goods is termed as Closing Stock. Thus, cost of goods sold will be calculated as follows:

COST OF GOODS SOLD = NET PURCHASES – CLOSING STOCK

= Rs 25,000 – 5,000
= Rs 20,000

The Gross Profit now can be computed as follows:

Gross Profit = Net Sales – Cost of goods sold
= Rs 35,000 – 20,000
= Rs 15,000

Illustration 6.3. From the following date calculate the profit made by a trader in 1988:

	Rs
Stock of goods on 1.1.1998	10,000
Purchases during the year	40,000
Purchases Returns during the year	3,000
Sales during the year	60,000
Sales returns during the year	10,000
Stock of goods on 31.12.1998	15,000

Solution:

Particulars	*Amount Rs*	*Amount Rs*
Sales	60,000	
Less: Sales Returns	10,000	50,000
Cost of goods sold:		
Opening Stock	10,000	
Add: Net Purchases (Rs 40,000–5,000)	35,000	
	45,000	
Less: Closing Stock	15,000	30,000
Gross Profit		20,000

Expenses on Purchases etc.

In the Illustrations given above, we have presumed that the trader has not incurred any expenses for purchase of goods and bringing them to his shop for sale. However, a trader has to incur various types of expenses for purchasing of goods as well as for bringing them to his shop for sale. Such expenses may include brokerage or commission paid to agents for purchase of goods, cartage or carriage charges for bringing the goods to the trader's shop, wages paid to coolies for transportation of goods etc. All such expenses increase the cost of the goods sold and hence they have also to be included in the cost of purchasing the goods. In other words, cost of goods sold will be calculated as follows:

COST OF GOODS SOLD = OP. STOCK + NET PURCHASES + EXPS ON PURCHASING OF GOODS – CL. STOCK

Cost of goods sold calculated as above will then be compared with the net sales to find out the amount of profit or loss made by the business. This will be clear with the following illustrations:

Illustration 6.4. Calculate the amount of the profit made by the trader with the help of data given in Illustration 6.3, if the wages, carriage charges etc. incurred for bringing the goods to the trader's shop amount to Rs 5,000.

Particulars	*Amount Rs*
Net Sales	50,000
Less: Cost of goods sold (30,000 + 5000)	35,000
Gross Profit	15,000

The term 'merchandise' is also used for the term 'goods'.

Thus:

COST OF GOODS	= COST OF MERCHANDISE
COST OF GOODS PURCHASED	= COST OF MERCHANDISE PURCHASED
COST OF GOODS SOLD	= COST OF MERCHANDISE SOLD

Illustration 6.5. Find out the cost of merchandise purchased, cost of merchandise sold, cost of merchandise unsold and Gross Profit from the following transactions:

	Rs
Purchases (3,000 articles)	25,000
Freight	1,000
Local Taxes	1,000
Salaries	2,500
Shop Rent	500
Godown Rent	500
Electrical Charges	600
Municipal Taxes	200
Stationery	250
Furniture (estimated life 5 years)	12,000
Sales (2,700 articles)	32,000

Solution:

Particulars	*Amount Rs*
Cost of Merchandise purchased	
This consists of:	
Purchases	25,000
Freight	1,000
Local Taxes	1,000
	27,000
Cost of Merchandise sold	
Cost of 3,000 units of merchandise purchased	27,000
Cost of one unit of merchandise	9
Cost of 2,700 units of merchandise sold	24,300
Gross Profit	
Sales of 2,700 units of merchandise	32,000
Less: Cost of merchandise sold	24,300
	7,700
Cost of Merchandise unsold	
300 units @ Rs 9 per unit	2,700

All other expenses including annual depreciation of furniture (amounting in all to Rs 6,950) will be considered for computing the Net Profit of the business. The concept of Net Profit has been explained later in the chapter.

Equation for Preparing Trading Account

On the basis of the illustrations given in the preceding pages, the following equation can be derived for preparing the Trading Account:

Gross Profit = Sales – Cost of goods sold

Cost of goods sold = Opening Stock + Purchases + Direct Expenses – Closing Stock

Therefore, Gross Profit = Sales – (Opening Stock +Purchases + Direct Expenses – Closing Stock)

or Gross Profit = (Sales + Closing Stock) – (Opening Stock + Purchases + Direct Expense)

The term "Direct Expenses" include those expenses which have been incurred in purchasing the goods, bringing them to the business premises and making them fit for sale. Examples of such expenses are carriage charges, octroi, import duty, expenses for seasoning the goods, etc.

The Trading Account can be prepared in the following form on the basis of equation given above.

TRADING ACCOUNT

Dr. *for the period ending ...* *Cr.*

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Opening Stock	......	By Sales	......
To Purchases		*Less*: Returns	......
Less: Returns	......	By Closing Stock	
To Direct Expenses	......		......

Illustration 6.6. Prepare the Trading Account of Mr. Ramesh for the year ending 31st December, 1998 from the date as follows:

	Rs		*Rs*
Purchases	10,000	Wages	4,000
Purchases Returns	2,000	Carriage Charges	2,000
Sales	20,000	Stock on 1.1.1998	4,000
Sales Returns	5,000	Stock on 31.12.1998	6,000

TRADING ACCOUNT

for the year ending 31.12.1998

Particulars		*Rs*	*Particulars*		*Rs*
To Opening Stock		4,000	By Sales	20,000	
To Purchases	10,000		*Less*: Sales		
Less: Returns	2,000	8,000	Returns	5,000	15,000
To Wages		4,000	By Closing Stock		
To Carriage Charges		2,000			6,000
To Gross Profit		3,000			
		21,000			21,000

Important Points Regarding Trading Account

1. **Stock.** The term 'Stock' includes goods lying unsold on a particular date. The Stock may be of two types:

(i) Opening Stock

(ii) Closing Stock

The term 'Opening Stock' means goods lying unsold with the businessman at the beginning of the accounting year. This is shown on the debit side of the Trading Account.

The term 'Closing Stock' includes goods lying unsold with the businessman at the end of the accounting year. It should be noted that stock at the end of the accounting year is taken after the books of accounts have been closed. The following journal entry is passed in the Journal Proper to record the amount of closing stock:

Closing Stock Account Dr.

To Trading Account

The amount of closing stock is shown on the credit side of the Trading Account and as an asset in the Balance Sheet. This has been explained later. The Closing Stock at the end of the accounting period will become the Opening Stock for the next year. The Opening Stock is, therefore, shown on the debit side of the Trial Balance.

Valuation of closing stock. The closing stock is valued on the basis of "cost or market price whichever is less" principle. It is, therefore, very necessary that the cost of the goods lying unsold should be carefully determined. The market value of such goods will also be found out on the Balance Sheet date. The closing stock will be valued at the lower of the two values. For example, if the goods lying unsold at the end of the accounting period is Rs 11,000, while their market price on the Balance Sheet date amounts to Rs 10,000, the closing stock will be valued at Rs 10,000. This valuation is done because of the accounting convention of conservatism, according to which expected losses are to be taken into account but not expected profits.

2. **Purchases.** The term "Purchases" includes both cash and credit purchases of goods. The term "goods", as already explained in an earlier chapter, means items purchased for resale. Assets purchased for permanent use in the business such as purchase of plant, furniture, etc., are not included in the purchase of goods. Similarly, purchase of articles such as stationery meant for using in the business will also not be included in the item of purchases. In case, a proprietor has himself used certain goods for his personal purposes, the value of such goods at cost will be deducted from the purchases and included in the drawings of the proprietor. The journal entry in such a case would be as follows:

Drawings Account Dr.

To Purchases Account

Similarly, in case certain goods are given by way of free samples, etc., the value of such goods should be charged to the advertisement account and deducted from purchases. The journal entry in such a case would be as follows:

Advertisement Account Dr.

To Purchases Account

The amount of purchases will be the net purchases made by the proprietor. The term 'net purchases' means total purchases of goods made by the businessman less the goods that he has returned to the suppliers. In other words, purchases will be taken to the Trading Account after deducting purchase returns from the gross purchases made during the accounting period.

3. **Sales.** The term 'Sales' includes both cash and credit sales. Gross sales will be shown in the inner column of the Trading Account out of which "sales returns" will be deducted. The net sales will then be shown in the outer column of the Trading Account. Proper care should be taken in recording sale of those goods which have been sold at the end of the financial year but have not yet been delivered. The sales value of such goods should be included in the sales, but care should be taken that they are not included in the closing stock at the end of the accounting period.

Sales of assets like plant and machinery, land and building or such other assets which were purchased for using in the business, and not for sale, should not be included in the figure of 'sales' to be taken to the Trading Account.

4. **Wages.** The amount of wages is taken as a direct expense and, therefore, is debited to the Trading Account. Difficulty arises in those cases when the Trial Balance includes a single amount for "wages and salaries". In such a case, the amount is taken to the Trading Account. However, if the Trial Balance shows "salaries and wages" the amount is taken to the Profit and Loss Account. In actual practice such difficulties do not arise because the businessman knows for which purpose he has incurred the expenditure by way of wages or salaries. However, in an examination problem, it will be useful for the students to follow the principle given above *i.e.*, "wages and salaries" to be charged to Trading Account while "wages and salaries" to be charged to the Profit and Loss Account. Wages paid for purchase of an asset for long-term use in the business *i.e.*, wages paid for plant and machinery or wages paid for construction of a building should not be charged to the Wages Account. They should be charged to the concerned Asset Account.

5. **Customs and import duty.** In case the goods have been imported from outside the country, customs and import duty may have to be paid. The amount of such duty should be charged to the Trading Account.

6. **Freight, carriage and cartage.** Freight, Carriage and Cartage are taken as direct expenses incurred on purchasing of the goods. They are therefore, taken to the debit side of the Trading Account. The terms "Freight In", "Cartage In" and "Carriage In" have also the same meaning. However, "Cartage Out", "Freight Out" and "Carriage Out" are taken to be the expenses incurred on selling the goods. They are, therefore, charged to the Profit and Loss Account. The term "Inward" is also used for the term "IN". Similarly, the term "Outward" is also used for the term "Out". In other words, "Carriage" or "Carriage Inward" or "Carriage Inward'' or ''Carriage In'' are used as synonymous terms. Similarly ''Carriage Out'' or ''Carriage Outward'' are also synonymous terms. The same is true for other expenses like Freight or Cartage.

7. **Royalty.** Royalty is the amount paid to the owner for using his rights. For example, the royalty is paid by a "Lessee" of a coalmine to its owner for taking out the coal from the coalmine. Similarly, royalty is paid to the owner of a patent for using his right. It is generally taken as a direct expense and, therefore, is charged to the Trading Account. However, where royalty is based on sales, for example in case of the book publishing trade, it may be charged to the Profit and Loss Account.

8. **Gas, electricity, water, fuel, etc.** All these expenses are direct expenses and, therefore, they are charged to the Trading Account.

9. **Packing materials.** Packing Materials used for packing the goods purchased for bringing them to the Shop or convert them into a saleable state are direct expenses and, therefore, they are charged to the Trading Account. However, packing expenses incurred for making the product look attractive or packing expenses incurred after the product has been sold away are charged to the Profit and Loss Account.

Closing Entries

Closing Entries are entries passed at the end of the accounting year to close different accounts. These entries are passed to close the accounts relating to incomes, expenses, gains and losses. In other words, these entries are passed to close the different accounts which pertain to Trading and Profit and Loss Account. The accounts relating to assets and liabilities are not closed but they are carried forward to the next year. Hence, no closing entries are to be passed regarding those accounts which relate to the Balance Sheet.

The principle of passing closing entry is very simple. In case an account shows a debit balance, it has to be credited in order to close it. For example, if the Purchases Account is to be closed, the Purchases Account will have to be credited so that it may be closed because it has a debit balance. The Trading Account will have to be debited.

The closing entries are passed in the Journal Proper. The difference closing entries to be passed by the accountant for preparing a Trading Account are being explained below:

(i) Trading Account Dr.
    To Stock Account (Opening)
    To Purchases Account
    To Sales Returns Account
    To Carriage Account
    To Customs Duty Account

(ii) Sales Account Dr.
    Purchases Returns Account Dr.
    Stock Account (Closing) Dr.
    To Trading Account

In case the total of the credit side of the Trading Account is greater than the total of the debit side of the Trading Account, the difference is known as Gross Profit. In a reverse case it will be a Gross Loss. Gross Profit or Gross Loss disclosed by the Trading Account is transferred to the Profit and Loss Account.

Importance of the Trading Account

Trading Account provides the following information to a businessman regarding his business:

1. Gross Profit disclosed by the Trading Account tells him the upper limit within which he should keep the operating expenses of the business besides saving something for himself. The cost of purchasing and the price at which he can sell the goods are governed largely by market factors over which he has no control. He can control only his operating expenses. For example, if the cost of purchasing an article is Rs 10 and it can be sold in the market at Rs 15 per unit, the gross margin available on each article is Rs 5. In case a businessman proposes to sell 1,000 units of that article in a year, his gross profit or gross margin will be Rs 5,000. His other expenses should therefore be less than Rs 5,000 so that he can also save something for himself.
2. He can calculate his Gross Profit Ratio[1] and compare his performance year after year. A fall in the Gross Profit Ratio means increase in the cost of purchasing the goods or decrease in the selling price of the goods or both. In order to maintain at least same figure of gross profit in absolute terms, he will have to push up the sales or make all our efforts to obtain goods at cheaper prices. Thus, he can prevent at least fall in the figure of his gross profit if cannot bring any increase in it.
3. Comparison of stock figures of one period from another will help him in preventing unnecessary lock-up of funds in inventories.
4. In case of new products, the businessman can easily fix up the selling price of the products by adding to the cost of purchases, the percentage gross profit that he would like to maintain. For example, if the trader has been so far maintaining a rate of gross profit of 20% on sales and he introduces a new product in the market having a cost of Rs 100, he should fix the selling price at Rs 125 in order to maintain the same rate of gross profit (*i.e.*, 20% on sales).

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[1] $\frac{\text{Gross Profit}}{\text{Sales}} \times 100$

CHECK YOUR PROGRESS

1. State whether each of the following statements is True or False:
   (a) The 'Current Liabilities' is used to denote those liabilities which are payable after a year.
   (b) The term 'Current Assets' and 'Liquid Assets' have synonymous meanings.
   (c) All Intangible Assets are fictitious assets.
   (d) Creating reserve for discount on creditors is not strictly according to the principle of conservatism.
   (e) Stock at the end, if appears in the Trial Balance, is taken only to the Balance Sheet.
   (f) Goods taken out by the proprietor from the business for his personal use are credited to Sales Account.
   (g) 'Salary paid in advance' is not an expense because it neither reduces assets nor increases liabilities.
   (h) The term "Accrued Income" and "Outstanding Income" have synonymous meanings.
   (i) Premium paid on the life policy of the proprietor is debited to the Profit and Loss Account.

6.2.2 Profit and Loss Account

The Trading Account simply tells about the gross profit or loss made by a businessman on purchasing and selling of goods. It does not take into account the other operating expenses incurred by him during the course of running the business. For example, he has to maintain an office for getting orders and executing them, taking policy decisions and implementing them. All such expenses are charged to the Profit and Loss Account. Besides this, a businessman may have other sources of income. For example, he may receive rent from some of his business properties. He may have invested surplus funds of the business in some securities. He might be getting interest or dividends from such investments. In order to ascertain the true profit or loss which the business has made during a particular period, it is necessary that all such expenses and incomes should be considered. Profit and Loss Account considers all such expenses and incomes and gives the net profit made or loss suffered by a business during a particular period. It is generally prepared in the following form:

PROFIT AND LOSS ACCOUNT

Dr. *for the year ending.....* *Cr.*

Particulars	*Rs*	*Particulars*	*Rs*
To Gross Loss b/d	....	By Gross Profit b/d	....
To Salaries	....	By Discount received	....
To Rent	....	By Net Loss transferred	
To Commission	....	to Capital A/c	....
To Advertisements	....		
To Bad Debts	....		
To Discount .	....		
To Net Profit Transferred			
to Capital Account	....		
	....		....

Important Points Regarding Profit and Loss Account

1. **Gross Profit or Gross Loss.** The figure of gross profit or gross loss is brought down from the Trading Account. Of course, there will be only one figure, *i.e.,* either of gross profit or gross loss.

2. **Salaries.** Salaries payable to the employees for the services rendered by them in running the business being of indirect nature are charged to the Profit and Loss Account. In case of a partnership firm, salaries may be allowed to the partners. Such salaries will also be charged to the Profit and Loss Account.

3. **Salaries *less* tax.** In case of employees earning salaries beyond a certain limit, the employer has to deduct at source income tax from the salaries of such employees. In such a case, the amount of gross salaries should be charged to the Profit and Loss Account, while the tax deducted by the employer will be shown as a liability in the Balance Sheet of the business till it is deposited with the Tax Authorities. For example, if salaries paid are Rs 2,400 after deducting income tax of Rs 600, the amount of salaries to be charged to the Profit and Loss Account will be a sum of Rs 3,000. The amount of tax-deducted at source by the employer, *i.e.*, Rs 600 will be shown as a liability in the Balance Sheet.

4. **Salaries after deducting provident fund contribution etc.** In order to provide for old age of the employees, employers contribute a certain percentage of salaries of the employees to the Provident Fund. The employee is also required generally to contribute an equivalent amount. The share of the employee's contribution to Provident Fund is deducted from the salary due to him and the net amount is paid to him. The amount of salaries to be charged to the Profit and Loss Account will be the gross salary payable to the employee, *i.e.*, including the employee's contribution to the Provident Fund. The contribution by the employer will also be charged as an expense to the Profit and Loss Account. Both employer's and employee's contributions to the Provident Fund will also be shown as liability in the Balance Sheet under the heading ''Employees Provident Fund''.

5. **Interest.** Interest on loans whether short-term or long-term is an expense of an indirect nature and, therefore, is charged to the Profit and Loss Account. However, interest on loans advanced by a firm to third-parties is an item of income and, therefore, will be credited to the Profit and Loss Account.

6. **Commission.** Commission may be both an item of income as well as an item of expense. Commission on business brought by agents is an item of expense while commission earned by the business for giving business to others is an item of income. Commission to agents is, therefore, debited to the Profit and Loss Account while commission received is credited to the Profit and Loss Account.

7. **Trade expenses.** Trade expenses are expenses of a miscellaneous nature. They are of small amount and varied in nature and, therefore, it is not considered worthwhile to open separate accounts for each of such types of expenses. The term ''Sundry Expenses'', ''Miscellaneous Expenses'' or ''Petty Expenses'' have also the same meaning. They are charged to the Profit and Loss Account.

8. **Printing and stationery.** This item of expense includes expenses on printing of bills, invoices, registers, files, letter heads, ink, pencil, paper and other items of stationery, etc. It is of an indirect nature and, therefore, charged to the Profit and Loss Account.

9. **Advertisements.** Advertisement expenses are incurred for attracting the customers to the shop and, therefore, they are taken as selling expenses. They are debited to the Profit and Loss Account. However, advertisement expenses incurred for purchasing of goods should be charged to the Trading Account, while an advertisement expenses incurred for purchase of a capital asset (*e.g.*, cost of insertion in a newspaper for purchase of car) should be taken as a capital expenditure and debited to the concerned asset account. Similarly advertisement expenditure incurred for sale of a capital asset should be deducted out of the sale proceeds of the asset concerned.

10. **Bad debts.** Bad Debts denotes, the amount lost from debtors to whom the goods were sold on credit. It is a loss and therefore, should be debited to the Profit and Loss Account.

11. **Depreciation.** Depreciation denotes decrease in the value of an asset due to wear and tear, lapse of time, obsolescence, exhaustion and accident. For example, a motor car purchased gets depreciated on account of its constant use. A property purchased on lease for Rs 12,000 for 12 years will depreciate at the rate of Rs 1,000 per year. On account of new inventions, old assets become obsolete and they have to be replaced. Mines etc. get exhausted after the minerals are completely taken out of them. An asset may meet an accident and may lose its value. It is necessary that depreciation on account of all these factors is charged to the Profit and Loss Account to ascertain the true profit or loss made by the business.

12. **Discount.** It is a reduction from a list price, quoted price or invoice price. Discount may be of three types:

(a) *Trade Discount.* It is a reduction from the list price. It is a reduction granted by a supplier from the list price of goods or services.

(b) *Quantity Discount.* It is similar to trade discount with the difference that it is given in case of purchasing of goods in bulk quantity.

(c) *Cash Discount.* It is reduction granted by a supplier from the invoice price in consideration of immediate payment or payment within a stipulated period.

Thus, quantity discount is similar to trade discount. However, cash discount is different from trade discount.

Distinction between trade discount and cash discount can be put as follows:

(a) *Meaning*. A trade discount is a reduction granted by the supplier from the list price on total amount of sales, while a cash discount is a reduction for prompt payment or payment within a stipulated time period.

(b) *Objective*. The objective of trade discount is to promote sales, while the objective of cash discount is quick collection of payment.

(c) *Time*. Trade discount is allowed at the time of purchasing of goods, while cash discount is allowed at the time of making payment.

(d) *Disclosure*. Trade discount is shown as reduction in the invoice itself, while cash discount is not shown in the invoice. Moreover, trade discount account is not opened in the ledger, while cash discount account is opened in the ledger.

(e) *Variation*. Trade discount may vary with the quantity of goods purchased, while cash discount may vary with time period within which payment is received.

Accounting (Closing) Entries for preparing Profit and Loss Account

Following journal entries will be passed in the Journal Proper for preparing the Profit and Loss Account:

(i) For transfer of items of expenses, losses, etc., appearing on the debit side of the Trial Balance

Profit and Loss Account Dr.
To Salaries
To Rent
To Commission
To Advertisements
To Bad Debts
To Discount
To Printing and Stationery

(ii) For transfer of items of incomes, gains, etc., appearing on the credit side of the Trial Balance

Interest Account Dr.
Dividends Account Dr.
Discount Account Dr.
To Profit and Loss Account

(iii) For transfer of net profit or net loss:

In case the total of the credit side of the Profit and Loss Account is greater than the debit side of the Profit and Loss Account, the difference is termed as Net Profit. In a reverse case, it will be termed as Net Loss. The amount of Net Profit or Net Loss shown by the Profit and Loss Account will be transferred to Capital Account in case of sole proprietary firm. In case of a partnership firm, the amount of net profit or net loss will be transferred to the Partners' Capital Accounts in the agreed ratio. In the absence of any agreement, the partners will share profits and losses equally.

For transfer of Profit

Profit and Loss Account Dr.
To Capital Account(s)

For transfer of Net Loss

Capital Account(s) Dr.
To Profit and Loss Account

Illustration 6.7. From the following balances, taken from the Trial Balance of Shri Suresh, prepare a Trading and Profit and Loss Account for the year ending 31st Dec., 1999:

Particulars	*Dr.* *Rs*	*Cr.* *Rs*
Stock on 1.1.1998	2,000	
Purchases and Sales	20,000	30,000
Returns	2,000	1,000
Carriage	1,000	
Cartage	1,000	
Rent	1,000	
Interest received		2,000
Salaries	2,000	
General Expenses	1,000	
Discount		500
Insurance	500	

The Closing Stock on 31st December, 1998 is Rs 5,000.

Solution:

TRADING AND PROFIT AND LOSS ACCOUNT

Dr. *for the year ending 31st December, 1998* *Cr.*

Particulars		*Rs*	*Particulars*		*Rs*
To Opening Stock		2,000	By Sales	30,000	
To Purchases	20,000		*Less*: Returns	2,000	28,000
Less: Returns	1,000	19,000	By Closing Stock		5,000
To Carriage	1,000				
To Cartage		1,000			
To Gross Profit c/d		10,000			
		33,000			33,000
To Rent		1,000	By Gross Profit b/d		10,000
To Salaries		2,000	By Interest		2,000
To General Expenses		1,000	By Discount		500
To Discount		1,000			
To Insurance		500			
To Net Profit taken to Capital Account		8,000			
		12,500			12,500

Importance of Profit and Loss Account

The Profit and Loss Account Provides information regarding the following matters:

(i) It provides information about the net profit or net loss earned or suffered by the business during a particular period. Thus, it is an index of the profitability or otherwise of the business.

(ii) The Profit figure disclosed by the Profit and Loss Account for a particular period can be compared with that of the other period. Thus, it helps in ascertaining whether the business is being run efficiently or not.

(iii) An analysis of the various expenses included in the Profit and Loss Account and their comparison with the expenses of the previous period or periods helps in taking steps for effective control of the various expenses.

(iv) Allocation of profit among the different periods or setting aside a part of the profit for future contingencies can be done. Moreover, on the basis for profit figures of the current and the previous period estimates about the profit in the year to come can be made. These projections will help the business in planning the future course of action.

6.3 MANUFACTURING ACCOUNT

In the preceding pages, we have explained the preparation of the Trading and Profit and Loss Account from the point of view of a trade, *i.e.,* a person who purchases and sells goods. However, a person may manufacture goods by himself for selling them at a profit. In case of such a person, *i.e.*, a manufacturer, it will be necessary to ascertain the cost of manufacturing the goods. In his case, therefore, the profit or loss made by him will be ascertained by preparing the following three accounts:

(i) **Manufacturing.** This account gives the cost of the goods manufactured by a manufacturer during a particular period.

(ii) **Trading account.** This account gives information about the gross profit or loss made by a manufacturer in selling the manufactured goods. In case a manufacturer also functions as a trader, *i.e.*, besides manufacturing and selling goods of his own, he also purchases and sells goods of others, he will be a manufacturer-cum-trader. In such a case, his Trading Account will disclose not only the profit made by him on selling his manufactured goods, but also the profit made by him in selling the goods purchased by him from others.

(iii) **Profit and loss account.** This account gives the overall profit or loss made or suffered by the manufacturer or manufacturer-cum-trader during a particular period. The pro forma of a Manufacturing Account is given below:

MANUFACTURING ACCOUNT

Dr. *for the year ending.........* *Cr.*

Particulars		*Rs*	*Particulars*	*Rs*
To Work-in-process (Opening)		....	By Work-in-process (Closing)	....
To Raw Materials consumed:			By Sale of Scrap	....
Opening Stock	....		By Cost of Production of finished goods during the period transferred to the Trading Account	....
Add: Purchases of Raw Materials	....			
Less: Closing Stock of Raw Materials	....	....		
To Direct or Productive wages		....		
To Factory Overheads:		....		
Power and Fuel		....		
Repairs of Plant		....		
Depreciation on Plant		....		
Factory Rent		....		
		....		....

The Trading Account in case of a manufacturer will appear as follows:

TRADING ACCOUNT

Dr. *for the year ending.........* *Cr.*

Particulars	*Rs*	*Particulars*	*Rs*
To Opening Stock of Finished Goods	....	By Sales *less* Returns	....
To Cost of Production of finished goods transferred from Manufacturing Account	....	By Closing Stock of Finished Goods	....
To Purchases of Finished Goods *less*: Returns	....	By Gross Loss c/d*	....
	....		
To Carriage Charges on goods purchased	....		
	....		
To Gross Profit c/d*	....		
	....		....

* Only one figure of profit or loss will appear.

The Gross Profit or Loss shown by the Trading Account will be taken to the Profit and Loss Account which will be prepared in the usual way as explained in the preceding pages.

Important Points Regarding Manufacturing Account

1. **Stock.** In case of a manufacturer, there can be stocks of three types:
   (i) **Stock of raw materials.** It includes stock of rawmaterials or finished components which might have been purchased by the manufacturer for using them in the products manufactured by him but still lying unsold.
   (ii) **Stock of work-in-process.** This is also termed as stock of work-in-progress. It includes goods in semi-finished form.
   (iii) **Stock of finishedgoods.** It includes stock of those goods which have been completely processed and arelying unsold at the end of a period with the manufacturer. It also includes stock of those finished goods which might have been purchased by a manufacturer-cum-trader from outside parties, but still lying unsold with him at the end of the accounting period.

2. **Raw materials consumed.** It is customary to show in the Manufacturing Account, the value of raw materials consumed for manufacturing goods during a particular period. This is computed as follows:

Opening Stock of Raw Materials	....
Add: Purchase of Raw Materials	....
	....
	....

For example, if the opening stock of raw materials is Rs 5,000, purchases of raw materials is Rs 20,000 and closing stock of raw materials is Rs 8,000, the value of raw materials consumed will be calculated as follows:

	Rs	*Rs*
Opening Stock of Raw Materials	5,000	
Add : Purchase of Raw Materials	20,000	25,000
Less : Closing Stock of Raw Materials		8,000
Raw Materials Consumed		17,000

3. **Carriage inwards, etc.** The expenses incurred for bringing the raw materials to the factory or the octroi or customs duty paid by the manufacturer on the raw materials purchased or imported by him will also be charged to Manufacturing Account.

4. **Factory overheads.** The term ''Overheads'' includes indirect material, indirect labour and indirect expenses. The term ''Factory Overheads'', therefore, stands for all factory indirect material, indirect labour, and indirect expenses. For example, in case of a manufacturer of chairs, the cost of timber purchased will be taken as raw materials. However, the polishing material used by him will be taken as indirect material and will be taken as an item of factory overheads. Similarly, the wages paid to the carpenters who have been employed for making chairs will come as cost of direct labour since they are actively engaged in manufacturing the chairs. However, the salaries of the supervisor or the wages of the gate- keeper will be taken as indirect labour cost and come in the definition of factoryoverheads. Similarly, the carriage charges paid for bringing the rawmaterials to the factoryare considered to be direct charges since they can directly be charged to the raw materials purchased. However, the rent for the factory, depreciation of the factory machines, insurance of the factory are all taken as indirect factory expenses and, therefore, covered under the category of factory overheads.

5. **Cost of production.** The Manufacturing Account gives the cost of manufacturing the goods during a particular period. This is computed by deducting from the total of the debit side of the Manufacturing Account, the total of the various items appearing on the credit side of the ManufacturingAccount asshown in the proforma of the ManufacturingAccount given earlier in the chapter.

6. **Sale of scrap.** In manufacturing operations, certain scrap is unavoidable. It may or may not have any sales value. In order to calculate the true cost ofmanufacturing the goods, it is necessarythat the moneyrealized on account of sale of scrap (or realisable value of the scrap in case it had not been sold) should be considered. The amount of scrap is, therefore, credited to the Manufacturing Account.

Illustration 6.8. From the following details, prepare a Manufacturing and a Trading Account for the year ending 31st December, 1998.

	Rs
Stock on 1.1.1998	
Raw Materials	10,000
Work-in-process	5,000
Finished Goods	20,000
Stock on 31.12.1998	
Raw Materials	5,000
Work-in-process	15,000

Finished Goods	30,000
Purchase of Raw Materials	50,000
Direct Wages	10,000
Carriage Charges on purchase of raw materials	5,000
Factory Power	5,000
Depreciation on Factory Machines	5,000
Purchase of Finished Goods	30,000
Cartage paid on Finished Goods purchased	2,000

Solution:

MANUFACTURING ACCOUNT

for the year ending 31.12.1998

Particulars		*Rs*	*Particulars*	*Rs*
To Work-in-process on 1.1.1998		5,000	By Work-in-process on 31.12.1998	15,000
To Raw Materials consumed			By Cost of Production transferred to Trading Account	70,000
Stock on 1.1.1998	10,000			
Add : Purchases	50,000			
	60,000			
Less : Closing Stock	5,000	55,000		
To Direct Wages		10,000		
To Carriage Charges		5,000		
To Factory Power		5,000		
To Depreciation on Factory Machines		5,000		
		85,000		85,000

TRADING ACCOUNT

for the year ending 31.12.1998

Particulars	*Rs*	*Particulars*	*Rs*
To Stock of Finished Goods 1.1.1998	20,000	By Stock of Finished Goods on 31.12.1998	30,000
To Cost of Production of finished goods transferred from Manufacturing Account	70,000	By Sale of Finished Goods	1,00,000
To Purchases of Finished Goods	30,000		
To Cartage on Finished Goods purchased	2,000		
To Gross Profit transferred to Profit and Loss A/c	8,000		
	1,30,000		1,30,000

Tutorial Note. Following points may further be noted by students:

(i) It is customary to give a separate heading to the Manufacturing Account as shown above. However, the Trading and Profit and Loss Account are not given separate headings. There will be a common heading for both these accounts as shown below:

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ending........

(ii) In case in an examination question, a Manufacturing Account is not separately asked for, the examinees may show all items relating to the Manufacturing Account in the Trading Account itself. However, it will be advisable in such a case to prepare a Manufacturing Account, if possible.

(iii) In case of Joint Stock Companies, the heading given is only, ''Profit and Loss Account for the year ending ''and not Trading and Profit and Loss Account. However, the amount of Gross Profit and Net Profit may be calculated separately.

6.4 BALANCE SHEET

Having prepared the Manufacturing Trading and Profit and Loss Account, a businessman will like to know the financial position of his business. For this purpose, he prepares a statement of his assets and liabilities as on a particular date. Such a statement is

termed as ''Balance Sheet''. Thus, Balance Sheet is not an account but only a statement containing the assets and liabilities of a business on a particular date. It is as a matter of fact a classified summary of the various remaining accounts after accounts relating to Incomes and Expenses have been closed by transfer to Manufacturing, Trading and Profit and Loss Account.

Balance Sheet has two sides. On the left hand side, the ''liabilities'' of the business are shown while on the right hand side the assets of the business appear. These two terms have been explained later in the chapter.

It will be useful here to quote definitions of the Balance Sheet given by some prominent writers. According to Palmer, ''The Balance Sheet is a statement at a given date showing on one side the trader's property and possessions and on the other side his liabilities.'' According to Freeman, ''ABalance Sheet is an itemised list of the assets, liabilities and proprietorship of the business ofan individual at a certain date.'' The definition given bythe American Institute of Certified Public Accountants makesthe meaning of Balance Sheet more clear. According to it, Balance Sheet is ''a list of balances of the asset and liability accounts. This list depicts the position of assets and liabilities of a specific business at a specific point of time.''

Pro Forma of Balance Sheet

There is no prescribed form of Balance Sheet for a sole proprietary and partnership concern. However, the assets and liabilities may be shown in any of the following order:

1. Liquidity Order.
2. Permanency Order.

1. **Liquidity order.** In case a concern adopts liquidity order, the assets which aremore readily convertible into cash come first and those which cannot be so readily converted come next and so on. Similarly, those liabilities which are payable first come first, and those payable later, come next and so on. A pro forma of Balance Sheet according to liquidity order is given below:

BALANCE SHEET

as on.......

Liabilities	*Rs*	*Assets*		*Rs*
Bank Overdraft	....	Cash in hand		....
Outstanding Expenses	....	Cash at Bank		....
Bills Payable	....	Prepaid Expenses	....	
Sundry Creditors	....	Bills Receivable	....	
Long-term Loans	....	Sundry Debtors	....	
Capital	....	Closing Stock:		
		Raw Materials	....	
		Work-in-progress	....	
		Finished Goods	....	....
		Plant and Machinery	....	
		Furniture	....	....
		Building	....	....
		Land	....	....
		Goodwill	....	....
	....			....

2. **Permanency order.** In case of permanency order, assets which are more permanent come first, less permanent come next and so on. Similarly liabilities which are more permanent come first, less permanent come next and so on. In other words, an asset which will be sold in the last or a liability which will be paid in the last come first and that order is followed both for all assets and liabilities. In case a balance sheet is to be prepared according to permanency order, arrangement of assets and liabilities will be reversed than what has been shown above in case of liquidity order.

Arrangement of assets according to any of these orders is also termed as "Marshalling of Assets and Liabilities".

Distinction between Profit and Loss Account and Balance Sheet

The point of distinction between Profit and Loss Account and Balance Sheet are as under:

(i) A profit and loss account shows the profit or loss made by the business during a particular period. While a balance sheet shows the financial position of the business on a particular date.

(ii) A profit and loss account incorporatesthose items which are of a revenue nature while a balance sheet incorporates those items which are of a capital nature.

(iii) Of course, both profit and loss account and the balance sheet areprepared from the Trial Balance. However, the accounts transferred to the profit and loss account are finally closed while the accounts transferred to the balance sheet represent those accounts whose balance are to be carried forward to the next year.

Important Points Regarding Balance Sheet

1. **Liabilities.** The term ''Liabilities'' denotes claims against the assets of a firm whether those of owners of the business or of thecreditors. Asa matter of fact, the term "Equity" ismore appropriate than theterm "Liabilities". This is supported bythe definition given by American Accounting Association. According to this Association, Liabilities are "claims of the creditors against the enterprise arising out of past activities that area to be satisfied by the disbursement or utilisation of corporate resources". While the term "Equity" stands both for owners equity (owners claims) as well as the outsiders equity (outsiders claims). However, for the sake of convenience, we are using the term "Liabilities" for purposes of this book.

Liabilities can be classified into two categories:

(*i*) Current Liabilities, and (*ii*) Long Term of Fixed Liabilities.

Current liabilities. The term "Current Liabilities" is used for such liabilities which are payable within a year from the date of the Balance Sheet either out of existing current assets or by creation of new current liabilities. The broad categories of current liabilities are as follows:

(a) Accounts Payable, *i.e.*, bills payable and trade creditors.
(b) Outstanding Expenses, *i.e*., expenses for which services have been received by the business but for which payments have not been made.
(c) Bank Overdraft.
(d) Short-term Loans, *i.e.*, loans from Bank which are payable within one year from the date of the Balance Sheet.
(e) Advance payments received by the business for the services to be rendered or goods to be supplied in future.

Fixed liabilities. All liabilities other than Current Liabilities come within this category. In other words, theseare liabilities which do not become due for payment in one year and which do not require current assets for their payment.

2. **Assets.** The term ''Assets'' denotes the resources acquired by the business from the funds made available either by the ownersof the business or others. It Thus, includesall rights or propertieswhich a business owns. Cash, investments, bills receivable, debtors, stock of raw materials, work-in-progress and finished goods, land, buildings, machinery, trade marks, patent rights, etc., are some examples of assets.

Assets may be classified into the following categories:

(a) **Current assets.** CurrentAssets are those assets which areacquired with the intention of converting them intocash during the normal business operations of the enterprise. According to Grady, ''the term Current Assets is used to designate cash and other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold during the normal operating cycle of the business.''[1] Thus, the term "Current Assets" includes cash and bank balances, stocks of raw materials, work-in-progress and finished goods, debtors, bills receivable, short-term investments, prepaid expenses, etc.

(b) **Liquid assets.** Liquid Assets are those assets which are immediately convertible into cash without much loss. Liquid Assets are a part of current asset. In computing liquid assets, stock of raw materials, work-in-progress and finished goods and prepaid expenses are excluded while all other current assets are taken.

(c) **Fixed assets.** Fixed assets are those assets which are acquired for relatively long periods for carrying on the business ofthe enterprise. They arenot meant for resale. Land and building, machinery, furniture aresome of the example of Fixed Assets. Sometimes, the term "Block Capital" is also used for them.

(d) **Intangible assets.** Intangible Assets are those assets which cannot be seen and touched. Goodwill, patents, trade marks, etc., are some examples of Intangible Assets.

(e) **Fictitious assets.** There are assets not represented by tangible possession or property. Examples of such assets are formation expenses incurred for establishing a business such as registration charge paid to the registrar of joint stock company for getting a company incorporated, discount on issue of shares, debit balance in the Profit and Loss Account when shown on the assets side in case of a joint stock company etc.

Difference between a Trial Balance and Balance Sheet

The difference between a trial balance and balance sheet can be put as under:

(a) *Meaning*. A trial balance is a statement containing various ledger balances on a particular date while a balance sheet is a statement of various assets and liabilities of the business on a particular date.

(b) *Objective*. The objective of preparation of a trial balance is to check the arithmetical accuracy of the books of account of the business. While the objective of preparation of a balance sheet is to ascertain the financial position of the business.

(c) *Item covered*. Atrial balance contains all items relating to incomes, expenses, assets and liabilitieswhile a balance sheet incorporates only assets and liabilities.

[1] Paul Grady, ''Inventory of Generally Accepted Accounting Principles for Business Enterprises'', pp. 234–35.

(d) *Preparation*. A trial balance is prepared before preparation of a balance sheet. In other words, the preparation of a trial balance is independent of preparation of a balance sheet. While a balance sheet is prepared not only on the basis of trial balance but also of any additional information which may not have been incorporated in the trial balance.

(e) *Use*. A trial balance is meant only for internal use. While a balance is prepared both for internal as well as external use.

Illustration 6.9. From the following balance extracted from the books of M/s Rajendra Kumar Gupta & Co., pass the necessary closing entries, prepare a Trading and Profit and Loss Account and a Balance Sheet.

Particulars	*Rs*	*Particulars*	*Rs*
Opening Stock	1,250	Plant and Machinery	6,230
Sales	11,800	Returns Outwards	1,380
Depreciation	667	Cash in hand	895
Commission (Cr.)	211	Salaries	750
Insurance	380	Debtors	1,905
Carriage Inwards	300	Discount (Dr.)	328
Furniture	670	Bills Receivable	2,730
Printing Charges	481	Wages	1,589
Carriage Outwards	200	Returns Inwards	1,659
Capital	9,228	Bank Overdraft	4,000
Creditors	1,780	Purchases	8,679
Bills Payable	541	Petty Cash in Hand	47
		Bad Debts	180

The value of stock on 31st December, 1999 was Rs 3,700.

Solution:

JOURNAL

Date	*Particulars*		*Dr. Amount Rs*	*Cr. Amount Rs*
	Trading A/c	Dr.	13,477	
	To Opening Stock A/c			1,250
	To Purchases A/c			8,679
	To Wages A/c			1,589
	To Returns Inward A/c			1,659
	To Carriage Inward A/c			300
	(For closing all accounts to be debited to Trading A/c)			
	Sales A/c	Dr.	11,800	
	Returns Outward A/c	Dr.	1,380	
	To Trading A/c			13,180
	(For closing all accounts to be credited to the Trading A/c)			
	Trading A/c	Dr.	3,403	
	To Profit and Loss A/c			3,403
	(For transfer of Gross Profit)			
	Profit and Loss A/c	Dr.	2,986	
	To Depreciation A/c			667
	To Insurance A/c			380
	To Printing Charges A/c			481
	To Carriage Outward A/c			200
	To Salaries A/c			750
	To Discount A/c			328
	To Bad Debts A/c			180
	(For closing all indirect and selling expenses accounts)			
	Commission A/c	Dr.	211	
	To Profit and Loss A/c			211
	(For closing commission account)			
	Profit and Loss A/c	Dr.	628	
	To Capital A/c			628
	(For transferring Net Profit to Capital Account)			

TRADING AND PROFIT & LOSS ACCOUNT
for the year ending 31st December, 1999

Particulars		Amount Rs	Particulars		Amount Rs
To Opening Stock		1,250	By Sales	11,800	
To Purchases	8,679		*Less*: Returns		
Less: Returns Outward	1,380	7,299	Inwards	1,659	10,141
To Wages		1,589	Closing Stock		3,700
To Carriage Inward		300			
To Gross Profit c/d		3,403			
		13,841			13,841
To Depreciation		667	By Gross Profit b/d		3,403
To Insurance		380	By Commission		211
To Printing Charges		481			
To Carriage Outwards		200			
To Salaries		750			
To Discount		328			
To Bad Debts		180			
To Net Profit		628			
		3,614			3,614

BALANCE SHEET
as on 31st December, 1999

Liabilities		Amount Rs	Assets	Amount Rs
Bills Payable		541	Cash	895
Creditors		1,780	Petty Cash	47
Bank Overdraft		4,000	Bills Receivable	2,730
Capital	9,228		Debtors	1,905
Add: Net Profit	628	9,856	Closing Stock	3,700
			Plant and Machinery	6,230
			Furniture	670
		16,177		16,177

Illustration 6.10. From the following Trial Balance prepare the Manufacturing Account, Trading and Profit and Loss Account for the year ending 31st March, 1999 and the Balance Sheet as on that date:

Particulars	Debit Rs	Credit Rs
Shri Banker's Capital Account		41,000
Shri Banker's Drawing Account	6,100	
Mrs. Banker's Loan Account		4,000
Sundry Creditors		45,000
Cash in Hand	250	
Cash at Bank	4,000	
Sundry Debtors	40,500	
Patents	2,000	
Plant and Machinery	20,000	
Land and Buildings	26,000	
Purchases of Raw Materials	35,000	
Raw Material as on 1.4.1998	3,500	
Work-in-process as on 1.4.1998	2,000	
Finished Stock as on 1.4.1998	18,000	
Carriage Inwards	1,100	
Wages	27,000	
Salary of Works Manager	5,600	
Factory Expenses	3,400	
Factory Rent and Taxes	2,500	
Royalties (paid on sales)	1,200	

Sales (less Returns)		1,23,400
Advertising	3,000	
Office Rent and Insurance	4,800	
Printing and Stationery	1,000	
Office Expenses	5,800	
Carriage Outwards	600	
Discounts	1,400	2,100
Bad Debts	750	
	2,15,500	2,15,500

The Stock on 31st March, 1999 was as follows:

Rs 4,000 Raw Materials, Rs 4,500 Work-in-progress and Rs 28,000 Finished Goods.

Solution:

MANUFACTURING ACCOUNT

for the year ending March 31, 1999

Particulars		*Rs*	*Particulars*	*Rs*
To Opening Work-in-process		2,000	By Transfer to Trading Account	
To Raw Materials used:			(cost of finished goods produced)	71,600
Opening Stock	3,500		By Closing Work-in-process	4,500
Add: Purchases	35,000			
	38,500			
Less: Closing Stock	4,000	34,500		
To Carriage Inwards		1,100		
To Wages		27,000		
To Salary of Works Manager		5,600		
To Factory Expenses		3,400		
To Factory Rent and Taxes		2,500		
		76,100		76,100

TRADING AND PROFIT & LOSS ACCOUNT

for the year ending March 31, 1999

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Opening Stock of		By Sales	1,23,400
Finished Goods	18,000	By Closing Stock of	
To Manufacturing A/c		Finished Goods	28,000
(cost of goods produced)	71,600		
To Gross Profit c/d	61,800		
	1,51,400		1,51,400
To Royalties	1,200	By Gross Profit b/d	61,800
To Advertising	3,000	By Discount received	2,100
To Office Rent and Insurance	4,800		
To Printing and Stationery	1,000		
To Office Expenses	5,800		
To Carriage Outwards	600		
To Bad Debts	750		
To Discount Allowed	1,400		
To Net Profit carried to			
Capital Account	45,350		
	63,900		63,900

BALANCE SHEET

as on 31st March, 1999

Liabilities		*Amount Rs*	*Assets*		*Amount Rs*
Sundry Creditors		45,000	Current Assets:		
Mrs. Banker's Loan		4,000	Cash in Hand		250
Capital Account			Cash at Bank		4,000
Balance on			Sundry Debtors		40,500
1.4.1998	41,000		Closing Stock:		
Profit	45,350		Raw Materials	4,000	

86,350			Work-in-process	4,500	
Less: Drawings 6,100		80,250	Finished goods	28,000	36,500
			Fixed Assets:		
			Patents		2,000
			Plant and Machinery		20,000
			Land and Buildings		26,000
		1,29,250			1,29,250

6.5 ADJUSTMENT ENTRIES

In the preceding pages, we have explained the preparation of the Final Accounts, without any adjustments. We have presumed that the accountant has taken into consideration all important facts before closing the books of accounts and preparing the Final Accounts. However, it may not always happen. The accountant may come to know of certain adjustments to be made in the books of accounts to give a true picture of the state of affairs of the business after closing the books of accounts and preparing the Trial Balance. These adjustments usually relate to the following:

1. Closing stock
2. Outstanding expenses
3. Prepaid expenses
4. Outstanding or accrued income
5. Income received in advance or unearned income
6. Depreciation
7. Bad debts
8. Provision for bad debts
9. Provision for discount on debtors
10. Reserve for discount on creditors
11. Interest on capital
12. Interest on drawings

Each of these adjustments are being explained in detail in the following pages:

Closing Stock

We have already explained about the treatment of the stock at the end of the accounting year while explaining Final Accounts in the preceding pages. The following journal entry is passed for the unsold stock at the end of the accounting period:

Closing Stock A/c Dr.
To Trading Account

The stock at the end appears in the Balance Sheet and its balance at the end of the accounting year is carried forward to the next year. It comes as opening stock in the Trial Balance of the next year from where it is transferred to the Trading Account on the debit side. The Trading Account is debited and the stock in the beginning of the accounting year (which was Closing Stock last year) is credited. Stock Account is thus closed.

Sometimes the value of the stock at the end of the accounting year, is given in the Trial Balance. In such a case, the Closing Stock will be shown only in the Balance Sheet. This is because it means that the Closing Stock has already been taken into account while computing the cost of goods sold. This will be clear with the help of the following example:

TRIAL BALANCE

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Opening Stock	10,000	
Purchases	30,000	
Sales		40,000

Stock at the end of the accounting year is Rs 15,000.

In this case, the Closing Stock has been given outside the Trial Balance and, therefore, the different items will appear in the Final Accounts as follows:

Dr. TRADING ACCOUNT *Cr.*

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Opening Stock	10,000	By Sales	40,000
To Purchases	30,000	By Closing Stock	15,000
To Gross Profit taken to Profit and Loss Account	15,000		
	55,000		55,000

BALANCE SHEET

Liabilities	Amount Rs	Assets	Amount Rs
		Closing Stock	15,000

The Opening and Closing Stock may both be adjusted with purchases and the cost of sales may be found out separately. In such a case, the items in the Trial Balance will appear as follows:

TRIAL BALANCE

Particulars	Dr. Amount Rs	Cr. Amount Rs
Adjusted Purchases or Cost of Sales	25,000	
Sales		40,000
Closing Stock	15,000	

The different items will now appear in the Final Accounts as follows:

Dr. TRADING ACCOUNT *Cr.*

Particulars	Amount Rs	Particulars	Amount Rs
To Adjusted Purchases	25,000	By Sales	30,000
To Gross Profit taken to Profit and Loss Account	15,000		
	40,000		40,000

BALANCE SHEET

Liabilities	Amount Rs	Assets	Amount Rs
		Closing Stock	40,000

Outstanding Expenses

Outstanding Expenses refer to those expenses which have become due during the accounting period for which the Final Accounts have been prepared but have not yet been paid. This happens particularly regarding those expenses which accrue from day to day business but which are recorded only when they are paid. Examples of such expenses are rent, salaries, interest, etc. Some of these expenses may have remained unpaid at the end of the accounting period and, therefore, no entry might have been passed in the books of accounts. For example, if the salary for the month of December has not been paid, no entry might have been passed in the books for the salary remaining outstanding on 31st December. However, in order to ascertain the true profit or loss made during the accounting year ending 31st December, it is necessary that such outstanding salaries are taken into account. The following journal entry will be passed in case of such outstanding expenses:

Salaries A/c Dr.
    To Outstanding Salaries A/c

Salaries Account is a nominal account and, therefore, it should be charged to the Profit and Loss Account, while the Outstanding Salaries Account is a personal account representing the persons to whom the salary has to be paid. It is, therefore shown in the Balance Sheet on the liabilities side.

Illustration 6.11. Following are the extracts from the Trial Balance of a firm as on 31st December, 1998:

TRIAL BALANCE

as on 31st December, 1998

Particulars	Dr. Amount Rs	Cr. Amount Rs
Salaries A/c	10,000	
Rent A/c	5,000	

Additional Information

(i) Salary for the month of December Rs 2,000 has not yet been paid.

(ii) Rent amounting to Rs 1,000 is still outstanding.

You are required to pass the necessary adjusting entries and show how the above items will appear in the Firm's Accounts:

Solution:

JOURNAL PROPER

Date	Particulars		Dr. Amount Rs	Cr. Amount Rs
	Salaries A/c	Dr.	2,000	
	To Outstanding Salaries A/c			2,000
	(Being salaries due but not paid)			
	Rent A/c	Dr.	1,000	
	To Outstanding Rent A/c			1,000
	(Being rent due but not paid)			

The items will appear in the Final Accounts as follows:

Dr. PROFIT AND LOSS ACCOUNT *Cr.*

Particulars		Amount Rs	Particulars	Amount Rs
To Salaries (as given in the Trial Balance)	10,000			
Add: Outstanding Salaries	2,000	12,000		
To Rent (as given in the Trial Balance)	5,000			
Add: Outstanding Rent	1,000	6,000		

BALANCE SHEET

Liabilities		Amount Rs	Assets	Amount Rs
Outstanding Expenses:				
Outstanding Salaries	2,000			
Outstanding Rent	1,000	3,000		

It should be noted that any item given outside the Trial Balance will be recorded at two places on account of Dual Aspect Concept. For example, in the above illustration, the amount of outstanding salaries has been shown in the Profit and Loss Account and also in the Balance Sheet.

However, if the accountant had come to know about these outstanding expenses before closing the books of accounts, the Salaries Account and Outstanding Salaries Account, Rent Account and Outstanding Rent Account would have appeared in the ledger as follows:

Dr. SALARIES ACCOUNT *Cr.*

Liabilities	Amount Rs	Particulars	Amount Rs
To Bank	10,000	By Balance c/d	12,000
To Outstanding Salaries	2,000		
	12,000		12,000

Dr. OUTSTANDING SALARIES ACCOUNT *Cr.*

Liabilities	Amount Rs	Particulars	Amount Rs
To Balance c/d	2,000	By Salaries	2,000
	2,000		2,000

RENT ACCOUNT

Liabilities	Amount Rs	Particulars	Amount Rs
To Bank	5,000	By Balance c/d	6,000
To Outstanding Rent	1,000		
	6,000		6,000

OUTSTANDING RENT ACCOUNT

Liabilities	Amount Rs	Particulars	Amount Rs
To Balance c/d	1,000	By Rent A/c	1,000
	1,000		1,000

The above balances would have appeared in the Trial Balance as follows:

TRIAL BALANCE
as on 31st December, 1998

Particulars	Dr. Amount Rs	Cr. Amount Rs
Salaries A/c	12,000	
Rent A/c	6,000	
Outstanding Salaries A/c		2,000
Outstanding Rent A/c		1,000

The above accounts would have appeared in the Final Accounts as follows:

PROFIT & LOSS ACCOUNT
for the year ending 31.12.1998

Particulars	Amount Rs	Particulars	Amount Rs
To Salaries	12,000		
To Rent	6,000		

BALANCE SHEET
as on 31.12.1998

Liabilities	Amount Rs	Assets	Amount Rs
Outstanding Salaries	2,000		
Outstanding Rent	1,000		

Thus, the position in both the cases is the same. The point to be noted is that any item appearing in the Trial Balance is recorded at only one place in the Final Accounts while any item outside the Trial Balance is recorded at two places in the Final Accounts.

Prepaid Expenses

Prepaid Expenses are those expenses which have been paid in advance. In other words, these are the expenses which have been paid during the accounting period for which the Final Accounts are bring prepared but they relate to the next period. For example, during the accounting year ending on 31st December, 1998, insurance premium for the year ending 31st March, 1999 might have been paid. It means insurance for three months has been paid in advance. In order to ascertain true profit or loss only expenses relating to the accounting period should be charged to the Profit and Loss Account. Any expenses paid in advance should be carried forward to the next year. The following journal entry is passed for an expense paid in advance:

Prepaid Expense A/c Dr.
To Expense A/c

Expense Account is a nominal account and, therefore, the amount should be credited to the Profit and Loss Account preferably the amounts should be deducted from the relevant Expense Account in respect of which is the payment has been made in advance. Prepaid Expense Account is a Personal Account, it represents the account of the person to whom payment has been made in advance. It is, therefore, shown on the Balance Sheet on the assets side.

Illustration 6.12. Following are the extracts from the Trial Balance of a firm as on 31st December, 1998:

TRIAL BALANCE
as on 31st December, 1998

Particulars	Dr. Amount Rs	Cr. Amount Rs
Insurance	8,000	
Rent	4,000	

Additional Information

(i) Insurance premium has been paid in advance amounting to Rs 1,000 for the next year.
(ii) Rent Rs 500 has been paid for the next year.

You are required to pass the necessary adjusting entries and show how the items will appear in the firm's Final Accounts.

Solution:

JOURNAL PROPER

Date	*Particulars*	*Dr. Amount Rs*	*Cr. Amount Rs*
1998	Prepaid Insurance A/c Dr.	1,000	
	To Insurance A/c		1,000
	(Being Insurance premium paid in advance)		
	Prepaid Rent A/c Dr.	500	
	To Rent A/c		500
	(Being rent paid in advance)		

PROFIT AND LOSS ACCOUNT

as on 31st December, 1998

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Insurance	8,000			
Less: Prepaid	1,000	7,000		
To Rent	4,000			
Less: Prepaid	500	3,500		

BALANCE SHEET

as on 31st December, 1998

Liabilities	*Amount Rs*	*Assets*	*Amount Rs*
		Prepaid Insurance	1,000
		Prepaid Rent	500

Outstanding Income

Outstanding Income means income which has become due during the accounting year but which has not so far been received by the firm. In order to ascertain the true profit or loss, adjustments for such income must be made in the Final Accounts of the business. The following journal entry will be passed:

Outstanding Income A/c Dr.
To Income A/c

Accrued income. Accrued income means income which has been earned by the business during the accounting year but which has not yet become due and, therefore, has not been received. Adjusting entry of such income is also on the pattern of outstanding income as shown below:

Accrued Income A/c Dr.
To Income A/c

A distinction has to be made between accrued income and outstanding income. Though, both the incomes have been earned by the business and not yet received but in case of accrued income, the income has not become due to the business while outstanding income is an income which has become due to the business. For example, if a loan of Rs 10,000 has been given @ 12% p.a. and interest is payable monthly, if interest for one month, *i.e.*, Rs 100 has not been received by the business, the income will be termed as an Outstanding Income since interest has become due but it has not yet been received by the business. However, in case of these securities where interest is payable on definite dates, interest may have been earned by the business, but it will become due not earlier than the definite date. For example, if a business has purchased 6% Government Securities of Rs 10,000 on which interest is payable on 31st March and 30th September, for the accounting year ending on 31st December interest for 3 months (*i.e.*, Rs 150 for October, November and December) will be taken as accrued interest and not an outstanding interest. This is because interest will become due after 30th September, only on 31st March and not earlier.

Illustration 6.13. Following are the extracts from the Trial Balance of a firm on 31st December, 1998.

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
6% Loan	20,000	
Investments in 6% Debentures of '*B*' Ltd.	30,000	
(Interest payable on 31st March and 30th Sept.)		
Interest on loan received upto 31st October, 1998		1,000
Interest on Investments		900

Solution:

In the above case, interest on loan for a period of two months is still outstanding. The amount of such interest is Rs 200. In case of debentures, interest for three months has been earned by the business but it has not become due. The amount of accrued interest, therefore, comes to Rs 450. The following adjusting entries will, therefore, be passed in the journal proper.

Date	*Particulars*		*Dr. Amount Rs*	*Cr. Amount Rs*
	Outstanding Interest A/c	Dr.	200	
	To Interest A/c			200
	(Being interest on loan due but not received)			
	Accrued Interest A/c		450	
	To Interest on Investments A/c			450
	(Being interest earned, not due and not received)			

Outstanding Interest Account and Interest Accrued Account are personal accounts. They represent the accounts of the persons from whom the interest has to be received. They will, therefore, be shown on the 'assets side' in the Balance Sheet. Interest Account is a nominal account, and it has been credited. The amount of interest will, therefore, be added to the amount of interest already appearing in the Trial Balance.

The items will appear in the Final Accounts as follows:

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1998

Particulars	*Amount Rs*	*Particulars*		*Amount Rs*
		By Interest on Loan	1,000	
		Add: Outstanding		
		Interest	200	1,200
		By Interest on Investments	900	
		Add: Accrued		
		Interest	450	1,350

BALANCE SHEET

as on 31st December, 1998

Liabilities	*Amount Rs*	*Asset*	*Amount Rs*
		Outstanding Interest A/c	200
		Accrued Interest A/c	450

Income Received in Advance

Income received in advance means income which has been received by the business before it being earned by the business. This includes certain prepayments which the business may receive during the course of the accounting year. In order to ascertain the true profit or loss, it is necessary that such income is not taken into account while preparing the Profit and Loss Account for the year. The following adjustment entry is passed for such income:

Income A/c Dr.

To Income Received in Advance A/c

Illustration 6.14. Following are the extracts from the Trial Balance of a firm on 31st December, 1999. You are required to pass the necessary adjustment entries and show how the various will appear in the firm's Final Accounts.

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Rent received for 12 months ending 31st March, 2000		1,200
Interest on Loan		2,000

Additional Information

Interest on Loan has been received in advance to the extent of Rs 500.

Solution:

JOURNAL ENTRIES

Date	Particulars	Dr. Amount Rs	Cr. Amount Rs
	Rent A/c Dr. To Rent received in Advance A/c (Being rent received in advance for three months)	300	300
	Interest A/c Dr. To Interest received in Advance A/c (Being interest received in advance)	500	500

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars	Amount Rs	Particulars		Amount Rs
		By Interest	2,000	
		Less: Received in advance	500	1,500
		By Rent	1,200	
		Less: Received in advance	300	900

BALANCE SHEET

as on 31st December, 1999

LiabilitiesAmount	Assets Rs	Amount Rs	
Rent received in advance	300		
Interest received in advance	500		

Depreciation

Depreciation denotes decrease in the value of an asset due to wear and tear, lapse of time, obsolescence, exhaustion and accident. In order to ascertain the true profit for the business, it is necessary that depreciation is charged on the fixed assets of the business. The following entry will be passed for depreciation.

Depreciation A/c Dr.
To Fixed Asset A/c

Illustration 6.15. Following are the extracts from the Trial Balance of a firm.

TRIAL BALANCE

as on 31st December, 1999

Particulars	Dr. Amount Rs	Cr. Amount Rs
Plant	30,000	
Buildings	50,000	

Additional Information

(i) Charge depreciation on plant @ 10% per annum,

(ii) Charge depreciation on buildings @ 5% per annum.

Solution:

JOURNAL ENTRIES

Date	Particulars	Dr. Amount Rs	Cr. Amount Rs
	Depreciation A/c Dr. To Plant A/c To Buildings A/c (Being depreciation charged on Plant and Buildings)	5,500	 3,000 2,500

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Depreciation:				
Plant	3,000			
Buildings	2,500	5,500		

BALANCE SHEET

as on 31st December, 1999

Liabilities	*Amount Rs*	*Assets*		*Amount Rs*
		Plant	30,000	
		Less: Depreciation	3,000	27,000
		Buildings	50,000	
		Less: Depreciation	2,500	47,500

Depreciation on Assets Acquired During the Course of the Year

Sometimes fixed assets are acquired during the course of the year. In such a case, the problem arises whether depreciation should be charged for the full accounting year or it should be charged only for a part of the accounting year. In such a situation in the absence of any specific instructions in the question, it will be appropriate to charge depreciation for the full year even in respect of those assets which have been acquired during the course of the year. However, where depreciation rate has been given as per annum and the date of acquisition of the fixed assets has been given, it will be appropriate to charge depreciation only for the remaining part of the accounting year.

Illustration 6.16. Following are the extracts from the Trail Balance of a firm.

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Furniture and Fixtures	10,000	
Plant and Machinery	40,000	

Additional Information

(i) Furniture of Rs 5,000 was purchased on 1st July, 1999. Charge depreciation @ 10% p.a.

(ii) Plant of Rs 10,000 was acquired on 1st July, 1999. Charge depreciation @ 20%.

Pass the necessary journal entries and show how the items will appear in the firm Final Accounts:

Solution:

JOURNAL ENTRIES

Date	*Particulars*		*Dr. Amount Rs*	*Cr. Amount Rs*
	Depreciation A/c	Dr.	8,750	
	To Furniture and Fixtures A/c			750
	To Plant and Machinery A/c			8,000
	(Being depreciation charged on furniture and fixtures and Plant and Machinery including additions)			

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Depreciation:				
Furniture and Fixtures	750			
Plant and Machinery	8,000	8,750		

BALANCE SHEET

as an 31st December, 1999

Particulars	*Amount Rs*	*Particulars*		*Amount Rs*
		Furniture and Fixtures	10,000	
		Less: Depreciation	750	9,250
		Plant and Machinery	40,000	
		Less: Depreciation	8,000	32,000

Notes :

(i) Since depreciation has been given on furniture at 10% p.a., depreciation for only 6 months has been charged for furniture acquired on 1st July, 1999.

(ii) In case of plant, the rate of depreciation has been given as 20%, hence, depreciation for the full year has been charged even on plant which has been acquired on 1st July, 1999.

Tutorial Note. The students should give note regarding their workings. In case, the question be regarding charging of depreciation on additions to fixed assets made during the year is silent, the students can also presume that no depreciation is to be charged on additions. However, a specific note should be given to that effect.

Bad Debts

Credit sales have become a must these days and bad debts occur when there are credit sales. Bad Debt is a loss to the business and a gain to the debtor. The following journal entry should, therefore, be passed in the event of a debt becoming bad.

Bad Debts A/c Dr.
  To Debtor's Personal A/c

Illustration 6.17. Following are the extracts from Trial Balance of a business.

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Sundry Debtors	50,000	
Bad Debtors	5,000	

Additional Information

Mahesh, one of the debtors became insolvent and it was learnt on 31st December, that out of the total debt of Rs 5,000 only Rs 2,500, will be recovered from him. No adjustment has so far been made.

You are required to pass necessary adjusting entries and show how the items will appear in the Final Accounts of the business.

Solution:

JOURNAL

Date	*Particulars*	*Dr. Amount Rs*	*Cr.Amount Rs*
	Bad Debts A/c Dr.	2,500	
	To Mahesh		2,500
	(Being Rs 2,500 became irrecoverable)		

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts (as given in the Trial Balance)	5,000			
Add: Additional bad debts	2,500	7,500		

BALANCE SHEET

as on 31st December, 1999

Liabilities	*Amount Rs*	*Assets*		*Amount Rs*
		Sundry Debtors	50,000	
		Less: Bad Debts	2,500	47,500

Provision for Bad Debts

In an earlier chapter, we have already explained that in accounting we observe the "convention of conservatism" while recording business transactions. This means that we make provision for expected losses but we do not take credit for expected profits. A firm, therefore, makes provision at the end of the accounting year for likely bad debts which may happen during the course of the next year. This is for the simple reasons that if out of credit sales made during a particular year some sales are likely to become bad in the course of the next year, the proper course would be to charge the same accounting year with such likely bad debts in which the sales have been made, since, the profit on such sales has been considered in the year in which the sales have been made.

The following journal entry is passed for creating a provision for bad debts:

Profit & Loss A/c Dr.
To Provision for Bad Debts

The provision for bad debts is charged to the Profit & Loss Account and is deducted from debtors in the Balance Sheet.

Illustration 6.18. Following are the extracts from the Trial Balance of a firm:

TRIAL BALANCE
as on 31st December, 1999

Particulars	*Rs*	*Rs*
Sundry Debtors	30,000	
Bad Debts	5,000	

Additional Information

(i) After preparing the Trial Balance, it is learnt that a debtor Ramesh has become insolvent and therefore, the entire amount of Rs 3,000 due from him was irrecoverable.
(ii) Create 10% provision for bad and doubtful debts.

You are required to pass necessary adjusting entries and show how the items will appear in the firm's Balance Sheet.

Solution:

ADJUSTING JOURNAL ENTRIES

Date	*Particulars*	*Dr. Amount Rs*	*Cr. Amount Rs*
	Bad Debts A/c Dr.	3,000	
	To Ramesh		3,000
	(Being amount due from Ramesh proved to be bad)		
	Profit & Loss A/c Dr.	2,700	
	To Provision for Bad and Doubtful Debts		2,700
	(Being bad debts provision created)		

PROFIT AND LOSS ACCOUNT
for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts (as given in the Trial Balance)	5,000			
Add : Additional bad debts	3,000			
Add : Provision for bad debts	2,700	10,700		

BALANCE SHEET
as on 31st December, 1999

Liabilities	*Amount Rs*	*Particulars*		*Amount Rs*
		Sundry Debtors	30,000	
		Less: Additional bad debts	3,000	
			27,000	
		Less: Provision for bad debts	2,700	24,300

The provision for bad debts created at the end of the accounting year is carried forward to the next year and the bad debts occurring during the course of the next year are met out of this provision. At the end of the next year, suitable adjusting entry is passed for keeping the provision for doubtful debts at an appropriate amount to be carried forward.

Illustration 6.19. Following are the extracts from the Trial Balance of a firm:

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Cr.* *Rs*	*Amount* *Rs*
Sundry Debtors	50,000	
Provision for Doubtful Debts		5,000
Bad Debts	3,000	

Additional Information

(i) Additional bad debts Rs 3,000.

(ii) Keep the provision for bad debts @ 10% on debtors.

You are required to pass the necessary journal entries and prepare Provision for Doubtful Debts Account and show how the different items will appear in the firm's Final Accounts.

JOURNAL ENTRIES

Date	*Particulars*		*Dr. Amount* *Rs*	*Cr. Amount* *Rs*
	Bad Debts A/c	Dr.	3,000	
	To Sundry Debtors			3,000
	(Being additional bad debts of Rs 3,000)			
	Provision for Bad Debts A/c	Dr.	6,000	
	To Bad Debts A/c			6,000
	(Being bad debts, Rs 3,000 appearing in the Trial Balance + Rs 3,000 additional bad debts, transferred to Provision for Bad Debts A/c)			
	Profit and Loss A/c	Dr.	5,700	
	To Provision for Bad Debts A/c			5,700
	(Being amount charged from P. & L. A/c to keep provision for bad debts @ 10% on debtors)			

PROVISION FOR BAD DEBTS ACCOUNT

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts A/c	6,000	By Balance b/d	5,000
To Balance c/d	4,700	By Profit & Loss A/c	5,700
	10,700		10,700

PROFIT AND LOSS ACCOUNT

as on 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts (as given in the Trial Balance)	3,000			
Add: Additional bad debts	3,000			
	6,000			
Add: New provision for bad debts	4,700			
	10,700			
Less: Old provision for bad debts	5,000	5,700		

BALANCE SHEET
as on 31st December, 1999

Particulars	*Amount Rs*	*Particulars*		*Amount Rs*
		Sundry Debtors	50,000	
		Less : Additional bad debts	3,000	
			47,000	
		Less : New provision for bad debts	4,700	42,300

Provision for Discount on Debtors

Discount may have to be allowed to the debtors on account of their making prompt payments. When discount is allowed, following journal entry is passed:

Discount A/c Dr.
To Debtor's Personal A/c

At the end of the accounting year, the firm also estimates the amount of discount which it may have to give to the debtors outstanding at the end of the accounting year in the course of the next year. This is done by creating a provision for discount on debtors. The following journal entry is passed:

Profit and Loss A/c Dr.
To Provision for Discount A/c

It should be noted that 'provision for discount' will be created only on good debtors. In other words, provision for discount should be made after deducting bad debts and provision for bad debts from the debtors' balances.

Illustration 6.20. Following are the extracts from the Trial Balance of a firm:

TRIAL BALANCE
as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Sundry Debtors	50,000	
Bad Debts	3,000	
Discount	2,000	

Additional Information

(i) Create a provision for doubtful debts @ 10% on debtors.
(ii) Create a provision for discount on debtors @ 5% on debtors.
(iii) Additional discount given to the debtors Rs 1,000.

You are required to pass the necessary journal entries and show how the different items will appear in the Final Accounts.

Solution:

JOURNAL ENTRIES

Date	*Particulars*	*Dr. Amount Rs*	*Cr. Amount Rs*
	Discount A/c Dr.	1,000	
	To Sundry Debtors A/c		1,000
	(Being discount allowed to debtors)		
	Profit & Loss A/c Dr.	4,900	
	To Provision for Bad Debts A/c		4,900
	(Being provision for bad debts created at the rate of 10% on debtors of Rs 49,000)		
	Profit & Loss A/c Dr.	2,205	
	To Provision for Discount		2,205
	(Being provision for discount created @ 5% on debtors of Rs 44,100 (*i.e.,* Rs 49,000–Rs 4,900)		

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts	3,000			
(as given in the				
Trial Balance)				
Add: Provision for				
bad debts	4,900	7,900		
To Discount	2,000			
(as given in the				
Trial Balance)				
Add: Additional discount	1,000			
Add: Provision for discount	2,205	5,205		

BALANCE SHEET

as on 31st December, 1999

Liabilities	*Amount Rs*	*Assets*		*Amount Rs*
		Debtors	50,000	
		Less: Additional discount	1,000	
			49,000	
		Less: Provision for		
		bad debts	4,900	
			44,100	
		Less: Provision for		
		discount	2,205	41,895

Illustration 6.21. Following are the extracts from the Trial Balance of a firm:

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Sundry Debtors	50,000	
Provision for Bad Debts		5,000
Provision for Discount		2,000
Bad Debts	3,000	
Discount	1,000	

Additional Information

(i) Additional Bad Debts Rs 1,000.

(ii) Additional Discount Rs 500.

(iii) Create a provision for bad debts @ 10% on debtors.

(iv) Create a provision for discount @ 5% on debtors.

Pass the necessary journal entries, prepare Provision for Bad Debts Account and Provision for Discount on Debtors Account and show how the different items will appear in the Firm's Final Accounts.

Solution :

JOURNAL ENTRIES

Date	*Particulars*		*Dr. Amount Rs*	*Cr. Amount Rs*
	Bad Debts A/c	Dr.	1,000	
	Discount A/c	Dr.	500	
	To Sundry Debtors A/c			1,500
	(Being additional bad debts and additional discount on debtors)			
	Provision for Bad Debts A/c	Dr.	4,000	
	To Bad Debts A/c			4,000
	(Being bad debts written off from Provision for Bad Debts A/c)			

Provision for Discount on Debtors A/c Dr. To Discount A/c (Being discount allowed written off from Provision for Discount on Debtors A/c)		1,500	1,500
Profit and Loss A/c Dr. To Provision for Bad Debts A/c (Being amount charged from P & L A/c to maintain a provision of 10% for bad debts on debtors amounting to Rs 48,500)		3,850	3,850
Profit and Loss A/c Dr. To Provision for Discount A/c (Being amount charged from P & L A/c for keeping the provision for discount @ 5% on good debtors amounting to Rs 43,650)		1,682.50	1,682.50

PROVISION FOR BAD DEBTS ACCOUNT

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts A/c	4,000	By Balance b/d	5,000
To Balance c/d	4,850	By Profit & Loss A/c	3,850
	8,850		8,850

PROVISION FOR BAD DEBTS ACCOUNT

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Discount A/c	1,500.00	By Balance b/d	2,000.00
To Balance c/d	2,182.50	By P & L A/c	1,682.50
	3,682.50		3,682.50

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Bad Debts (as given in the Trial Balance)	3,000			
Add: Additional bad debts	1,000			
Add: New provision for bad debts	4,850			
	8,850			
Less: Old provision for bad debts	5,000	3,850		
To Discount (as given in the Trial Balance)	1,000			
Add: Additional discount	500			
Add: New provision for discount	2,182.50			
	3,682.50			
Less: Old provision	2,000.00	1,682.50		

BALANCE SHEET
as on 31st December, 1999

Liabilities	Amount Rs	Assets		Amount Rs
		Sundry Debtors	50,000	
		Less: Additional bad debts and additional discount	1,500	
			48,500	
		Less: New provision for bad debts	4,850	
			43,650	
		Less: New provision for discount	2,182.50	41,467.50

Reserve for Discount on Creditors

A firm may like to create a reserve for discount on its creditors on a similar pattern on which a provision for discount on debtors is made. However, creating of such a reserve is against the fundamental convention of conservation. Such a reserve, therefore, is usually not created. However, if this is done the accounting entries are passed on the same pattern on which the accounting entries are passed for provision for discount on debtors.

On receipt of additional discount from creditors:

Sundry Creditors A/c Dr.
To Discount A/c

For creating a reserve for discount on creditors:

Reserve for Discount on Creditors Dr.
To Profit and Loss A/c

Illustration 6.22. Following are the extracts from the Trial Balance of a firm.

TRIAL BALANCE
as on 31st December, 1999

Particulars	Amount Rs	Amount Rs
Sundry Creditors		30,000
Discount		1,000
Reserve for Discount on Creditors	2,000	

Additional Information

(i) Additional discount received from creditors after closing the accounts Rs 1,500.
(ii) Create a reserve for discount on creditors @ 10%.

You are required to pass the necessary journal entries, prepare Reserve for Discount Account and show how the various items will appear in the Firm's Final Accounts.

Solution:

JOURNAL ENTRIES

Date	Particulars	Dr. Amount Rs	Cr. Amount Rs
	Sundry Creditors A/c Dr. To Discount A/c (Being additional discount received from Creditors)	1,500	1,500
	Discount A/c Dr. To Reserve for Discount on Creditors (Being discount received transferred to Reserve for Discount A/c)	2,500	2,500
	Reserve for Discount A/c Dr. To Profit and Loss A/c (Being amount credited to Profit and Loss Account for maintaining Reserve for Discount Account at 10% on creditors)	3,350	3,350

Dr.	RESERVE FOR DISCOUNT ON CREDITORS ACCOUNT		Cr.
Particulars	*Amount*	*Particulars* *Rs*	*Amount* *Rs*
To Balance b/d	2,000	By Discount A/c	2,500
To Profit and Loss Account	3,350	By Balance c/d	2,850
	5,350		5,350

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars	*Amount Rs*	*Particulars*		*Amount Rs*
		By Discount (as given in the Trial Balance)	1,000	
		Add : Additional discount received	1,500	
		Add: New Reserve for discount	2,850	
			5,350	
		Less : Old Reserve for discount	2,000	3,350

Interest on Capital

Funds provided by the proprietor to run the business is termed as Capital. In order to determine the real profit made by the business, it is necessary that the profit should be determined after deducting interest on such funds, which the proprietor could have earned otherwise. The entry for interest on proprietor's funds (or capital) is passed as follows:

Interest on Capital A/c Dr.
To Capital A/c

In case of a partnership firm, interest will be allowed on the capital of each partner. The following journal entry will be passed:

Interest on Capital A/c Dr.
To Partner's Capital Account

Interest on capital is allowed on the balance in the Capital Account in the beginning of the accounting year. However, in case the proprietor has introduced further capital during the course of the accounting year, interest on such capital will also be allowed from the date on which such further capital was introduced till the end of the accounting period.

Illustration 6.23. Following are the extracts from the Trial Balance of a firm:

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Capital Accounts:		
Ramesh		30,000
Suresh	20,000	

Additional Information

(i) Interest on capital is to be allowed @ 10% p.a.

(ii) Suresh introduced additional capital amounting to Rs 5,000 on 1st July, 1999.

You are required to pass the necessary journal entries and show how the different items will appear in the Firm's Final Accounts.

Solution:

JOURNAL ENTRIES

Date	*Particulars*	*Dr. Amount Rs*	*Cr. Amount Rs*
	Interest on Capital A/c Dr.	4,750	
	To Ramesh's Capital A/c		3,000
	To Suresh's Capital A/c		1,750
	(Being interest on capital allowed to Ramesh on Rs 30,000 for full year and to Suresh on Rs 15,000 for full year and on Rs 5,000 for 6 months)		

BALANCE SHEET
as on 31st December, 1999

Liabilities		*Amount Rs*	*Assets*	*Amount Rs*
Capital Accounts:				
Ramesh	30,000			
Add: Interest on capital	3,000	33,000		
Suresh	20,000			
Add: Interest on capital	1,750	21,750		

PROFIT AND LOSS ACCOUNT
for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Interest on Capital:				
Ramesh	3,000			
Suresh	1,750	4,750		

Interest on Drawings

Drawings denote the money withdrawn by the proprietor from the business for his personal use. It is usual practice to charge interest on drawings in case interest is allowed to the proprietor on his capital. The following journal entry is passed for interest on drawings.

Capital A/c Dr.
To Interest on Drawings A/c

In case of a partnership firm, interest on drawings will be charged on the drawings made by each partner. The journal entry will be as follows:

Partners Capital/Current Accounts* Dr.
To Interest on Drawings A/c

Computation of Interest on Drawings

There is a difference between the method of computation of interest on capital and computation of interest on drawings. In most cases, interest on capital is charged on the opening balance in the Capital Account. However, in case of additional capital introduced during the year by the proprietor, interest may be charged from the date of introducing additional capital till the end of the accounting period. This does not create much problem. However, in case of drawings, the things are different. The proprietor does not usually make the entire amount of drawings on a particular date for the whole accounting year.

For example, if the proprietor has withdrawn Rs 12,000 from the business, it cannot reasonably be presumed that he must have withdrawn the entire amount in the beginning of the accounting year.

Since, the interest is to be charged on the amount withdrawn by the proprietor from the date on which he withdrew the amount from the business till the end of the accounting period, it requires computation of interest on each withdrawal made by the proprietor separately. In the absence of any specific information, it can reasonably by presumed that the drawings were made evenly throughout the year. Moreover, for computation of interest, any of the following three presumptions can reasonably be made:

(i) The proprietor withdrew the money on the 1st of each month. In such a case, interest should be charged for $6\frac{1}{2}$ months on the total amount at the given rate of interest.

(ii) The proprietor withdrew the money on the 15th of each month. In such a case, interest should be charged on the total amount of drawings for six months.

(iii) The proprietor withdrew the money at the end of each month. In such a case, interest should be charged on the total amount for $5\frac{1}{2}$ months.

Tutorial Note. The students may adopt the second presumption in the absence of any specific instructions in the question.

Illustration 6.24. Following are the extracts from the Trial Balance of a Firm:

* Partners Capital Accounts can be maintained either on a Fixed or a Fluctuating Capital System. In case of a Fixed Capital System, two accounts are maintained for each partner. (*i*) Capital Account, and (*ii*) Current Account. Capital Account is credited with the amount of capital introduced by the partner or debited with the amount of capital withdrawn by the partner. While all adjustments regarding interest on capital, share of profit, drawings, etc., are made in the Current Accounts. Thus, balance in the Capital Account remains more or less fixed. This is the reason for calling it as a Fixed Capital System. In case of Fluctuating Capital System all adjustments regarding capital, drawings, interest, share or profit etc. are made only in the Capital Account. Thus, the balance of the Capital Account goes on fluctuating. This is the reason for calling this system as Fluctuating Capital System.

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Capital Accounts:		
A's Capital		30,000
B's Capital		20,000
Drawings:		
A	6,000	
B	3,000	

Additional Information

(i) Interest on capital is to be allowed to the partners @ 10% p.a. on the opening balances standing to the credit of their Capital Accounts.

(ii) Interest on drawings is to be charged @ 12% p.a.

You are required to pass the necessary journal entries and show how the different items will appear in the Firm's Final Accounts. You may presume that the drawings were made evenly throughout the year on 15th of each month.

Solution:

JOURNAL ENTRIES

Date	*Particulars*		*Dr. Amount Rs*	*Cr. Amount Rs*
	Interest on Capital A/c	Dr.	5,000	
	To *A*'s Capital A/c			3,000
	To *B*'s Capital A/c			2,000
	(Being interest on capital @ 10% p.a.)			
	A's Capital A/c	Dr.	360	
	B's Capital A/c	Dr.	180	
	To Interest on Drawings A/c			540
	(Being interest on drawings charged for 6 months @ 12% p.a. on the total amount)			

PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars		*Amount Rs*	*Particulars*		*Amount Rs*
To Interest on Capital:			By Interest on Drawings:		
A	3,000		*A*	360	
B	2,000	5,000	*B*	180	540

BALANCE SHEET

as on 31st December, 1999

Liabilities		*Amount Rs*	*Assets*	*Amount Rs*
Capital Accounts:				
A's Capital	30,000			
Add: Interest on Capital	3,000			
	33,000			
Capital Accounts:				
A's Capital	30,000			
Add: Interest on Capital	3,000			
	33,000			
Less: Drawings	6,000			
	27,000			
Less: Interest on Drawings	360	26,640		
B's Capital	20,000			
Add: Interest on Capital	2,000			
	22,000			
Less: Drawings	3,000			
	19,000			
Less: Interest on Drawings	180	18,820		

CHECK YOUR PROGRESS

2. Sales are equal to
   (a) Cost of goods sold + Profit.
   (b) Cost of goods sold – Gross Profit.
   (c) Gross Profit – Cost of goods sold.
3. Interest on Drawings is
   (a) Expenditure for the business.
   (b) Expense for the business.
   (c) Gain for the business.
4. Goods given as samples should be credited to
   (a) Advertisement Account.
   (b) Sales Account.
   (c) Purchases Account.

6.6 WORKSHEET

In the preceding pages, we have explained about the passing of the necessary adjusting entries in the books of accounts so that final accounts represent the true position of the business. As a result of these adjusting entries and their posting into the ledger, some new accounts are opened in the books while the balances of some of the existing accounts appearing in the Trial Balance also get changed. In order to prevent errors and facilitate the preparation of the final accounts, it is sometimes considered necessary to prepare a preliminary draft incorporating all balances of the Trial Balance, the necessary adjustments to be made therein and showing separately the items relating to Income Statement and the Balance Sheet. Such a preliminary draft is termed as a Worksheet.

The Worksheet contains the following information:

(i) The Trial Balance as originally prepared.
(ii) The necessary adjustments to be carried out on account of adjustment entries.
(iii) The new Trial Balance after making the necessary adjustments as required under point (*ii*) above. The new Trial Balance is termed as the 'Adjusted Trial Balance'.
(iv) Classification of the items appearing in the Trial Balance between those relating to Income Statement and those relating to Balance Sheet.

A Worksheet may therefore be defined as a large columnar statement specially designed to organize and arrange all accounting data required at the end of the accounting period.

The necessary closing entries are passed on the basis of Adjusted Trial Balance. The Final Accounts are then prepared on the basis of the classification of the items made in the Worksheet as explained under point (*iv*) above.

It should be noted that Worksheet is not a part of the accounting records. It is, therefore, not supplied to the bankers, creditors and shareholders. It is, simply a working tool of the accountant prepared by him for his own convenience as an aid to preparing the financial statements at the end of the year. A pro forma of Worksheet is given below:

PRO FORMA OF WORKSHEET

Sl. No.	*Name of Account*	*L.F.*	*Trial Balance*		*Adjustments*		*Adjusted Trial Balance*		*Income Statement*		*Balance Sheet*	
			Dr.	*Cr.*	*Dr.*	*Cr.*	*Dr.*	*Cr.*	*Dr.*	*Cr.*	*Dr.*	*Cr.*

Advantages of Worksheet

The Worksheet offers following advantages:

(i) It brings together the Trial Balance and the adjusting data. Thus, it reduces the chances of errors and at the same time assists the location of errors which may be made in adjusting, closing and balancing account.

(ii) It classifies and summarises the information shown by the Trial Balance and the adjusting data. It thus, facilitates preparation of Final Accounts and passing of closing entries.

(iii) The net results of the business operations are known even before preparing formal Final Financial Statements. It makes possible the preparation of the statements during the financial period without the necessity of formal adjusting and closing entries.

Thus, Worksheet is extremely useful for the management since it furnished a quick means of determining the business results.

Illustration 6.25. From the following Trial Balance and additional information, you are required to prepare a Worksheet and Final Accounts.

TRIAL BALANCE

as on 31st December, 1999

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Capital		20,000
Sundry Debtors	5,400	
Drawings	1,800	
Machinery	7,000	
Sundry Creditors		2,800
Wages	10,000	
Purchases	19,000	
Opening Stock	4,000	
Bank Balance	3,000	
Carriage Charges	300	
Salaries	400	
Rent and Taxes	900	
Sales		29,000
	51,800	51,800

Additional Information

(i) Closing Stock Rs 1,200.

(ii) Outstanding Rent and Taxes Rs 100.

(iii) Charge depreciation on machinery at 10%.

(iv) Wages prepaid Rs 400.

(*For Solution see next page*).

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ending 31st December, 1999

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Opening Stock	4,000	By Sales	29,000
To Adjusted Purchases	17,800	By Gross Loss c/d	2,700
To Wages	9,600		
To Carriage	300		
	31,700		31,700
To Gross Loss b/d	2,700	By Net Loss taken to Capital A/c	4,800
To Salaries	400		
To Rent and Taxes	1,000		
To Depreciation on Machinery	700		
	4,800		4,800

Solution
(Illustration 6.25):

WORKSHEET

Sl. No.	Name of the Account	L.F.	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
			Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
1.	Capital			20,000				20,000				20,000
2.	Sundry Debtors		5,400				5,400				5,400	
3.	Drawings		1,800				1,800				1,800	
4.	Machinery		7,000			700	6,300				6,300	
5.	Sundry Creditors			2,800				2,800				2,800
6.	Wages		10,000			400	9,600		9,600			
7.	Purchase/Adjusted Purchases		19,000			1,200	17,800		17,800			
8.	Opening Stock		4,000				4,000		4,000			
9.	Cash at Bank		3,000				3,000				3,000	
10.	Carriage		300				300		300			
11.	Salaries		400				400		400			
12.	Rent and Taxes		900		100		1,000		1,000			
13.	Sales			29,000				29,000		29,000		
14.	Closing Stock				1,200		1,200				1,200	
15.	Outstanding Rent					100		100				100
16.	Prepaid Wages				400		400				400	
17.	Depreciation on Machinery				700		700		700			
			51,800	51,800	2,400	2,400	51,900	51,900				
										4,800	4,800	
18.	Net Loss								33,800	33,800	22,900	22,900

BALANCE SHEET

as on 31st December, 1999

Liabilities		*Amount Rs*	*Assets*	*Amount Rs*
Outstanding Rent		100	Cash at Bank	3,000
Creditors		2,800	Debtors	5,400
Capital	20,000		Closing Stock	1,200
Less: Net Loss	4,800		Prepaid Wages	400
	15,200		Machinery	6,300
Less: Drawings	1,800	13,400		
		16,300		16,300

Illustration 6.26. From the following figures extracted from the books of Shri Govind, you are required to prepare a Trading and Profit & Loss Account for the year ended 31st March, 1999 and a Balance Sheet as on that date after making the necessary adjustments:

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
Shri Govind's Capital	2,28,800	Stock 1.4.1999	38,500
Shri Govind's Drawings	13,200	Wages	35,200
Plant and Machinery	99,000	Sundry Creditors	44,000
Freehold Property	66,000	Postage and Telegrams	1,540
Purchases	1,10,000	Insurance	1,760
Returns Outwards	1,100	Gas and Fuel	2,970
Salaries	13,200	Bad Debts	660
Office Expenses	2,750	Office Rent	2,860
Office Furniture	5,500	Freight	9,900
Discounts A/c (Dr.)	1,320	Loose Tools	2,200
Sundry Debtors	29,260	Factory Lighting	1,100
Loan to Shri Krishan @		Provision for D/D	880
10% p.a.-balance on 1.4.1999	44,000	Interest on loan to Shri Krishna	1,100
Cash at Bank	29,260	Cash in Hand	2,640
Bills Payable	5,500	Sales	2,31,440

Adjustments

1. Stock on 31st March, 1999 was valued at Rs 72,600.
2. A new machine was installed during the year costing Rs 15,400, but it was not recorded in the books as no payment was made for it. Wages Rs 1,100 paid for its erection have been debited to wages account.
3. Depreciate:

   Plant and Machinery by $33\frac{1}{3}\%$.

   Furniture by 10%

   Freehold Property by 5%
4. Loose tools were valued at Rs 1,760 on 31.3.1999.
5. Of the Sundry Debtors Rs 600 are bad and should be written off.
6. Maintain a provision of 5% on Sundry Debtors for doubtful debts.
7. The manager is entitled to a commission of 10% of the net profits after charging such commission.

Solution:

Shri Govind

TRADING AND PROFIT & LOSS ACCOUNT

for the year ended 31.3.1999

Particulars		*Amount*	*Particulars*	*Amount*
To Stock (1.4.99)		38,500	By Sales	2,31,440
To Purchases	1,10,000		By Closing Stock	72,600
Less: Returns	1,100	1,08,900		
To Wages	35,200			
Less: Erection				
of machinery	1,100	34,100		
To Gas and Fuel		2,970		
To Freight		9,900		
To Factory Lighting		1,100		

To Gross Profit c/d		1,08,570			
		3,04,040			3,04,040
To Salaries		13,200	By Gross Profit b/d		1,08,570
To Office Expenses		2,750	By Interest	1,100	
To Postage & Telegram		1,540	*Add*: Outstanding	3,300	4,400
To Insurance		1,760			
To Office Rent		2,860			
To Discounts		1,320			
To Bad Debts	660				
Add: Addl. Bad Debts	600				
Add: New Provision	1,430				
	2,690				
Less: Old Provision	880	1,870			
To Depreciation:					
Machinery	38,500				
Furniture	550				
Freehold Property	3,300				
Loose Tools	440	42,790			
To Commission to Manager		4,080			
To Net Profit taken to Balance Sheet	40,800				
		1,12,970			1,12,970

Shri Govind
BALANCE SHEET
as at 31.3.1999

Liabilities		*Amount Rs*	*Assets*		*Amount Rs*
Capital	2,28,800		Plant & Machinery	99,000	
Add: Net Profit	40,800		*Add* : New Machinery		
	2,69,600		(15,400 + 1,100)	16,500	
Less: Drawings	13,200	2,56,400		1,15,500	
Bills Payable		5,500	*Less*: Depreciation	38,500	77,000
Sundry Creditors		59,400	Freehold Property	66,000	
Manager's Commission			*Less*: Depreciation	3,300	62,700
Outstanding		4,080	Office Furniture	5,500	
			Less: Depreciation	550	4,950
			Loose Tools	2,200	
			Less: Depreciation	440	1,760
			Closing Stock		72,600
			Sundry Debtors:	29,260	
			Less: Addl. bad debts	600	
				28,600	
			Less: Provision for doubtful debts	1,430	27,170
			Load to Sh. Krishna	44,000	
			Add: Interest accrued and outstanding	3,300	47,300
			Cash at Bank		29,260
			Cash in Hand		2,640
		3,25,380			3,25,380

Illustration 6.27. The following is the Trial Balance of Shri Om, as on 31st March, 1999. You are requested to prepare the Trading and Profit and Loss Account for the year ended 31st March, 1999 and Balance Sheet as on that date after making the necessary adjustments:

Particulars	*Debit Rs*	*Credit Rs*
Sundry Debtors	5,00,000	......
Sundry Creditors	......	2,00,000
Outstanding Liability for Expenses	55,000	......
Wages	1,00,000	.....
Carriage Outwards	1,10,000	......
Carriage Inwards	50,000	......
General Expenses	70,000	......

Cash Discounts	20,000	......
Bad Debts	10,000	......
Motor Car	2,40,000	......
Printing and Stationery	15,000	......
Furniture and Fittings	1,10,000	......
Advertisement	85,000	......
Insurance	45,000	......
Salesmen's Commission	87,500	....
Postage and Telephone	57,500	....
Salaries	1,60,000	....
Rates and Taxes	25,000	......
Drawings	20,000	......
Capital Account	....	14,43,000
Purchases	15,50,000	......
Sales	....	19,87,500
Stock on 1.4.99	2,50,000	......
Cash at Bank	60,000	......
Cash in Hand	10,500	......
	36,30,500	36,30,500

The following adjustments are to be made:

(1) Stock on 31st March, 1999 was valued at Rs 7,25,000.

(2) A Provision for Bad and Doubtful Debts is to be created to the extent of 5 per cent on Sundry Debtors.

(3) Depreciate:
Furniture and Fittings by 10%
Motor Car by 20%

(4) Shri Om had withdrawn goods worth Rs 25,000 during the year.

(5) Sales include goods worth Rs 75,000 sent out to Shanti & Company on approval and remaining unsold on 31st March, 1999. The cost of the goods was Rs 50,000.

(6) The Salesmen are entitled to a Commission of 5% on total sales.

(7) Debtors include Rs 25,000 bad debts.

(8) Printing and Stationery expenses of Rs 55,000 relating to 1997-98 had not been provided in that year but was paid in this year by debiting outstanding liabilities.

(9) Purchases include purchase of Furniture worth Rs 50,000.

Solution:

Shri Om

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ended 31st March, 1999

Particulars		*Amount Rs*	*Particulars*		*Amount Rs*
To Opening Stock		2,50,000	By Sales	19,87,500	
To Purchases	15,50,000		*Less:* Goods sent on		
Less: Drawings	25,000		Approval	75,000	19,12,500
	15,25,000		By Closing Stock	7,25,000	
Less: Furniture	50,000	14,75,000	*Add*: Stock on		
To Wages		1,00,000	approval (at cost)	50,000	7,75,000
To Carriage Inwards		50,000			
To Gross Profit c/d		8,12,500			
		26,87,500			26,87,500
To Salaries		1,60,000	By Gross Profit b/d		8,12,500
To Rates and Taxes		25,000			
To Postage and Telephone		57,500			
To Insurance		45,000			
To Printing and Stationery		15,000			
To General Expenses		70,000			
To Depreciation:					
Furniture (11,000 + 5,000)		16,000			
Motor Car		48,000			
To Salesmen's Commission		95,625			
(5% on Rs 19,12,500)					

To Advertisement		85,000		
To Carriage Outwards		1,10,000		
To Bad Debts	10,000			
Add: Addl. Bad Debts	25,000			
Add: Prov. for Bad Debts				
(5% on Rs 4,00,000:	20,000	55,000		
See W.N. 3)				
To Cash Discount		20,000		
To Net Profit		10,375		
		8,12,500		8,12,500

Shri Om
BALANCE SHEET
as on 31.3.1991

Liabilities		*Amount Rs*	*Assets*		*Amount Rs*
Capital as on	*Rs*		Furniture &	*Rs*	
1.4.98	14,43,000		Fittings	1,10,000	
Add: Net Profit	10,375		Additions during the yr.	50,000	
	14,53,375			1,60,000	
Less: Drawings			*Less*: Depn.	16,000	1,44,000
(20,000 + 25,000)	45,000		Motor Car	2,40,000	
	14,08,375		*Less*: Depn.	48,000	1,92,000
Less: Printing & Stationery			Closing Stock		7,75,000
of last year	55,000	13,53,375	(7,25,000 + 50,000)		
Sundry Creditors		2,00,000	Sundry Debtors	5,00,000	
Salesmen's Commission			*Less*: Goods sent on		
Outstanding		8,125	approval	75,000	
(Rs 95,625 – Rs 87,530)				4,25,000	
			Less: Addl. Bad debts	25,000	
				4,00,000	
			Less: Provision for doubtful debts		
			5% on 4,00,000	20,000	3,80,000
			Cash at Bank		60,000
			Cash in Hand		10,500
		15,61,500			15,61,500

Working Notes

1. Both Sales and Sundry Debtors have been reduced by Rs 75,000 representing invoice value of goods sent on approval. Rs 50,000 have been added to the closing stock being the cost of goods sent on approval.
2. Last year's short provision for Printing and Stationery has not been charged to the current year's Profit & Loss Account. It is preferable to charge it directly to in Capital Account.
3. Sundry Debtors = Rs 5,00,000 – (Rs 75,000 Goods on Approval + Rs 25,000 Bad Debt) = Rs 4,00,000.

Illustration 6.28. The Trial Balance of Jagfay Corporation, New Delhi, as on 30.9.1999 is as below:

Particulars		*Amount Rs*
Capital Account (including Rs 5,000) (Introduced on 1.4.1999)		22,500
Stock as on 1.10.1998		
Finished Goods	3,500	
Work-in-progress	7,000	
Raw Materials	3,000	13,500
Purchase of Raw Material		70,500
Machinery		22,500
Sales		1,26,225
Carriage Inwards		750
Carriage Outwards		450
Rent (including Rs 450 for the factory premises)		1,350
Rebates and Discounts allowed		105
Fire Insurance (for machinery)		210
Sundry Debtors		18,900
Sundry Creditors		5,100

Reserve for Bad and Doubtful Debts	60
Printing and Stationery	180
Miscellaneous Expenses	840
Advertisement	4,500
Drawings of Proprietor	1,800
Office Salaries	5,400
Manufacturing Wages	6,000
Furniture and Fixtures	2,250
Factory Power and Fuel	300
Cash in hand	600
Balance with Bank of Bikaner Ltd., Delhi (Dr.)	3,750

Adjustments

(i) Provide for interest @ 10% per annum on Capital. (No interest on drawings need be provided.)

(ii) A motor car purchased on 1.4.1999 for Rs 6,000 has been included in "Purchases'.'

(iii) Provide depreciation:
Machinery @ 10% p.a., Motor Car @ 20% p.a., Furniture and Fixtures @ 10% p.a.

(iv) Provision for unrealized rent in respect of a portion of the office sublet at Rs 50 per month from 1.4.1999 has to be made.

(v) Sundry Debtors include bad debts of Rs 400 which must be written off.

(vi) Provision for Bad and Doubtful Debts as on 30.9.1999 should be maintained at 10% of the Debtors.

(vii) Asum of Rs 2,000 transferred from the Current Account with Bank of Bikaner Ltd., to Fixed Deposit Account on 1.2.1999 has been passed through books. Make suitable adjustments and provide for accrued interest @ 6% p.a.

(viii) Stock as on 30.9.1999.
Finished Goods Rs 5,000, Raw Materials Rs 1,000, Work-in-progress Rs 5,500.

Prepare the Manufacturing, Trading and Profit and Loss Account for the year ended 30.9.1999 and Balance Sheet as on that date after making the necessary adjustments (Journal entries are not required.)

Solution:

Messrs Jagfay Corporation, New Delhi

MANUFACTURING ACCOUNT

for the year ended 30.9.1999

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Work-in-progress		7,000	By Cost of Manufactured goods transferred to Trading Account	75,710
To Materials used:			By Work-in-progress at end	5,500
Opening Stock	3,000			
Purchases	64,500			
	67,500			
Less: Closing Stock	1,000	66,500		
To Carriage Inwards		750		
To Factory Power and Fuel		300		
To Manufacturing Wages		6,000		
To Factory Rent		450		
To Fire Insurance for Machinery		210		
		81,210		81,210

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ended 30.9.1999

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
To Opening Stock:		By Sales	1,26,225
Finished Goods	3,500	By Closing Stock:	
To Cost of Goods transferred		Finished Goods	5,000
from Manufacturing A/c	75,710		
To Gross Profit c/d	52,015		
	1,31,225		1,31,225
To Office Salaries	5,400	By Gross Profit b/d	52,015
To Rent	900	By Rent Receivable	300
To Advertisement	4,500	By Interest receivable	
To Carriage Outwards	450	(on fixed deposit for Rs 2,000	
To Rebates and Discounts	105	for 8 months @ 6% p.a.)	80

	Rs		Rs
To Bad Debts written off 400 *Add*: New provision for bad debts 1,850 2,250 *Less*: Old provision for bad debts 60	2,190		
To Printing and Stationery	180		
To Miscellaneous Expenses	840		
To Depreciation written off	3,075		
To Interest on Capital	2,000		
To Net Profit transferred to Capital A/c	32,755		
	52,395		52,395

BALANCE SHEET

as on 30.9.1999

Liabilities		*Amount Rs*	*Assets*		*Amount Rs*
Capital Account:			Machinery:		
Balance	22,500		As per last Balance Sheet	22,500	
Add: Profit for the year	32,755		*Less:* Depreciation	2,250	20,250
Interest	2,000		Motor Car:		
	57,255		Cost	6,000	
Less: Drawings	1,800	55,455	*Less*: Depreciation	600	5,400
Sundry Creditors		5,100	Furniture & Fixtures:		
			as per last Balance Sheet	2,250	
			Less: Depreciation	225	2,025
			Closing Stock:		
			Finished Goods	5,000	
			Work-in-progress	5,500	
			Raw Materials	1,000	11,500
			Sundry Debtors	18,900	
			Less: Bad debts written off	400	
				18,500	
			Less: Provision for bad and doubtful debts	1,850	16,650
			Interest Accrued		80
			Rent Receivable		300
			Bank Balance:		
			Fixed Deposit with Bank of Bikaner Ltd.		2,000
			Balance with Bank of Bikaner Ltd.		1,750
			Cash in Hand		600
		60,555			60,555

CHECK YOUR PROGRESS

5. Outstanding Salaries are shown as
   (a) an expense.
   (b) a liability.
   (c) an asset.
6. Income Tax paid by a sole proprietor on his business income should be
   (a) Debited to the Trading Account.
   (b) Debited to the Profit and Loss Account.
   (c) Deducted from the Capital Account in the Balance Sheet.

6.7 SUMMARY

- The term Financial Statement includes the Income Statement or Profit & Loss Account and the Balance Sheet.
- Since these accounts/ statements are prepared at the end of accounting period, hence they are also known as final accounts.
- It is a usual practice to give the heading, "Trading and Profit & Loss Account" showing gross profit and net profit separately. In case of a manufacturing company, separate manufacturing account is prepared to compute the cost of goods manufactured which is transferred to the trading account.
- Adjustment entries are required to be made for those transactions which could not be recorded for whatever reason before closing the books of account.
- The table entry effect of the adjustment entry is made in the final accounts.
- A worksheet may be prepared to organize or arrange all accounting data required at the end of the accounting period.

6.8 KEY TERMS

- **Assets:** Tangible objects or intangible rights owned by an enterprise and carrying probable future benefits.
- **Adjustment Entry:** A journal entry passed at the end of an accounting period to record the completed portion of an incomplete continuous event.
- **Balance Sheet:** A statement of financial position of an enterprise as at a given period.
- **Current Assets:** Cash and other assets that are expected to be converted into cash or consumed in the production of goods or rendering of services in the normal course of business.
- **Current Liabilities:** Liabilities payable within a year from the date of Balance Sheet either out of existing current assets or by creation of new current liabilities.
- **Fixed Assets:** Assets held for the purpose of providing or producing goods and services and not held for resale in the normal course of business.
- **Fictitious Assets:** Assets not represented by tangible possession or property.
- **Fixed Liabilities:** All liabilities other than current liabilities.
- **Liabilities:** The claims of outsiders (other than owners) against the firm's assets.
- **Liquid Assets:** Assets which are immediately convertible into cash without much loss.
- **Manufacturing Account:** An account giving the cost of goods manufactured by the manufacturer during a particular period.
- **Profit & Loss Account:** An account presenting the revenues and expenses of an enterprise for an accounting period and shows the excess of revenues over expenses and *vice-versa.* It is also known as Income Statement.
- **Trading Account:** An account giving the overall result of trading, *i.e.*, purchasing and selling of goods.

6.9 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*a*) F, (*b*) F, (*c*) F, (*d*) T, (*e*) T, (*f*) F, (*g*) T, (*h*) F, (*i*) F
2. (*a*), 3. (*c*), 4. (*c*), 5. (*b*), 6. (*c*)

6.10 QUESTIONS AND EXERCISES

1. What are Final Accounts? What purpose do they serve?

2. What is meant by Marshalling of Assets and Liabilities?

3. Differentiate between:
   (a) Outstanding Expense and Prepaid Expense.
   (b) Outstanding Income and Accrued Income.
   (c) Interest on Capital and Interest on Drawings.

4. Why are adjustment entries required to be made at the time of preparing Final Accounts? Given illustrative examples of any four such adjustment entries.

5. Write short notes on:
   (a) Closing Entries
   (b) Trading Account
   (c) Worksheet.

6. What do you understand by the terms 'Grouping' and 'Marshalling', used in connection with the Balance Sheet? Illustrate the different forms of Marshalling.

7. Distinguish between Trial Balance and Balance Sheet.

6.11 PRACTICAL PROBLEMS

Final Accounts without Adjustments

1. Prepare Manufacturing, Trading and Profit and Loss Account from the following figures relating for the year 1998:

	01.01.98	*31.12.98*
	Rs	*Rs*
Stock:		
Finished Goods	33,000	27,500
Raw Materials	16,000	18,300
Work-in-progress	11,100	9,400
Purchase of Materials		1,50,900
Carriage on Purchases		4,100
Wages		65,000
Factory Salaries		26,000
Office Salaries		18,000
Repair and Maintenance:		
Machinery		8,300
Office Equipment		1,700
Depreciation:		
Machinery		25,000
Office Equipment		8,100
Sundry Expenses:		
Factory		5,300
Office		17,800
Sales		3,60,000

It is the firm's practice to transfer goods from the Factory to Sales godown at cost plus 10%.

[**Ans.** Manufacturing Profit Rs 28,400; Gross Profit Rs 42,100; Net Loss Rs 3,500]

2. From the following particulars, prepare Manufacturing Account, Trading Account, and Profit and Loss Account:

	Rs
Purchases of Raw Materials	13,195
Return Inward	70
Stock on 31.12.1998	
Raw Materials	1,210
Work-in-progress	1,000
Finished Goods	1,370
Productive Wages	2,000
Factory Expenses	1,840
General Office Expenses	300
Salaries	600
Distribution Expenses	100
Selling Expenses	700
Purchasing Expenses	600
Export Duty	300
Import Duty	200
Interest on Bank Loan	600
Stock on 1.1.1998	*Rs*
Raw Material	400
Work-in-progress	300
Finished Goods	410
Sales	19,500
Returns Outward	85
Carriage Outward	105
Carriage Inward	100
Cash Discount (allowed)	10
Sale of scrap	20
Depreciation of Machinery	500
Repairs of Machinery	100
Depreciation of Office Furniture	40

[**Ans.** Gross Profit Rs 3,470; Net Profit Rs 7,150]

3. From the following Trial Balance, prepare a Trading, Manufacturing and Profit and Loss Account and Balance Sheet as on 31st December, 1999:

TRIAL BALANCE

as on 31st December, 1999

Particulars		*Amount* *Rs*	*Amount* *Rs*
Stock on 1.1.1999			
Raw Materials			2,000
Work-in-progress		5,000	
Finished Goods		10,000	
Manufacturing Wages		10,000	
Purchasing of Raw Materials		30,000	
Factory Rent		5,000	
Carriage of Raw Materials		3,000	
Salary of the Works Manager		2,000	
Office Rent		2,000	
Printing and Stationery		1,000	
Bad Debts	1,000		
Sales			60,000
Land and Buildings		30,000	
Plant and Machinery		20,000	
Depreciation on Plant		2,000	
Sundry Debtors	5,000		
Sundry Creditors			30,000
Cash in Hand		5,000	
Capital			43,000
		1,33,000	1,33,000

Closing Stocks on 31st December, 1999 were as follows:

	Rs
Raw Material	5,000
Work-in-process	4,000
Finished Goods	10,000

[**Ans.** Cost of Production Rs 50,000; Gross Profit Rs 10,000; Net Profit Rs 6,000; Total of Balance Sheet Rs 79,000]

4. Prepare Manufacturing, Trading and Profit and Loss Account for the year ended 31st March, 1999 and Balance Sheet as at the end of the year from the following Trial Balance:

Particulars	*Dr. Amount* *Rs*	*Cr. Amount* *Rs*
Opening Stock of Raw Materials	30,000	
Opening Stock of Finished Goods	16,000	
Opening Stock of Work-in-progress	5,000	
Capital		72,000
Purchases of Raw Materials	2,50,000	
Sales		4,00,000
Purchases of Finished Goods	8,000	
Carriage Inwards	4,000	
Wages	50,000	
Salaries (75% Factory)	26,000	
Commission	3,000	
Bad Debt	2,000	
Insurance	4,000	
Rent, Rates and Taxes (50% Factory)	12,000	
Postage and Telegram	2,800	
Tea and Tiffin	1,600	
Travelling and Conveyance (25% Factory)	3,500	
Carriage Outwards	2,600	
Machinery	40,000	
Furniture	5,000	
Debtors	60,000	
Creditors		53,500
	5,25,500	5,25,500

The Closing Stocks are as follows:

	Rs
Raw Materials	40,000
Work-in-progress	12,000
Finished Goods	8,000

[**Ans.** Cost of Production Rs 3,13,375, Gross Profit Rs 70,625,
Net Profit Rs 39,500, Balance Sheet Total Rs 1,65,000]

5. From the following balances draw up a Trading and Profit and Loss Account and Balance Sheet:

Particulars	*Amount Rs*
P. Parikh Capital	20,000
Bank Overdraft	5,000
Machinery	13,400
Cash in Hand	1,000
Fixtures and Fittings	5,500
Opening Stock	45,000
Bills Payable	7,000
Creditors	40,000
Debtors	63,000
Bills Receivable	5,000
Purchases	50,000
Sales	1,29,000
Returns from Customers	1,000
Returns to Creditors	1,100
Salaries	9,000
Manufacturing Wages	4,000
Commission and T.A.	5,500
Trade Expenses	1,500
Discount (Cr.)	4,000
Rent	2,200

The Closing Stock amounted to Rs 52,000.

[**Ans.** Gross Profit Rs 82,100 ; Net Profit Rs 67,900
and
Balance Sheet Total Rs 1,39,900]

6. From the understated Trial Balance of M/s Suneel Brothers prepare (*a*) Manufacturing Account; (*b*) Trading and Profit and Loss Account; and (*c*) Balance Sheet:

TRIAL BALANCE

as on 31st December, 1988

Debit Balances	*Amount Rs*	*Credit Balances*	*Amount Rs*
Wages	20,000	Sales	1,74,000
Stock (Raw Materials)		Profit and Loss	
1.1.1998	5,710	Balance 1.1.1998	12,000
Purchases	88,274	Capital	1,30,000
Carriage Inward	3,686		
Repairs	6,000		
Salaries (Factory)	2,100		
Salaries General	1,000		
Rates and Taxes	2,240		
Travelling Expenses	3,550		
Insurance (Factory)	700		
Insurance General	80		
Bad Debts	410		
General Expenses	2,942		
Carriage Outward	9,424		
Various Assets	1,13,884		
Stock 1.1.98 (Finished Goods)	56,000		
	3,16,000		3,16,000

Closing Stock: Raw Materials, Rs 5,272; Finished Goods, Rs 34,324.

[**Ans.** Cost of Production, Rs 1,21,198; Gross Profit Rs 31,126; Net Profit Rs 11,480; Balance Sheet Total Rs 1,53,480]

7. The following are the Trading and Profit & Loss Account and Balance Sheet of *B* as on December 31, 1999. Redraw them in proper form, giving reasons for your correction.

TRADING AND PROFIT & LOSS ACCOUNT
for the year ended 31.12.1999

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
Purchases	4,66,800	Sales	5,59,900
Stock	55,110	Profit on Consignment to	
Salaries	11,010	*A* & Co., Bombay	19,080
B's Drawings	19,170	Interest on Capital	7,500
Wages	65,590	Stock (1st Jan.)	50,310
Rent	2,250	Commission received	27,990
General Expenses	17,470	Discount received	11,250
Interest on Loan	3,000		
Bad Debts	11,890		
Net Profit to *B/S*	23,740		
	6,76,030		6,76,030

BALANCE SHEET
as on 31.12.1999

Liabilities	*Amount Rs*	*Assets*	*Amount Rs*
Creditors	1,95,070	Debtors	2,61,580
Bills Receivable	1,30,140	Cash	960
Capital (1.1.1999)	1,50,000	Bank	52,210
Net Profit from P & L A/c	23,740	Loan from Bank	75,000
		Stock (31.12.1999)	55,110
		Bills Payable	54,090
	4,98,950		4,98,950

[**Ans.** Gross Profit Rs 32,310, Net Profit Rs 37,510, Balance Sheet Total Rs 5,00,000]

Final Accounts with Adjustments

8. State how the following must be dealt with in the final accounts of a firm for the year ended 31.12.1999 giving reasons in brief:

(i) Advertisement expenditure of Rs 10,000 paid on 30.12.1998, the advertisement in respect of which has appeared in the magazines only in January, 1999.

(ii) Cost of temporary pandal erected for an exhibition on 1.7.1998, the exhibition being expected to be over by June 1999: Rs 17,000.

(iii) Cost of a second-hand scooter purchased on 1.10.1988 for Rs 2,500, which was totally destroyed in an accident on 31.11.1998, the insurance company paying Rs 1,000 in full settlement in January, 1999.

(iv) Petrol expenses of Rs 420 paid for the car of one of the partners for an official visit, the car not being an asset of the firm.

(v) Hire charges of Rs 1,000 for a compressor, when the firm's own compressor was under break down.

[**Ans.** (*i*) Prepaid expense (*ii*) Charge Rs 8,500 to P & L in 1998 and carry forward the balance to 1999 (*iii*) Write off Rs 1,500 from P & L (*iv*) Charge P & L A/c as a travelling expense (*v*) Charge Manufacturing A/c (if prepared) or P & L A/c]

9. (*a*) On 1st January, 1998 the Provision for Doubtful Debts Account in the books of a firm which maintains it at 5% had a credit balance of Rs 1,100. During the year the Bad Debts amounted to Rs 800 and the debtors at the end of the year were Rs 20,000. Show Provision for Doubtful Debts Account and Bad Debts Account for the year 1998.

(b) At the end of a accounting year, a trader finds that no entry, has been passed in the books of accounts in respect of the following transactions:

(i) Outstanding salary at the end of the year Rs 200.

(ii) Goods given as charity during the year Rs 300.

(iii) Stock-in-hand at the end of the year Rs 20,000. Journalise these transactions.

10. The following balances were taken from the records of a firm. For each account give the adjusting journal entry which may have resulted in the change in that account balance.

Particulars	*Trial Balance*	*Adjusted Trial Balance*
Advance from Customers	20,000	16,000
Prepaid Insurance	8,000	6,000
Wages Payable	3,000	5,000
Interest (Credit Balance)	1,000	1,200
Accumulated Depreciation	15,000	20,000

Assume that the final accounts were prepared from the unadjusted balances. How would the Profit and Loss account and Balance Sheet be affected in each of the above cases?

11. The following items are found in the Trial Balance of John on 31st December, 1998:

	Rs
Debtors	16,000
Bad Debts	300
Bad and Doubtful Debts Provision 1.1.1998	700

You are to provide for the bad and doubtful debts @ 5%. Give the necessary journal entries and prepare the Bad Debts Account, Bad and Doubtful Debts Provision Account, Profit and Loss Account, Sundry Debtors Account in the ledger and a Balance Sheet appearing after the final adjustments.

12. A firm had the following Balances on 1st January, 1998:

	Rs
(a) Provision for Bad and Doubtful Debts	2,500
(b) Provision for Discount on Debtors	1,200
(c) Provision for Discount on Creditors	1,000

During the year Bad Debts amounted to Rs 2,000, Discounts allowed were Rs 100 and Discounts received were Rs 200. During 1999 Bad Debts amounting to Rs 1,000 were written off while Discounts allowed and received were Rs 2,000 and Rs 500 respectively.

Total Debtors on December 31, 1998 were Rs 48,000 before writing off Bad Debts, but after allowing Discounts. On December 31, 1998 the amount was Rs 19,000 after writing off the Bad Debts, but before allowing Discounts. Total Creditors on these two dates were Rs 20,000 and Rs 25,000 respectively.

It is the firm's policy to maintain a provision of 5% against Bad & Doubtful Debts and 2% for Discount on Debtors and a provision of 3% for Discount on Creditors.

Show the accounts relating to Provision on Debtors and Provision on Creditors for the year 1988 and 1999.

[**Ans.** Balances on 31.12.1999; Bad Debts Provision Rs 850, Provision for Discount on Debtors Rs 323, and Provision for Discount on Creditors Rs 750]

13. Apear Ltd. makes provision for doubtful debts at the end of each year against specific debtors. On 30th June, 1999 the following debtors' balances were considered doubtful and provided for

	Rs
Raman	1,500
Jalil	400
Nagpal	250
Sharma	500

Following are the particulars for the year ended 30th June, 1999:

(*a*) Bad Debts written off:

	Rs
Raman	1,200
Sharma	350
Gupta	300
Ramesh	200
Atmaram	150

(*b*) Amounts realized against debts written off in earlier year:

	Rs
Hossain	350
Kriparam	175
Dayaram	225

(*c*) Debts considered doubtful (after taking into account all realisations during the year) at the end of the year.

	Rs
Abraham	180
Ganesh	230
Gangasaran	375
Ramchandra	470

You are required to draw up:

(i) Bad Debts Account.

(ii) Provision for Doubtful Debts Account and to show the relevant amount in the Profit & Loss Account for the year ended 30th June, 1999.

[**Ans.** Amount charged from P & L A/c for Bad Debts Provision Rs 805, Bad Debts recovered Rs 750 Credited to P & L A/c]

14. The accountant of M/s Kasturi Agencies extracted the following Trial Balance as on March 31, 1997:

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Capital		1,00,000
Drawings		18,000
Buildings	15,000	
Furniture and Fittings	7,500	
Motor Van	25,000	
Loan from Hari @ 12% interest	15,000	
Interest paid on above	450	
Sales		1,00,000
Purchases	75,000	
Stock as at 1.4.96	25,000	
Stock as at 31.3.97		32,000
Establishment Expenses	15,000	
Freight Inward	2,000	
Freight Outward		1,000
Commission received		7,500
Sundry Debtors	28,100	
Bank Balance	20,500	
Sundry Creditors		10,000
	2,28,550	2,68,500

The Accountant located the following errors but is unable to proceed any further:

(a) A totalling error in bank column of payment side of Cash Book whereby the column was under totalled by Rs 500.

(b) Interest on loan paid for the quarter ending December 31, 1996, Rs 450 was omitted to be posted in the ledger. There was no further payment of interest.

You are required to set right the Trial Balance and prepare the Trading and Profit and Loss Account for the year ended March 31, 1997 and the Balance Sheet as at the date after carrying out the following:

(i) Depreciation is to be provided on the assets as follows:

Buildings	2½% p.a.
Furniture and Fittings	10% p.a.
Motor Van	25% p.a.

(ii) Balance of interest due on the loan is also to be provided for.

[**Ans.** Correct Trial Balance Total Rs 2,32,500; Gross Profit Rs 30,000, Net Profit Rs 12,775; Balance Sheet Total; Rs 1,20,225]

15. The following is the Schedule of balances as on 31.3.1998 extracted from the books of Shri Gavaskar, who carries on business under the name and style of Messrs Gavaskar Viswanath & Co., at Bombay:

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Cash in Hand	1,400	
Cash at Bank	2,600	
Sundry Debtors	86,000	
Stock as on 1.4.1997	62,000	
Furniture and Fixtures	21,400	
Office Equipment	16,000	
Buildings	60,000	
Motor Car	20,000	
Sundry Creditors		43,000
Loan from Viswanath		30,000
Reserve for Bad Debts		3,000
Purchases	1,40,000	
Purchase Returns		2,600
Sales		2,30,000

Sales Returns	4,200	
Salaries	11,000	
Rent for Godown	5,500	
Interest on loan from Viswanath	2,700	
Rates and taxes	2,100	
Discount allowed to Debots	2,400	
Discount received from Creditors		1,600
Freight on Purchases	1,200	
Carriage Outwards	2,000	
Drawings	12,000	
Printing and Stationery	1,800	
Electric Charges	2,200	
Insurance Premium	5,500	
General Office Expenses	3,000	
Bad Debts	2,000	
Bank Charges	1,600	
Motor Car Expenses	3,600	
Capital Account		1,62,000
	4,72,200	4,72,200

Prepare Trading and Profit and Loss Account for the year ended 31st March, 1998 and the Balance Sheet as at that date after making provision for the following:

1. (*a*) Buildings used for business by 5%.
   (b) Furniture and Fixtures by 10%: one steel table purchased during the year for Rs 1,400 was sold for same price but the sale proceeds were wrongly credited to sales account.
   (c) Office Equipment by 15%: Purchases of a typewriter during the year for Rs 4,000 has been wrongly debited to purchases.
   (d) Motor car by 20%.
2. Value of stock at the close of the year was Rs 44,000.
3. One month rent for godown is outstanding.
4. One month salary is outstanding.
5. Interest on Loan from Viswanath is payable at 12% p.a. This loan was taken on 1.5.1997.
6. Reserve for Bad debts is to be maintained at 5% of Sundry Debtors.
7. Insurance premium includes Rs 4,000 paid towards proprietor's life insurance policy and the balance of the insurance charges cover the period from 1.4.1997 to 30.6.1998.
8. Half of the buildings are used for residential purposes of Shri Gavaskar.

[**Ans.** Gross Profit Rs 71,800, Net Profit Rs 18,400,
Balance Sheet Total Rs 2,38,000]

16. From the following trial balance of Shri Goyal, prepare Trading and Profit & Loss Account for the year ending 31st Dec., 1996, and Balance Sheet as on that date after taking into consideration the adjustments given at the end of the trial balance:

TRIAL BALANCE
as on 31st December, 1996

Particulars	*Dr. Amount* *Rs*	*Cr. Amount* *Rs*
Sales	—	3,70,000
Purchases (adjusted)	3,49,600	
Wages	10,450	
Capital Account		34,250
National Insurance	150	
Carriage Inwards	200	
Carriage Outwards	250	
Lighting	300	
Rates and Insurance (including premium of Rs 150 p.a. up to 30th June, 1997)	200	
Stock at 31.12.1996	30,625	
Cash in Hand and at Bank	875	
Discount earned		300
Plant and Machinery	15,000	
Discount allowed	50	
Debtors and Creditors	3,000	10,000
Furniture	4,000	
Dividends received		150
	4,14,700	4,14,700

Adjustments

(i) National Insurance also includes employees contribution of Rs 75. Wages are shown "Net" after deducting national insurance contribution borne by the employees.
(ii) Owing to the nature of employment, some employees are housed in the building of the business. The rental value of such portion is assessed at Rs 250 per annum. The benefit to the employee treated as wages and the rental as income for Shri Goyal.
(iii) Depreciate Plant & Machinery at 15% per annum and Furniture at 10% p.a.
(iv) Goods worth Rs 2,000 given by Shri Goyal to his son at cost.
(v) The Manager is entitled to a commission of 20% of the Net Profits after charging his commission. (Calculations may be made nearest to the multiple of a rupee.)

[**Ans.** Gross Profit Rs 11,350; Net Profit Rs 7,229;
Balance Sheet Total Rs 50,925]

17. The following Trial Balance is extracted from the book of a merchant on 31st December, 1997:

Particulars	*Amount Rs*	*Amount Rs*
Furniture and Fittings	640	
Motor Vehicles	6,250	
Buildings	7,500	
Capital Account		12,500
Bad Debts	125	
Provision for Bad Debts		200
Sundry Debtors and Creditors	3,800	2,500
Stock on January 1, 1998	3,460	
Purchase and Sales	5,475	15,450
Bank Overdraft		2,850
Sales and Purchase Returns	200	125
Advertising	450	
Interest (on Bank Overdraft)	118	
Commission		375
Cash	650	
Taxes and Insurance	1,250	
General Expenses	782	
Salaries	3,300	
	34,000	34,000

The following adjustments are to be made:
(a) Stock in hand on 31st December, 1997 was Rs 3,250.
(b) Depreciate buildings at the rate of 5%, Furniture and Fittings @ 10% and Motor Vehicles @ 20%.
(c) Rs 85 is due for interest on bank overdraft.
(d) Salaries Rs 300 and Taxes Rs 120 are outstanding.
(e) Insurance amounting to Rs 100 is prepaid.
(f) One-third of the commission received is in respect of work to be done next year.
(g) Write off a further sum of Rs 100 as bad debts and provision for bad debts to be made equal to 10 per cent on sundry debtors.

[**Ans.** Gross Profit Rs 9,690; Net Profit Rs 1,551;
Balance Sheet Total Rs 20,031]

18. From the following balances taken from the ledger of Shri Krishna on 31st March, 1999, prepare the Trading and Profit and Loss Account for the year ended 31st March, 1999 and the Balance Sheet as at 31st March, 1999 of:

Particulars	*Amount Rs*	*Particulars*	*Amount Rs*
Sundry Creditors	19,000	Bad Debts	100
Building	15,000	Loan from Ram	2,500
Income-Tax	1,025	Sundry Debtors	9,500
Loose Tools	1,000	Investments	6,500
Cash at Bank	16,200	Bad Debts Reserve	1,600
Sundry Expenses	1,990	Rent and Rates	850
Bank Interest (Cr.)	75	Furniture	3,000
Purchases	1,57,000	Stock (1.4.1988)	27,350
Wages	10,000	Capital	47,390
Carriage Inwards	1,120	Discount allowed	630
Sales	1,85,000	Dividends received	535
Motor Van	12,500	Drawings	2,000
Cash in Hand	335	Bills payable	10,000

Adjustments to be taken into account:

(a) Write off further Rs 300 as bad out of Sundry Debtors and create a Reserve for Bad Debts at 20% on Debtors.
(b) Dividends accrued and due on Investments is Rs 135. Rates paid in advance Rs 100 and wages owing Rs 450.
(c) On 31.3.1999 stock was valued at Rs 15,000 and Loose Tools were valued at Rs 800.
(d) Write off 5% for depreciation on Buildings and 40% on Motor Van.
(e) Provide for interest at 12% per annum due on loan taken on 1.6.98.
(f) Income tax paid has to be treated as Drawings.

[**Ans.** Gross Profit Rs 4,080; Net Loss Rs 5,385;
Balance Sheet Total Rs 71,180]

19. The following Trial Balance was extracted from the books of Mr. *A* as on 30th September, 1998:

Particulars	*Dr. Amount Rs*	*Cr. Amount Rs*
Capital Account		1,00,000
Plant & Machinery	78,000	
Furniture	2,000	
Sales		1,27,000
Purchases	60,000	
Returns	1,000	750
Opening Stock	30,000	
Discount	425	800
Sundry Debtors	45,000	
Sundry Creditors	25,000	
Salaries		7,550
Manufacturing Wages	10,000	
Carriage Outward	1,200	
Provision for Bad Debts		525
Rent, Rates and Taxes	10,000	
Advertisement	2,000	
Cash		6,900
	2,54,075	2,54,075

Prepare Trading and Profit & Loss Accounts for the year ended 30th September, 1998 and a Balance Sheet as on that date after taking into account the following adjustments:

1. Closing Stock was valued at Rs 34,220.
2. Provision for Bad Debts is to be kept at Rs 500.
3. Allow Interest on Capital at 10% per annum.
4. Furniture was sold and the same was disposed of for Rs 760 in exchange of new furniture costing Rs 1,680. The net invoice of Rs 920 was passed through Purchase Register. (No depreciation need be charged on old and new furniture.)
5. Depreciate Plant and Machinery by 10% per annum.
6. The proprietor Mr. *A* has taken goods worth Rs 5,000 for personal use, and distributed goods worth Rs 1,000 as samples.

[**Ans.** Gross Profit Rs 67,890; Net Profit Rs 27,500;
Balance Sheet Total Rs 1,57,500]

6.12 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT-7 INVENTORY VALUATION

Structure

7.0 Introduction
7.1 Unit Objectives
7.2 Objectives of Inventory Valuation
7.3 Inventory Systems
  7.3.1 Periodic Inventory System
  7.3.2 Perpetual Inventory System
  7.3.3 Methods of Valuation of Inventories
  7.3.4 Historical Cost
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  7.3.6 Net Realizable Value
  7.3.7 Anticipated Price Decline
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7.0 INTRODUCTION

Inventories are unconsumed or unsold goods purchased or manufactured. According to the Accounting Standard 2 (Revised), inventories are assets.

(a) held for sale in the ordinary course of business,

(b) in the process of production for such sale, or

(c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Thus, the term inventory includes stock of (i) finished goods, (ii) work-in-progress, and (iii) raw materials and components. In case of a trading concern, inventory primarily consists of finished goods while in case of a manufacturing concern, inventory consists of raw materials, components, stores, work-in-process, and finished goods.

7.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Define the term inventory
- Appreciate the objectives of inventory valuation
- Explain different inventory systems
- Enumerate different methods of inventory valuation
- Prepare inventory records according to different inventory systems/methods
- Value inventory for balance sheet purposes
- List the essential requirements of Accounting Standard: 2 regarding valuation of inventories and
- Explain the meaning of certain key terms.

7.2 OBJECTIVES OF INVENTORY VALUATION

Inventory has to be properly valued because of the following reasons:

(i) **Determination of income:** The valuation of inventory is necessary for determining the true income earned by a business during a particular period. Gross profit is the excess of sales over cost of goods sold. Cost of goods sold is ascertained by adding opening inventory to and deducting closing inventory from purchases.

(ii) **Determination of financial position:** The inventory at the end of a period is to be shown as a current asset in the balance sheet of the business. In case the inventory is not properly valued, the balance sheet will not disclose the correct financial position of the business.

7.3 INVENTORY SYSTEMS

Records pertaining to quantity and value of inventory-in-hand can be maintained according to any of the following two systems:

(i) Periodic Inventory System

(ii) Perpetual Inventory System

7.3.1 Periodic Inventory System

In case of this system the quantity and value of inventory is found out only at the end of the accounting period after having a physical verification of the units in hand. The system does not provide the information regarding the quantity and value of materials in hand on a continuous basis. The cost of materials used is obtained by adding the total value of goods purchased during the period to the value of inventory in hand in the beginning of the period and subtracting the value of inventory at the end of the period. For example, if the inventory in the beginning was 1,000 units of Rs 10,000, purchases during the period were of 5,000 units of Rs 50,000, and the closing inventory 1,500 units of Rs 15,000, the cost of materials used will be taken as Rs 45,000 (i.e., Rs 10,000 + Rs 50,000 – Rs 15,000). It is, thus, assumed that materials not in stock have been used. No accounting is done for shrinkage, losses, theft and wastage.

7.3.2 Perpetual Inventory System

It is also known as an Automatic Inventory System.

According to the Chartered Institute of Management Accountants London, it is 'a system of records maintained by the controlling department, which reflects the physical movement of stocks and their current balance". The definition given by Wheldon is more exhaustive and explanatory. According to him, it is "a method of recording inventory balances after every receipt and issue to facilitate regular checking and to obviate closing down for stocktaking".[1] In case of this system, the stores ledger gives the balance of raw materials, work-in-progress, and finished goods on a continuing basis. The basic objective of this system is to make available details about the quantity and value of stock of each item at all times. The system, thus, provides a rigid control over the stock of materials, as physical stock can regularly be verified with the stock records kept in the stores and the cost office.

7.3.3 Methods of Valuation of Inventories

According to International Accounting Standard: 2 (IAS: 2), the inventories should be valued at the lowest of 'historical cost' and 'net realizable value'.

7.3.4 Historical Cost

Historical cost of inventories is the aggregate of cost of purchase, cost of conversion, and other costs incurred in bringing the inventories to their present location and condition.[2]

Thus, Historical Cost includes not only the price paid for acquisition of inventories but also all costs incurred for bringing and making them fit for use in production or for sale, e.g., transportation costs, duties paid, insurance, manufacturing expenses, wages or manufacturing expenses incurred for converting raw materials into finished products, etc. Selling expenses such as advertisement expenses or storage costs should not be included.

A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues. It requires assigning of proper costs to inventory as well as goods sold.

However, it should be noted that assigning of such costs need not conform to the physical flow of goods.

The various methods for assigning historical costs to inventory and goods sold are being explained below:

1. **Specific identification method—**According to this method, each item of inventory is identified with its cost. The total of the various costs so identified constitutes the value of inventory. This method is generally used when the materials or goods have been purchased for a specific job or customer. Such materials or goods are earmarked for the job and sold to that particular job or customer whenever demanded.

1. *Cost Accounting & Costing Methods,* 13th edition, p.60.
2. . International Accounting Standard: 2.

This technique of inventory valuation can be adopted only by a company which is handling a small number of items. In case of a manufacturing company having a number of inventory items, it is almost impossible to identify the cost of each individual item of inventory. Thus, this method is inappropriate in most cases on account of practical considerations. Moreover, the method opens door to income manipulation when like items are purchased at different prices. For example, a company purchases 10,000 units of an item in equal lots of 2,500 each at costs Rs 2.50, Rs 3, Rs 3.50, and Rs 4 per unit. It sells 7,500 units at Rs 4 per unit. In case the management follows this method for valuation of inventory, it can determine the income reported for the period by selecting that lot of units which will produce the desired objective. If it is assumed that the inventory consists of the last lot purchased, the value of the inventory would be a sum of Rs 10,000 as compared to the presumption that the inventory consists of units purchased in the first lot in which case the value of inventory would be Rs 6,250. The working of the system can be understood with the help of the following illustration.

Illustration 7.1. The following is the record of receipts of certain materials during February, 2003:

Feb. 1 Received 400 units for Job No. 12 @ Rs 10 per unit.

Feb. 4 Received 300 units for Job No. 13 @ Rs 11 per unit.

Feb. 16 Received 200 units for Job No. 14 @ Rs 12 per unit.

Feb. 25 Received 400 units for Job No. 15 @ Rs 13 per unit.

During February 2003, the following issue of materials is made:

Feb. 10 Issued 200 units to Job No. 12.

Feb. 15 Issued 100 units to Job No. 13.

Feb. 17 Issued 200 units to Job No. 12.

Feb. 20 Issued 200 units to Job No. 14.

Feb. 26 Issued 100 units to Job No. 13.

Feb. 28 Issued 200 units to Job No. 15.

Show how these transactions will appear in the Stores Ledger and state the amount of inventory of Feb. 28, 2003.

Solution:

STORES LEDGER

	Receipts				*Issues*						*Balance*	
Date	*Job No.*	*Qty.*	*Rate Rs*	*Amt. Rs*	*Date*	*Job No.*	*Qty.*	*Due*	*Rate Rs*	*Amt. Rs*	*Qty.*	*Amt. Rs*
2003					2003							
Feb. 1	12	400	10	4,000	Feb.	...	...	...	...	...	400	4,000
Feb. 4	13	300	11	3,300	...	...	...	...	...	...	700	7,300
					Feb.10	12	200	200	10	2,000	500	5,300
					15	13	100	200	11	1,100	400	4,200
Feb. 16	16	200	12	2,400	...	...	...	...	...	...	600	6,600
					17	12	200	...	10	2,000	400	4,600
					20	14	200	...	12	2,400	200	2,200
Feb. 25	15	400	13	5,200	...	...	...	...	...	...	600	7,400
					26	13	100	100	11	1,100	500	6,300
					28	15	200	200	13	2,600	300	3,700
Total		1,300		14,900			1,000			11,200	300	3,700*

*This consists of:

100 units for Job No. 13 @ Rs 11 per unit	*Rs*	1,100
200 units for Job No. 15 @ Rs 13 per unit		2,600
300 units		3,700

2. **First in first out method (FIFO)**—Under this method, it is assumed that the materials/goods first received are the first to be issued/sold. Thus, according to this method, the inventory on a particular date is presumed to be composed of the items which have been acquired most recently. The working of this method can be understood with the following illustration.

Illustration 7.2. The following are the details regarding purchases of a certain item during January.

January 1	Purchases	200 units	@ Rs 7	Rs 1,400
January 8	Purchases	900 units	@ Rs 8	Rs 7,200
January 25	Purchases	300 units	@ Rs 9	Rs 2,700
January 30	Purchases	400 units	@ Rs 10	Rs 4,000
				Rs 15,300

A physical inventory of the items taken on January 31 shows that there are 700 units in hand. You are required to calculate the value of the inventory according to the FIFO method.

Solution:

In case of the FIFO method, the inventory is presumed to be consisting of items purchased most recently. Accordingly, the value of the inventory on 31st January will be as follows:

January 30	Purchases	400 units	@ Rs 10	Rs 4,000
January 25	Purchases	300 units	@ Rs 9	Rs 2,700
				Rs 6,700

In the above cases, the valuation of inventory has been done on the presumption that the concern follows 'Periodic Inventory System'. Of course, in case of the FIFO method, the value of inventory would remain the same even if the perpetual inventory system is followed. For example, if, out of 1,100 units issued, 150 units were issued on January 4, while 950 units were issued on January 10, the valuation of inventory using the perpetual inventory system will be calculated as follows:

STOCK LEDGER

	Receipts			*Issues*			*Balance*	
Date	*Qty.*	*Rate*	*Amount*	*Qty.*	*Rate*	*Amount*	*Qty.*	*Amount*
Jan. 1	200	7	1,400	–	–	–	200	1,400
Jan. 4	–	–	–	150	7	1,050	50	350
Jan. 8	900	8	7,200	–	–	–	950	7,550
Jan. 10	–	–	–	50	7	350	–	–
				900	8	7,200		
Jan. 25	300	9	2,700	–	–	–	300	2,700
Jan. 30	400	10	4,000	–	–	–	700	6,700

It is clear from the above that the value of inventory in case of periodic inventory system as well as perpetual system is the same, i.e., Rs 6,700, if the FIFO method is followed. The cost of goods sold in both the cases, therefore, also amounts to Rs 8,600 (i.e., Rs 15,300 – Rs 6,700).

Advantages: The FIFO method has the following advantages:

1. It values the stock nearer to current market prices since stock is presumed to be consisting of the most recent purchases.
2. It is based on cost and, therefore, no unrealized profit enters into the financial accounts of the company.
3. The method is realistic since it takes into account the normal procedure of utilizing/selling those materials/goods which have been longest in stock.

Disadvantages: The method suffers from the following disadvantages:

1. It involves complicated calculations and hence increases the possibility of clerical errors.
2. Comparison between different jobs using the same type of material becomes sometimes difficult. A job commenced a few minutes after another job may have to bear an entirely different charge for materials because the first job completely exhausted the supply of materials of the particular lot.

The FIFO method of valuation of inventories is particularly suitable in the following circumstances:

(i) The materials/goods are of a perishable nature.
(ii) The frequency of purchases is not large.
(iii) There are only moderate fluctuations in the prices of materials/goods purchased.
(iv) Materials are easily identifiable as belonging to a particular purchase lot.

3. **Last in first out method (LIFO)—**This method is based on the assumption that last item of materials/goods purchased are the first to be issued/sold. Thus, according to this method, inventory consists of items purchased at the earliest cost.

Illustration 7.3. Calculate the value of the inventory of January 31 from the following data using (*i*) periodic inventory system and (*ii*) perpetual inventory system.

Receipts				*Rs*
January 1	Inventory in hand	200 units	@ Rs 7	1,400
January 8	Purchases	1,100 units	@ Rs 8	8,800
January 25	Purchases	300 units	@ Rs 9	2,700
January 31	Purchases	400 units	@ Rs 10	4,000

Issued for sale

January 6	100 units	January 15	400 units
January 9	200 units	January 27	600 units

Solution:

(*i*) Valuation of inventory under the periodic inventory system:

January 1	Opening inventory	200 units	@ Rs 7	1,400
January 8	Purchases	500 units	@ Rs 8	4,000
	Total	700 units		5,400

(*ii*) Valuation of inventory under perpetual inventory system:

STOCK LEDGER

Date	*Receipts*			*Issues*			*Balance*	
	Qty.	*Rate*	*Amount*	*Qty.*	*Rate*	*Amount*	*Qty.*	*Amount*
Jan. 1	–	–	–	–	–	–	200	1,400
Jan. 6	–	–	–	100	7	700	100	700
Jan. 8	1,100	8	8,800	–	–	–	1,200	9,500
Jan. 9	–	–	–	200	8	1,600	1,000	7,900
Jan. 15	–	–	–	400	8	3,200	600	4,700
Jan. 25	300	9	2,700	–	–	–	900	7,400
Jan. 27	–	–	–	300	9	2,700	300	2,300
				300	8	2,400		
Jan. 31	400	10	4,000	–	–	–	700	6,300*

*The value of inventory on January 31.

Advantages—The method has the following advantages:

1. It takes into account the current market conditions while valuing materials issued to different jobs or calculating the cost of goods sold.
2. The method is based on cost and, therefore, no unrealized profit or loss is made on account of use of this method.

The method is most suitable for materials which are of a bulky and non-perishable type.

7.3.5 FIFO and LIFO Methods and Market Fluctuations

Both FIFO and LIFO methods of pricing inventories are based on actual cost and hence both value the products manufactured at true costs. However, both have conflicting results in periods of rising and falling prices.

In periods of rising prices. In periods of rising prices, the FIFO method will result in production being relatively undercharged, since replenishment of stock will be at higher prices than the prices of issue of materials. On the same pattern, the cost of goods sold will also be relatively deflated. Thus, profits will be inflated and there will be more liability for payment of taxes. The situation will be just the reverse if the LIFO method is followed—the production will be relatively overcharged resulting in lower profitability, deflating profits, and reducing income tax liability.

In periods of falling prices. In periods of falling prices, the FIFO method will result in production being relatively overcharged, resulting in deflating the profits, and reducing the income tax liability. The reverse will be the case if the LIFO method is followed. Production will be charged at the most recent prices of purchase of materials or goods, resulting in inflation of profits and increase in the tax liability.

In periods of rising prices, the inventory will be valued in FIFO method at a price higher than that in case of LIFO method. The reverse will be the case in case of periods of falling prices. Thus, it may be concluded that in periods of rising price LIFO method tends to give a more meaningful income statement but a less realistic balance sheet, whereas FIFO method gives a more meaningful balance sheet but a less realistic income statement. The reverse will be the situation in periods of falling prices.

It may also be noted that no sweeping generalization can be made regarding superiority of LIFO over FIFO or vice versa. Each method has its own merits and demerits depending upon the circumstances prevailing at a particular moment of time.

4. **Highest in first out method (HIFO)—**According to this method, the inventory of materials or goods should be valued at the lowest possible prices. Materials or goods purchased at the highest prices are treated as being first issued/sold irrespective of the date of purchase. This method is very suitable when the market is constantly fluctuating because cost of heavily priced materials or goods is recovered from the production or sales at the earliest. However, the method involves too many calculations as in the case of the FIFO or LIFO method. The method has therefore, not been adopted widely.
5. **Base stock method—**The method is based on the contention that each enterprise maintains at all times a minimum quantity of materials or finished goods in its stock. This quantity is termed as base stock. The base stock is deemed to have been created out of the first lot purchased and, therefore, it is always valued at this price and is carried forward as a fixed asset. Any quantity over and above the base stock is valued in accordance with any other appropriate method. As this method aims at matching current costs to current sales, the LIFO method will be the most suitable for valuing the stock of materials or finished goods other than the base stock. The base stock method has the advantage of charging out materials/goods at actual cost. Its other merits or demerits will depend on the method used for valuing materials other than the base stock.
6. **Next in first out method (NIFO)—**The method attempts to value materials issued or goods sold at actual price which is the nearest possible to the market price. Under this method, the issues are made at the price of materials or goods which have been ordered but not yet received. In other words, issues of goods for further processing or sale are made at the latest price at which the company has been committed even though materials/goods have not yet been physically received. This method is better than the marked price method under which the market price of materials or goods issued or sold will have to be ascertained everytime. In case of this method, the materials or goods will be issued at the price at which a new order has been placed and this price will hold good for all future issues till a next order is placed. For example, 100 units of material *A* purchased @ Re 1 per unit are lying in the store and an order for another 100 units @ Re 1.25 has already been placed. If a requisition of 50 units from a department is made, they will be issued to the department at Rs 1.25 per unit (the price at which the materials are yet to be received).

The value of inventory on a particular date is ascertained by deducting the cost of materials issued or goods sold from the total value of materials or goods purchased.

Calculations of issue prices are complicated in this method and therefore the method is not widely used.

7. **Weighted average price method—**This method is based on the presumption that once the materials or goods are put into a common bin, they lose their separate identity. Hence, the inventory consists of no specific batch of goods. The inventory is thus priced on the basis of average prices paid for the goods, weighted according to the quantity purchased at each price.

Illustration 7.4. From the following details, calculate the value of inventory on January 31 according to the Weighted Average Price Method when the firm follows: (*i*) Periodic Inventory System and (*ii*) Perpetual Inventory System.

Jan. 1	Purchases	100 units	@ Rs 4 per unit
Jan. 8	Purchases	200 units	@ Rs 5 per unit
Jan. 20	Sales	100 units	
Jan. 25	Purchases	200 units	@ Rs 6 per unit
Jan. 31	Sales	200 units	

Solution:

(*i*) **Valuation of Inventory under the Periodic Inventory System**

Jan. 1	Purchases	@ Rs 4	100 units	Rs 400
Jan. 8	Purchases	@ Rs 5	200 units	1,000
Jan. 24	Purchases	@ Rs 6	200 units	1,200
	Total		500 units	2,600

Weighted Average Price: Rs 2,600/500 = Rs 5.2

Value of Inventory on January 31:200 units @ Rs 5.20 = Rs 1,040.

(*ii*) **Valuation of Inventory under Perpetual Inventory System**

	Receipts			*Issues*			*Balance*		
Date	*Qty.*	*Rate*	*Amount*	*Qty.*	*Rate*	*Amount*	*Qty.*	*Rate*	*Amount*
Jan. 1	100	4	400	–	–	–	100	4	400
Jan. 8	200	5	1,000	–	–	–	300	4.67	1,400
Jan. 20				100	4.67	467	200	4.67	933
Jan. 25	200	6	1,200	–	–	–	400	5.33	2,133
Jan. 31	–	–	–	200	5.33	1,066	200	5.33	1,067*

*Value of Inventory on January 31.

Weighted Average Price Method is very popular on account of its being based on the total quantity and value of materials purchased, besides reducing number of calculations. As a matter of fact, the new average price is to be calculated only when a fresh purchase of materials is made in place of calculating it every now and then as is the case with the FIFO, LIFO, NIFO, or HIFO methods. However, in case of this method, different prices of materials are charged from production, particularly when the frequency of purchases and issues/sales is quite large and the concern is following the perpetual inventory system.

The following comprehensive illustration will further help the students in understanding the working of different methods.

Illustration 7.5. M/s Swadeshi Cotton Mills Ltd. take a periodic inventory of their stocks on chemical *Y* at the end of each month. The physical inventory taken on June 30 shows a balance of 1,000 litres of chemical *Y* in hand @ Rs 2.28 per litre. The following purchases were made during July:

July 1	14,000	litres	@ Rs 2.30	per litre.
July 8	10,000	litres	@ Rs 2.32	per litre.
July 9	20,000	litres	@ Rs 2.33	per litre.
July 25	5,000	litres	@ Rs 2.35	per litre.

A physical inventory on July 31 discloses that there is a stock of 10,000 litres.

You are required to compute the inventory value on July 31, by each of the following methods:

(i) First In First Out, (*ii*) Last In First Out, and (*iii*) Average Cost Method.

Solution:

(i) First In First Out Method

					Rs
July 25	5,000	litres	@ Rs 2.35	=	11,750
July 9	5,000	litres	@ Rs 2.33	=	11,650
Closing inventory on July 31:10,000 litres of					23,400

(ii) Last In First Out Method

					Rs
June 30	1,000	litres	@ Rs 2.28	=	2,280
July 1	9,000	litres	@ Rs 2.30	=	20,700
Closing inventory on July 31: 10,000 litres of					22,980

(iii) Average Cost Method

					Rs
June 30	1,000	litres	@ Rs 2.28	=	2,280
July 1	14,000	litres	@ Rs 2.30	=	32,200
July 7	10,000	litres	@ Rs 2.32	=	23,200
July 9	20,000	litres	@ Rs 2.33	=	46,600
July 25	5,000	litres	@ Rs 2.35	=	11,750
Total 50,000 litres of					1,16,030

$$\text{Average cost per litre} = \frac{1,16,030}{50,000} = 2.3206$$

Total value of inventory on July 31 $= 10,000 \times 2.3206$

$= \text{Rs}\,23,206.$

Illustration 7.6. Following are the details regarding the receipts and issues of material *X* in respect of a firm.

Receipts:	Jan. 1	Balance 50 units @ 4 per unit		
	Jan. 5	Purchase Order No. 10,	40 units	@ Rs 3 per unit
	Jan. 8	Purchase Order No. 12,	30 units	@ Rs 4 per unit
	Jan. 15	Purchase Order No. 11,	20 units	@ Rs 5 per unit
	Jan. 26	Purchase Order No. 13,	40 units	@ Rs 3 per unit
Issues:	Jan. 10	Material Requisition No. 4,	70 units	
	Jan. 12	Material Requisition No. 5,	10 units	
	Jan. 20	Material Requisition No. 6,	20 units	
	Jan. 24	Material Requisition No. 7,	10 units	
	Jan. 31	Shortage 5 units		

The firm follows the perpetual inventory system for maintaining its stores records. You are required to calculate the value of inventory on Jan. 31 according to: (i) FIFO, (ii) LIFO, (iii) HIFO, and (iv) Weighted Average Price Methods.

Solution:

(i) Stores Ledger Card (FIFO)

MATERIAL *X*

Date	*Receipts*				*Issues*				*Balance*	
Jan.	*Ref.*	*Qty.*	*Rate Rs*	*Amt. Rs*	*Ref.*	*Qty.*	*Rate Rs*	*Amt. Rs*	*Qty.*	*Amt. Rs*
1	Balance	50	4	200	....	....	....	....	50	200
5	P.O. No.10	40	3	120	....	....	....	....	90	320
8	P.O. No.12	30	4	120	....	....	....	....	120	440
10	...	...	...		M.R. No.4	50	4	200	50	180
						20	3	60		
12	...	...	...	...	M.R. No.5	10	3	30	40	150
15	P.O. No.11	20	5	100	...	...	...	...	60	250
20	...				M.R. No.6	10	3	30	40	180
	...					10	4	40		
24					M.R. No.7	10	4	40	30	140
26	P.O. No.13	40	3	120	...	...	...	...	70	260
31	...	...	...	...	Shortage	5	4	20	65	240*

*The stock consists of:

				Rs
40 units	purchased on Jan. 26	@ Rs 3 per unit	=	120
20 units	purchased on Jan. 15	@ Rs 5 per unit	=	100
5 units	purchased on Jan. 8	@ Rs 4 per unit	=	20
			Total	240

(ii) **Stores Ledger Card (LIFO)**

MATERIAL *X*

Date	*Receipts*				*Issues*				*Balance*	
Jan.	*Ref.*	*Qty.*	*Rate*	*Amt.*	*Ref.*	*Qty.*	*Rate*	*Amt.*	*Qty.*	*Amt.*
			Rs	*Rs*			*Rs*	*Rs*		*Rs*
1	Balance	50	4	200	...	...	...	...	50	200
5	P.O. No.10	40	3	120	...	...	...	...	90	320
8	P.O. No.12	30	4	120	...	...	...	...	120	440
10	...	...	...	...	M.R. No.4	30	4	120	50	200
						40	3	120		
12	...	...	...	...	M.R. No.5	10	4	40	40	160
15	P.O. No.11	20	5	100	...	...	...	...	60	260
20	...	...	...	...	M.R. No.6	20	5	100	40	160
24	...	...	...	...	M.R. No.7	10	4	40	30	120
26	P.O. No.13	40	3	120	...	...	...	...	70	240
31	...	...	...	...	Shortage	5	3	15	65	225*

*The stock consists of:

	Rs
30 units of the balance on Jan. 1 @ 4 =	120
35 units of the balance on Jan. 26 @ 3 =	105
	225

(iii) **Stores Ledger Card (HIFO)**

MATERIAL *X*

Date	*Receipts*				*Issues*					*Balance*	
Jan.	*Ref.*	*Qty.*	*Rate*	*Amt.*	*Date*	*Ref.*	*Qty.*	*Rate*	*Amt.*	*Qty.*	*Amt.*
			Rs	*Rs*				*Rs*	*Rs*		*Rs*
Jan. 1	Balance	50	4	200	...	...	...	...	...	50	200
Jan. 5	P.O. 10	40	3	120	...	...	...	...	...	90	320
Jan. 8	P.O. 12	30	4	120	...	...	...	...	...	120	440
					Jan. 10	M.R. 4	70	4	280	50	160
					Jan. 12	M.R. 5	10	4	40	40	120
Jan. 15	P.O. 11	20	5	100	...	...	...	...	...	60	220
					Jan. 20	M.R. 6	20	5	100	40	120
					Jan. 24	M.R. 7	10	3	30	30	90
Jan. 26	P.O. 13	40	3	120	...	...	...	...	...	70	210
					Jan. 27	Shortage	5	3	15	65	195*

*This consists of units purchased on Jan. 5 and Jan. 26. This stock has been valued at the lowest price.

(iv) **Stores Ledger Card (Weighted Average Price)**

MATERIAL *X*

Date	*Receipts*				*Issues*			*Balance*			
Jan.	*Ref.*	*Qty.*	*Rate*	*Amt.*	*Ref.*	*Qty.*	*Rate*	*Amt.*	*Qty.*	*Amt.*	*Weighted*
			Rs	*Rs*			*Rs*	*Rs*		*Rs*	
1	Balance	50	4	200	...	...	...	...	50	200	4
5	P.O. 10	40	3	120	...	...	...	...	90	320	3.56
8	P.O. 12	30	4	120	...	...	...	...	120	440	3.67

10					M.R. 4	70	3.67	256.90	50	183.10	...
12	...	...	...	...	M.R. 5	10	3.67	36.70	40	146.40	...
15	P.O. 11	20	5	100	...	...	...	...	60	246.40	4.16
20	...	...	...	...	M.R. 6	20	4.16	83.20	40	163.20	...
24	P.O. 13	40	3	120	M.R. 7	10	4.16	41.60	30	121.20	...
26	...	...	...	...	...	...	...	...	70	241.60	3.45
31	...	...	...	...	Shortage	5	3.45	17.25	65	224.35	...

CHECK YOUR PROGRESS

1. State whether each of the following statements is 'True or False'.
   (i) The valuation of inventory only affects the income statement.
   (ii) Periodic inventory gives a continuous balance of stock in hand.
   (iii) FIFO method correlates the current costs with the current market prices.
   (iv) Inventory should be valued at the lower of historical cost and current replacement cost.
   (v) LIFO method is suitable for items which are of non-perishable and bulky type.
   (vi) Changes in the accounting policies relating to stock valuation are explained only to statutory auditors and not disclosed in the financial statements.

7.3.6 Net Realizable Value

According to International Accounting Standard: 2 (IAS: 2), the net realizable value means 'the estimated selling price in the ordinary course of business less costs of completion and less costs necessarily to be incurred in order to make the sale'. Thus, net realizable value is to be calculated after taking into consideration all expenses which might have to be incurred for making sales. For example, if the seller has to pay a commission of 20 per cent on sales, the net realizable value of an article having a selling price of Rs 10 should be taken as only Rs 8.

Inventories are to be valued at cost or net realizable value, whichever is less. The ascertainment of net realizable value of different items and its comparison with the historical costs can be done by any of the following methods:

1. **Aggregate or total inventory method**—According to this method, the total cost prices of the different items of inventories are calculated and the total, so calculated, is compared with the total of net realizable value of the different items of inventory. Inventory is valued at a price which is the least of the two.
2. **Group method**—According to this method, groups are formed of homogeneous items of inventory. The cost and the net realizable value of each group so formed are found out. The least of the two, cost or net realizable value of each group of items, is taken for valuation of inventory.
3. **Item by item method**—According to this method, the cost and net realizable prices of each item of inventory are found out. Each item is valued at a price of the cost or net realizable value, whichever is the least.

IAS: 2 has recommended the use of the 'group' or 'item by item' method for valuation of inventory. The 'aggregate or total inventory' method has not found favour with the International Accounting Standards Committee.

The following illustration will explain the difference between all the three methods.

Illustration 7.7. The following are the details regarding inventories of a manufacturing concern as on 31 December 2003:

	Inventory Categories	*Cost (Rs)*	*Market Price (Rs)*
Category 1:	*A*	6,000	9,000
	B	10,000	9,500
Category 2:	*C*	15,000	17,000
	D	20,000	14,000
Total		51,000	49,500

You are required to determine inventory value using 'lower of cost or market value' basis, according to each of the following methods:

(i) Aggregate or total inventory method, (ii) Group method, and (iii) Item by item method.

Solution:

DETERMINATION OF VALUE OF INVENTORY

at 31st December, 2003

Items *Rs*			*Cost* *Rs*	*Market Price* *Rs*	*Aggregate Inventory* *Rs*	*Group Method* *Rs*	*Item by Item Method*
Category 1:	*A*		6,000	9,000			6,000
	B		10,000	9,500			9,500
		(*i*)	16,000	18,500		16,000	15,500
Category 2:	*C*		15,000	17,000			15,000
	D		20,000	14,000			14,000
		(*ii*)	35,000	31,000		31,000	29,000
Total inventory (*i*) + (*ii*)			51,000	49,500	49,500	47	44,500
Inventory valuation (at lower of cost or market price)					49,500	47,000	44,500

7.3.7 Anticipated Price Decline

The principle, that inventory should be valued at 'lower of cost or net realizable value', is applicable only to a price decline which has actually occurred, and not to a possible future decline in prices. This has also been clarified by the American Institute of Certified Public Accountants as follows:

"It has been argued with respect to inventories that losses, which will have to be taken in periods of receding price levels, have their origins in periods of rising prices, and that therefore reserves to provide for future price decline should be created in periods of rising prices by charges against operations of those periods. Reserves of this kind involve assumptions as to what future price levels will be, what inventory quantities will be on hand if and when a major decline takes place, and finally whether loss to the business will be measured by the amount of the decline in prices. The bases for such assumptions are so uncertain that any conclusions drawn from them would generally seem to be speculative guesses rather than informed judgements".[3]

7.4 VALUATION OF INVENTORY FOR BALANCE SHEET PURPOSES

In the preceding pages, we have explained that inventory is to be valued at cost or market price, whichever is less. We have also explained the various methods for calculation of the cost as well as the market price. However, in certain cases, it will not be possible for the business to take inventory on the date of the balance sheet. The inventory might have been taken on a date earlier or later to the date of the balance sheet. In such a case, the value of inventory on the date of the balance sheet can be found out by making suitable adjustments in the value of the inventory as taken on a particular date. Some of the important adjustments and their treatment are explained below:

(i) **If Inventory is taken on a date after the balance sheet date:** For example, if the balance sheet is prepared on 31 December, 2001 and the inventory has been taken on 31 January 2002, the following adjustments will generally be required:

Inventory as on 31 January 2002	......
Less: Purchases made between 1 January, 2002 to 31 January, 2002	......
Less: Sales returns (at cost price between Jan. 1, 2002 to 31 Jan. 2002)	......
Add: Sales (at cost price between 1 January 2002 to 31 January 2002)	......
Add: Purchases returns between 1 January, 2002 to 31 January, 2002	......
Value of Inventory as on 31 Dec., 2001	......

(ii) **If inventory is taken on a date before the balance sheet date:** In case the inventory is taken, say, on 30 November, 2002, and the balance sheet has to be prepared as on 31 December, 2002, the above adjustment will be done in a reverse order taking inventory as on 30 November, 2001 as the base. In other words, items which have been added above will be subtracted and items which have been subtracted above will be added to find out the value of inventory as on 31 December, 2002.

Particular care has to be taken of the items which have been sold at a rate of gross profit lower or higher than the normal rate of gross profit.

3. . Accounting Research and Terminology Bulletin, Final Edition Ch. 6, p. 42.

The following illustrations will help the students in understanding the various adjustments required for valuation of inventories.

Illustration 7.8. The financial year of Mr Philip ends on 31 March, 2004 but the stock on hand will be physically verified only on 7 April, 2004. You are required to determine the value of Closing Stock (at cost) as on 31 March, 2004 from the following information:

(i) The stock (valued at cost) as verified on 7 April, 2004 was Rs 15,400.

(ii) Sales have been entered in the Sales Day Book only after the despatch of goods and Sales Returns only on receipt of the goods.

(iii) Purchases have been entered in the Purchase Day Book on receipt of purchase invoice irrespective of the date of receipt of goods.

(iv) Sales as per the Sales Day Book for the period 1 April, 2004 to 7 April, 2004 (before the actual verification) amounted to Rs 6,880 of which goods of sale value Rs 1,200 had not been delivered at the time of verification.

(v) Purchases as per the Purchased Day Book for the period 1 April, 2004 to 7 April, 2004 (before the actual verification) amounted to Rs 5,800 of which goods for purchases of Rs 1,500 had not been received at the date of verification and goods for purchases of Rs 2,000 had been received prior to 31 March, 2004.

(vi) In respect of goods costing Rs 5,000 received prior to 31 March, 2004, invoices had not been received until the date of verification of stocks.

(vii) The gross profit is 25 per cent on sales.

Solution:

STATEMENT SHOWING VALUE OF STOCK
as on March 31, 2004

Particulars		*Rs*	*Rs*
Stock as verified on 7th April, 2004			15,400
Add: Cost of goods sold:			
Sales for the period April 1, 2004 to April 7, 2004		6,880	
Less: Goods not yet delivered		1,200	
		5,680	
Less: Gross Profit @ 25%		1,420	4,260
			19,660
Less: Purchases for the period April 1, 2004 to April 7, 2004		5,800	
Less: Goods not received upto April 7, 2004	1,500		
Purchases for which goods were received prior to Mar. 31,'04	2,000	3,500	2,300
			17,360
Less: Goods received before March 31, 2004 but in respect of which invoices have not been received yet*			5,000
Stock as on 31st March, 2004 at cost			12,360

*These have been excluded since purchase invoices are entered in the Purchases Day Book on their receipt, the date of the receipt of the goods being ignored.

Alternatively, the value of the stock may be considered to be Rs 19,360 provided an entry is passed debiting the Purchases Account and crediting Sundry Creditors by Rs 7,000, the cost of goods actually received prior to 31 March, 2004 but in respect of which invoices have been received only afterwards.

Illustration 7.9. A firm has to take a complete stock on 21 June, 2007 because of a deal for sale of business which fell through only at the last stage. As a consequence, it decided not to carry out stock taking on 30 June, 2007, when accounts were closed for the year. The stock as on 21 June, 2007 was Rs 67,460. The following information is supplied to you regarding transactions in stock between 21 June, 2007 and 30 June, 2007.

1. Goods purchased from 21.6.2007 to 30.6.2007 amounted to Rs 4,820, out of which goods worth Rs 1,900 were received on 2.7.07.
2. Sales during the period from 21.6.07 to 30.6.07 amounted to Rs 16,800 includingRs 3,600 for goods sent on approval, half of which were still returnable on 30.6.07. The firm sells goods at cost plus 25 per cent except one lot of goods which had cost Rs 2,800 sold for Rs 1,200 due to damage. The stock as on 21 June, 2007 included these goods at cost.
3. Unsold goods in the hands of a consignee on 30 June, 2007 were revalued at Rs 3,200.

Prepare a statement showing the actual value of stock as on 30 June, 2007.

Solution:

STATEMENT OF ACTUAL VALUE OF STOCK

as on 30 June, 2007

Particulars	*Rs*	*Rs*
Stock as on 21 June, 2007		67,460
Add: Goods purchased between 21.6.07 and 30.6.07	4,820	
Less: Goods not yet received	1,900	2,920
Add: Goods in hands of consignee*		3,200
		73,580
Less: Cost of goods sold		
Sales	16,800	
Less: Goods still returnable by customers	1,800	
	15,000	
Less: Sale of damaged goods	1,200	
	13,800	
Less: Gross Profit @ 25/125	2,760	11,040
		62,540
Less: Cost of goods included in stock on 21.6.07, since sold		2,800
Stock on 30 June, 2007		59,740

* If a separate Consignment Account has been opened, Rs 3,200 (for goods in hands of the consignee) may be excluded from the value of stock on 30th June, 2007. It is assumed the goods in the hands of the consignee were despatched to him before 21st June, 2007.

7.5 ACCOUNTING STANDARD: 2 (REVISED)[4]

The following is the text of the revised Accounting Standard (AS: 2), 'Valuation of Inventories', issued by the Council of the Institute of Chartered Accountants of India. The revised Standard supersedes Accounting Standard (AS: 2), Valuation of Inventories, issued in June, 1981. The revised standard comes into effect in respect of accounting periods commencing on or after April 1, 1999 and is mandatory in nature.

1. **Objective:** A primary issue in accounting for inventories is the determination of the value at which inventories are carried in the financial statements until the related revenues are recognised. This statement deals with the determination of such value, including the ascertainment of cost of inventories and any write-down thereof to net realisable value.
2. **Scope:** This Statement should be applied in accounting for inventories other than:
   - (a) work in progress arising under construction contracts, including directly related service contracts;
   - (b) work in progress arising in the ordinary course of business of service providers;
   - (c) shares, debentures and other financial instruments held as stock-in-trade; and
   - (d) producers of inventories of livestock, agricultural and forest products, and mineral oils, ores and gases to the extent that they are measured at net realizable value in accordance with well-established practices in those industries.
3. **Definitions:** The following terms are used in this Statement the meaning specified:
   - (i) *Inventories* are assets:
   - (a) held for sale in the ordinary course of business;
   - (b) in the process of production for such sale; or
   - (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.
   - (ii) *Net realizable value* is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Inventories encompass goods purchased and held for resale, for example, merchandise purchased by a retailer and held for resale, computer software held for resale, or land and other property held for resale. Inventories also encompass finished goods

4. . Chartered Secretary July, 1999.

produced, or work in progress being produced, by the enterprise and include materials, maintenance supplies, consumables and loose tools awaiting use in the production process. Inventories do not include machinery spares which can be used only in connection with an item of fixed asset and whose use is expected to be irregular, such machinery spares are accounted for in accordance with Accounting Standard (AS: 10), Accounting for Fixed Assets.

4. **Measurement of Inventories:** Inventories should be valued at the lower of cost and net realizable value.
5. **Cost of Inventories:** The cost of inventories should comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.
6. **Costs of Purchase:** The costs of purchase consist of the purchase price including duties and taxes (other than those subsequently recoverable by the enterprise from the taxing authorities) freight inwards and other expenditure directly attributable to the acquisition. Trade discounts, rebates, duty drawbacks and other similar items are deducted in determining the costs of purchase.
7. **Costs of Conversion:** The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods.
8. **Other Costs:** Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. For example, it may be appropriate to include overheads other than production overheads or the costs of designing products for specific customers in the cost of inventories.
9. **Cost Formulas:** The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects should be assigned by specific identification of their individual costs.

   The cost of inventories, other than those dealt with in paragraph 9 should be assigned by using first-in-first out (FIFO), or weighted average cost formula. The formula used should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition.
10. **Net Realizable Value:** Inventories are usually written down to net realizable value on an item-by-item basis.

    However, materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost.
11. **Disclosure** The financial statements should disclose:-
   (a) the accounting policies adopted in measuring inventories, including the cost formula used; and
   (b) the total carrying amount of inventories and its classification appropriate to the enterprise.

CHECK YOUR PROGRESS

2. Indicate the correct answer.
   (i) The test of objectivity and verifiability is satisfied by valuing inventory at
   (a) Historical Cost. (b) Current Replacement Price. (c) Net Realizable Value.
   (ii) Inventory is valued at lower of the cost or net realisable value on account of the accounting principle of
   (a) Consistency. (b) Conservatism. (c) Realisation.
   (iii) The system which gives a continuous information regarding quantum and value of inventory is known as
   (a) Continuous Stock-taking, (b) Periodic Inventory. (c) Perpetual Inventory.
   (iv) The value of inventory will be the least in case of
   (a) Aggregate or Total Inventory Method. (b) Item by Item Method. (c) Group or Category Method.

7.6 SUMMARY

- **Meaning of Inventory:** Inventories are unconsumed or unsold goods purchased or manufactured. According to the Accounting Standard: 2 (Revised), inventories are assets.
  (a) held for sale in the ordinary course of business
  (b) in the process of production for such sale, or
  (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.

- **Objectives of Inventory Valuation:** Inventory has to be properly valued because of the following reasons:
  (i) Determination of Income
  (ii) Determination of financial position
- **Inventory Systems:** Records pertaining to quantity and value of inventory-in-hand can be maintained according to any of the following two systems:
  (i) Periodic Inventory system
  (ii) Perpetual Inventory system
- **Methods of Valuation of Inventories:** According to International Accounting Standard: 2 (IAS:2), the inventories should be valued at the lowest of 'historical cost' and 'net realizable value'.
- **Historical Cost:** Historical cost of inventories is the aggregate of cost of purchase, cost of conversion, and other costs incurred in bringing the inventories to their present location and condition.

  The following are the methods for assigning historical costs to inventory and goods sold:
  (i) Specific identification method
  (ii) First In First Out method (FIFO)
  (iii) Last In First Out method (LIFO)
  (iv) Highest In First Out method (HIFO)
  (v) Base Stock method
  (vi) Next In First Out method (NIFO)
  (vii) Weighted Average Price method.
- **Net Realizable Value:** The ascertainment of net realizable value of different items and its comparison with the historical costs can be done by any of the following methods:
  (i) Aggregate or total inventory method
  (ii) Group method
  (iii) Item by item method

  IAS:2 has recommended the use of 'group' or 'item by item' method for valuation of inventory.

7.7 KEY TERMS

- **Inventory:** Inventories are unconsumed or unsold goods purchased or manufactured.
- **Historical Cost:** It is the aggregate of cost of purchase, cost of conversion, and other costs incurred in bringing the inventories to their present location and conditions.
- **Periodic Inventory System:** A system where the quantity and value of inventory is found out only at the end of the accounting period after having a physical verification of the units in hand.
- **Perpetual Inventory System:** A system of records maintained by the controlling department, which reflects the physical movement of stocks and their current balance.

7.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*i*) False, (*ii*) False, (*iii*) False, (*iv*) False, (*v*) True, (*vi*) False.
2. (*i*) *a*, (*ii*) *b*, (*iii*) *c*, (*iv*) *b*.

7.9 QUESTIONS AND EXERCISES

1. Define 'Inventory'. Why is proper valuation of inventory important?
2. Discuss the different methods of inventory valuation with suitable examples.
3. Compare the LIFO and FIFO methods of inventory valuation.
4. Write a note on inventory valuation through the NIFO method.
5. State the salient features of AS:2 (Revised) regarding inventory valuation.

7.10 PRACTICAL PROBLEMS

1. From the following data, calculate the value of inventory on 31 January 2004 by (i) LIFO and (ii) FIFO methods:

2004		
1st Jan.	Opening Stock	200 pieces @ Rs 2 each
4th Jan.	Purchases	100 pieces @ Rs 2.20 each
10th Jan.	Purchases	150 pieces @ Rs 2.40 each
20th Jan.	Purchases	180 pieces @ Rs 2.50 each
2nd Jan.	Issues	150 pieces
7th Jan.	Issues	100 pieces
12th Jan.	Issues	200 Pieces

[**Ans.** Stock: LIFO 80 units of Rs 172 and FIFO 80 units of Rs 200]

2. Calculate the value of inventory using
   (a) Weighted Average Method and
   (b) the LIFO Method of pricing issues in connection with the following transactions:

April		*Units*	*Value*
1.	Balance in hand b/f	300	600
2.	Purchased	200	440
4.	Issued	150	
6.	Purchased	200	460
11.	Issued	150	
19.	Issued	200	
22.	Purchased	200	480
27.	Issued	250	

In a period of rising prices, as in the above case, what are the effects of each method?

[**Ans.** (*a*) 150 units of Rs 342, (*b*) 150 Units of Rs 300]

3. Purchases of a certain product during March, 2002 are set out below:

March	1	100 units	@ Rs 10
	12	100 units	@ Rs 9.80
	15	50 units	@ Rs 9.60
	20	100 units	@ Rs 9.40

Units sold during the month were as follows:

March	10	80 units
	14	100 units
	30	90 units

No opening inventories.

You are required to determine the cost of goods sold for March, under (*i*) FIFO, (*ii*) LIFO, and (*iii*) Weighted Average Cost Method.

[**Ans.** FIFO 270 units of Rs 2,648, LIFO 270 units of Rs 2,626, Weighted Average Cost Method 270 units of Rs 2,639]

4. A company started on 1 January, 2005 purchased raw material during 2005 as stated below:

January 2	800 kg	@ Rs 62 per kg
February 26	1,200 kg	@ Rs 57 per kg
April 13	2,500 kg	@ Rs 59 per kg
July 10	3,000 kg	@ Rs 56 per kg
September 18	1,500 kg	@ Rs 60 per kg
November 29	1,000 kg	@ Rs 65 per kg

While preparing its final accounts on 31 December 2005, the company had 1,300 kgs of raw material in its godown.

Calculate the value of closing stock of raw material according to:

(i) First In First Out basis,

(ii) Last In First Out basis, and

(iii) Weighted Average basis.

[**Ans.** Value of closing stock (*i*) 83,000, (*ii*) Rs 78,100, and (*iii*) Rs 76,505].

5. From the following data, calculate the value of closing inventory according to Last in First out method on March 31, 2005, using:

(i) Periodic inventory system and

(ii) Perpetual inventory system.

March 1 Stock in Hand	400 units	@ 7.50 each
Purchases:		
March 5	600 units	@ 8.00 each
March 15	500 units	@ 9.00 each
March 25	400 units	@ 8.50 each
March 30	300 units	@ 9.50 each
Issues:		
March 3	300 units	
March 10	500 units	
March 17	400 units	
March 26	500 units	
March 31	200 units	

(**Ans.** Value of Closing Inventory: Periodic Inventory System Rs 2,250, Perpetual Inventory Rs 2,500).

6. Oil India is a bulk distributor of high octane petrol. A periodic inventory of petrol on hand is taken when the books are closed at the end of each month. The following summary of information is available for the month of June, 2007:

Sales		Rs 9,45,000
General Administration Cost		Rs 25,000
Opening Stock: 1,00,000 litres @ Rs 3 per litre		Rs 3,00,000
Purchases (including freight in)		
June 1	2,00,000 litres @ Rs 2.85 per litre	
June 30	1,00,000 litres @ Rs 3.03 per litre	
Closing Stock June 30	1,30,000 litres	

Compute the following by the First In First Out, Weighted Average, and Last In First Out Methods of inventory costing:

(a) Value of inventory of June 30.

(b) Amount of the cost of goods sold for June.

(c) Profit or loss for June.

Ans.

Method	*Value of Inventory Rs*	*Cost of Goods Sold Rs*	*Profit (Loss) Rs*
FIFO	3,88,500	7,84,500	1,35,500
Weighted Average	3,90,000	7,83,000	1,37,000
LIFO	3,93,000	7,80,000	1,50,000

[Hint. Administrative costs are not been included in the cost of goods sold.]

7. The following details relate to the value of inventories of different items as on 31 December 2004. You are required to calculate the value of inventory for balance sheet purposes on the basis of cost or net realizable value, whichever is less, by the following methods:

(*i*) Aggregate Method, (*ii*) Group Method, and (*iii*) Item by Item Method

Articles	*Group*	*Number of Items*	*Cost per Item (Rs)*	*Net Realisable Value per Item (Rs)*
A	*X*	5	10	12
B	*X*	4	14	12
C	*Y*	6	10	8
D	*Y*	10	15	20
E	*Y*	5	20	15
F	*Z*	4	15	10
G	*Z*	5	20	16
H	*P*	4	6	4
I	*P*	3	4	5
J	*P*	3	3	2

[**Ans.** (*i*) Rs 588, (*ii*) Rs 573, and (*iii*) Rs 525]

8. Karam Chand closed his books of account for the year on 31 March 2005. Due to certain difficulties, he could not conduct stock-taking on the date. Actual stock-taking was done on 7 April 2005 when goods valued at Rs 34,500 were found present in the godown.

The following transactions had taken place during the period from 1 April 2005 to 7 April 2005:

(i) Sales during the period were Rs 10,590. These goods were sold at the usual rate of gross profit at 25 per cent on cost except goods which realized Rs 840 on the basis of 20 per cent profit on cost.

(ii) Purchases during the period were Rs 8,300 of which Rs 1,180 worth of goods were delivered to Karam Chand only on 9 April 2005.

(iii) Sales returns during the period were Rs 600. Out of it, Rs 300 worth of returns were out of the sales made at 20 per cent gross profit mentioned above.

Prepare a statement showing clearly the value of stock on 31 March 2005 to be shown in the final accounts prepared by Karam Chand.

[**Ans.** Value of stock on 31 March 2005—Rs 35,390].

9. *FY* Ltd. conducts physical stock-taking every year at the end of the accounting year. Due to certain difficulties, it was not possible for it to conduct a physical stock-taking at the end of the accounting year ending 30 June, 2004. Physical stock-taking was taken on 8 July 2004 where it was valued at Rs 34,500.

The following transactions took place during 1 July to 8 July 2004:

(1) Net sales during the period were Rs 9,340. These goods were sold at the usual rate of gross profit of 25 per cent on cost except goods which realized Rs 840 on the basis of 20 per cent profit on cost.

(2) Purchases during the period were Rs 7,500 of which Rs 800 worth of goods were delivered to the company only on 10 July, 2004.

(3) Sales return during the period were Rs 1,500 of which 50 per cent were out of the sales at 20 per cent gross profit mentioned above.

(4) 5 July, 2004, goods unsold worth Rs 4,000 were received from the consignee.

You are required to prepare a statement showing clearly the value of the stock to be taken into account in *FY* Ltd's final accounts for the year ended 30 June, 2004.

[**Ans.** Value of stock on 30th June Rs 30,075].

7.11 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy.*

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management.*

UNIT 8 EQUITIES, ASSETS AND DEPRECIATION ACCOUNTING

Structure

8.0 Introduction
8.1 Unit Objectives
8.2 Equities
8.3 Assets
8.4 Concept of Depreciation
8.5 Causes of Depreciation
8.6 Basic Features of Depreciation
8.7 Depreciation, Depletion, Amortization and Dilapidations
8.8 Meaning of Depreciation Accounting
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8.21 Practical Problems
8.22 Further Reading

8.0 INTRODUCTION

In a preceding unit on 'Accounting, Principles and Standards', it has already been explained that accounting transactions should be recorded in the books of account as per the DUAL ASPECT CONCEPT. This concept has been further crystallized in the form of an Accounting Equation as under:

$$\text{Equities} = \text{Assets}$$
$$\Sigma e = \Sigma e$$

In the present unit we are explaining the meanings of the terms equities and assets in greater details besides the different methods of charging depreciation on fixed assets.

8.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Understand the concept of equities and assets
- Understand the concept of depreciation
- Identify the causes of depreciation
- Differentiate depreciation from depletion, amortization and dilapidation
- Explain the meaning of depreciation accounting
- Make critical evaluation of providing depreciation on replacement cost
- Appreciate the role of a proper depreciation policy
- Describe the salient features of Accounting Standard: 6 regarding Depreciation Accounting
- Explain the meaning of certain key terms

8.2 EQUITIES

Meaning: According to accounting equation assets are equal to equities. The properties owned by a business are called Assets. The rights to the properties are called Equities. Equities may be divided into two principal types.

(i) The rights of the creditors; and

(ii) The rights of the owners.

The equity of the creditors represents debts of the business and is called Liabilities. The equity of the owners is called Capital. The two terms 'Liabilities & Capital' are explained below:

Liabilities: Liabilities are financial obligations of the enterprise other than the owners' funds. The two basic characteristics of liabilities are:

(i) obligations must exist in the present; and

(ii) it must be the result of past transactions or events.

Thus, 'Liabilities' is used to denote amounts, which a business owes and has to return or account for. They can be divided into two categories:

(i) *Current Liabilities:* The term 'Current Liabilities' is used to denote liabilities which will be due within a short time (usually one year or less) and that are to be paid out of current assets or by creation of other current liabilities. Creditors for goods, bills payable, outstanding expenses are some of the examples of current liabilities.

(ii) *Fixed Liabilities:* Liabilities that will not be due for a comparatively long time (usually more than one year) are termed as 'Fixed Liabilities' or 'Long-term Liabilities'. These liabilities would continue to be treated as Fixed Liabilities if they are renewed rather than paid at maturity.

Capital: The term 'Capital' is used to denote the owners' equity in the business. It is a residual claim against the assets of the business after the total liabilities are deducted. Owners' Equity, Proprietorship and Net-Worth are some of the other terms, which are also used to denote Capital.

Capital may be classified into the following categories:

(i) *Fixed Capital:* It is the capital invested in or represented by Fixed Assets.

(ii) *Circulating Capital:* It is the capital in the form of Current or Floating Assets.

(iii) *Working Capital:* It is the excess of Current Assets over Current Liabilities.

The accounting equation referred above can be further analysed as under:

Thus,

$$\text{Assets} = \text{Liabilities} + \text{Capital}$$
$$\Sigma a = \Sigma l + \Sigma c$$

Or

$$\text{Assets} - \text{Liabilities} = \text{Capital}$$
$$\Sigma a - \Sigma l = \Sigma c$$

The owners' equity is the total of Share Capital + Retained Earnings.

The Share Capital can be classified as Equity Share Capital and Preference Capital

Thus,

Shareholders' or Owners' Equity = Equity Share Capital + Preference Capital + Retained Earnings

8.3 ASSETS

The terms 'Assets' include the resources acquired by a business from the funds made available either by the owners or by others. They are 'tangible objects or intangible rights owned by an enterprise and carrying probable future benefits'. In other words, property of all kinds owned by a business comes within the category of the term 'Assets'.

Assets may be classified into the following categories:

(i) *Fixed assets:* These are assets acquired for relatively long periods for carrying on the business of the enterprise. They are not meant for resale. The examples of such assets are land, buildings, plant, machinery, etc.

(ii) *Current assets:* These are assets, acquired with the intention of converting them into cash during the normal business operations of the company. They include "cash and other assets that are expected to be converted into cash or consumed in the production of goods or rendering of services in the normal course of business. The essential difference between Current Assets and Fixed Assets is that the Current Assets are held essentially for a short period and they are meant for converting into cash. The examples of such assets are Cash, Inventories (*i.e.* Stocks of Raw Material, Work-in Progress and Finished Goods), Bills Receivable, Debtors, etc. These assets are also termed as 'Floating' or 'Circulating' Assets.

(iii) *Liquid assets:* These are assets which are immediately convertible into cash without much loss. As a matter of fact, all current assets excluding prepaid expenses and inventories are included in the definition of liquid assets.

(iv) *Fictitious assets:* These are assets which have no real value but are shown in the books of accounts only for technical reasons. Examples of such assets are preliminary expenses incurred in connection with the establishment of a business or discount allowed on issue of shares by a company, etc.

(v) *Wasting assets:* These are the assets which are exhausted with, or which lose themselves in the goods they produce. Mines and quarries are common examples of such assets. The term is also used for describing such assets which get exhausted with the lapse of time, e.g., copyrights, patents, trademark, etc.

8.4 CONCEPT OF DEPRECIATION

The concept of depreciation is closely linked to the concept of business income. In the revenue generating process, the use of long-term assets tend to consume their economic potential. At some point of time these assets become useless and are disposed of and possibly replaced. The economic potential so consumed represents the expired cost of these assets and must be recovered from the revenue of the business in order to determine the income earned by the business. Depreciation may, therefore, be defined as that portion of the cost of the assets that is deducted from revenue for assets or services used in the operation of a business.

In order to have a clear understanding about the concept of depreciation, it will be useful to quote definitions given by some prominent writers.

According to Pickles, 'Depreciation is the permanent and continuing diminution in the quality, quantity or value of an asset'.

The Institute of Chartered Accountants of England and Wales defines depreciation as 'that part of the cost of a fixed asset to its owner which is not recoverable when the asset is finally put out of use by him. Provision against this loss of capital is an integral cost of conducting the business during the effective commercial life of the asset and is not dependent upon the amount of profit earned'.

According to Spicer and Pegler, depreciation may be defined as, 'the measure of the exhaustion of the effective life of an asset from any cause during a given period'.

From the above definitions, it can be concluded that depreciation is a gradual decrease in the value of an asset from any cause.

8.5 CAUSES OF DEPRECIATION

The causes of depreciation are as follows:

1. **Wear and tear.** Assets get worn or torn out on account of constant use as is the case with plant and machinery, furniture and fixtures used in a factory.
2. **Exhaustion.** An asset may get exhausted through working. This is the case with mineral mines, oil wells, etc. On account of continuous extraction of minerals or oil, a stage comes when the mine or well gets completely exhausted and nothing is left.
3. **Obsolescence.** Some assets are discarded before they are worn out because of changed conditions. For example, an old machine which is still workable may have to be replaced by a new machine because of the latter being more efficient and economical. Such a loss on account of new inventions or changed fashions is termed as loss on account of obsolescence.
4. **Efflux of time.** Certain assets get decreased in their value with the passage of time. This is true in case of assets like leasehold properties, patents or copyrights.
5. **Accidents.** An asset may meet with an accident and, therefore, it may get depreciated in its value.

On the basis of the above causes, it can be said that depreciation is the decrease or depletion in the value of an asset due to wear and tear, lapse of time, obsolescence, exhaustion and accidents.

8.6 BASIC FEATURES OF DEPRECIATION

1. The term depreciation is used only in respect of fixed assets. Of course, the current assets may also lose their value. Loss on account of fall in their value is taken care of by valuing them for Balance Sheet purposes 'at cost or market price whichever is less'.
2. Depreciation is a charge against profits. This means that true profit of the business cannot be ascertained without charging depreciation.
3. Depreciation is different from maintenance. Maintenance expenses are incurred for keeping the machine in a state of efficiency. However, any degree of maintenance cannot assure that the asset will never reach a state of scrap. Of course, good maintenance delays this stage but it cannot absolutely prevent it.
4. All fixed assets, with certain possible exceptions e.g., land, and antiques, etc., suffer depreciation although the process may be invisible or gradual.

8.7 DEPRECIATION, DEPLETION, AMORTIZATION AND DILAPIDATIONS

The term 'depreciation' is to be distinguished from other terms such as depletionas, amortization, etc. though they are used often interchangeably.

Depletion. Depletion implies removal of an available but irreplaceable resource such as extracting coal from a coal mine or oil out of an oil well.

Amortization. The process of writing off intangible assets is termed as amortization. Some intangible assets like patents, copy-rights, leaseholds have a limited useful life. Hence, their cost must be written off over such period.

The American Institute of Certified Public Accountants (AICPA) has put the difference between depreciation, depletion, and amortization in the following words.

'Depreciation can be distinguished from other terms with specialized meanings used by accountants to describe assets cost allocation procedures. Depreciation is concerned with charging the cost of man made fixed assets to operations (and not with determination of asset value for the balance sheet). Depletion refers to cost allocations for natural resources such as oil and mineral deposits. Amortization relates to cost allocation for intangible assets such as patent and leaseholds. The use of the term depreciation should also be avoided in connection with the valuation procedures for securities and investments.'

Dilapidations. The term dilapidation refers to damage done to a building or other property during tenancy. When a property is taken on lease, is returned to the landlord he may ask the lessee as per agreement to put it in as good condition as it was at the time it was leased out. In order to meet cost of such dilapidation, a provision may be created by debiting the property account with the estimated amount of dilapidation and crediting the provision for dilapidations account. Depreciation may then be charged on the total cost of the asset so arrived at. Any payment made later on dilapidation may be debited to the provision for dilapidation account. The balance, if any, may be transferred to profit and loss account.

8.8 MEANING OF DEPRECIATION ACCOUNTING

Depreciation Accounting is mainly concerned with a rational and systematic distribution of cost over the estimated useful life of the asset. According to the American Institute of Certified Public Accountants, Depreciation Accounting is 'a system of accounting which aims to distribute the cost or other basic values of the tangible capital assets less salvage (if any) over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is the process of allocation and not of valuation'.

The objective of Depreciation Accounting is to absorb the cost of using the assets in different accounting periods in a way so as to give the true figure of profit or loss made by the business.

8.9 OBJECTIVES OF PROVIDING DEPRECIATION

The following are objectives of providing depreciation:

1. **Ascertainment of true profits.** When an asset is purchased, it is nothing more than a payment in advance for an expense. For example, if a building is purchased for Rs 10,000 for business, the effect of such a purchase will be saving on the cost of rent in the future. But, after a certain number of years, the building will become useless. The cost of the building is, therefore, nothing except paying rent in advance for a period of years. If the rent had been paid, it would have been charged as an expense for determination of the true profits, made by the business during a particular period. The amount paid for the purchase of a building should, therefore, be charged over a period of time for which the asset would be serviceable.
2. **Presentation of true financial position.** The assets get depreciated in their value over a period of time on account of various factors, as explained before. In order to present a true state of affairs of the business, the assets should be shown in the Balance Sheet, at their proper values.
3. **Replacement of assets.** Assets used in the business need replacement after the expiry of their service life. By providing depreciation, a part of the profits of the business is kept in the business which can be used for purchase of new assets when the old fixed assets become useless.

8.10 FIXATION OF DEPRECIATION AMOUNT

Following are the three important factors which should be considered for determining the amount of depreciation to be charged to the Profit and Loss Account in respect of a particular asset.

1. **Cost of the asset.** The cost of the asset includes the invoice price of the asset, less any trade discount plus all costs essential to bring the asset to a useable condition. It should be noted that financial charges, such as interest on money borrowed for the purchase of the asset, should not be included in the cost of the asset.
2. **Estimated scrap value.** The term 'scrap value' means the residual or the salvage value which is estimated to be realized on account of the sale of the asset at the end of its useful life. In determining the scrap value, the cost to be incurred in the disposal or removal the asset should be deducted out of the total realizable value.
3. **Estimated useful life.** This is also termed as the economic life of the asset. This may be calculated in terms of years, months, hours, units of output of other operating measures such as kilometers in case of a taxi or a truck.

8.11 METHODS OF RECORDING DEPRECIATION

Depreciation can be recorded in the books of account by two different methods:

1. **When a provision for depreciation account is maintained.** In case of this method, the amount of depreciation to be charged in a particular year is credited to the Provision for Depreciation Account and debited to the Profit and Loss Account. The Asset Account appears in the books at original cost. In case the asset is sold, the Provision for Depreciation Account is transferred to the Asset Account. Any amount realized on account of sale of the asset is also credited to the Asset Account. The balance, if any, in the Asset Account is transferred to the Profit and Loss Account.

The following journal entries are passed in case this method is followed:

(i) For providing depreciation:

Depreciation Account Dr.
  To Provision for Depreciation Account

(ii) For transfer of depreciation to Profit and Loss Account:

Profit and Loss Account Dr.
  To Depreciation Account

(iii) On sale of asset:

(a) Provision for Depreciation Account Dr.
  To Asset Account

(b) In case of profit or loss on sale of an asset:

If Profit: Asset Account Dr.
  To Profit and Loss Account

If Loss: Profit and Loss Account Dr.
  To Asset Account

Alternatively, on sale of an asset, an 'asset disposal account' may be opened. The following entries will be passed in such a case on sale of an asset:

Asset Disposal Account Dr.
  To Asset Account
(with original cost of the asset)

Bank Account Dr.
  To Asset Disposal Account
(with the actual sale proceeds on account of sale of asset)

Provision for Depreciation Account Dr.
  To Asset Disposal Account
(with the accumulated depreciation on the asset sold)

Profit & Loss Account Dr.
  To Asset Disposal Account
(for transfer of loss on sale of the asset)

In case of profit, the above entry would be reversed.

2. **When a provision for depreciation account is not maintained.** In case a Provision for Depreciation Account is not maintained, the amount of depreciation is debited to the Depreciation Account and credited to the Asset Account. The Asset Account thus appears in the books at a written down value (*i.e.,* the value remaining after deducting depreciation). The Depreciation Account is transferred to the Profit and Loss Account like any other item of expense.

The following journal entries are passed in case depreciation is provided according to this method:

(i) For providing depreciation:

Depreciation Account Dr.
  To Asset Account

(ii) For transfer of depreciation to the Profit and Loss Account:

Profit and Loss Account Dr.
  To Depreciation Account

In case the asset is sold, the amount realized is credited to the Asset Account. Any profit or loss on the sale of the asset is transferred to the Profit and Loss Account.

8.12 METHODS FOR PROVIDING DEPRECIATION

The following are various methods for providing depreciation:

1. Uniform charge methods
   (a) Fixed instalment method
   (b) Depletion method
   (c) Machine hour rate method
2. Declining charge or accelerated depreciation methods:
   (a) Diminishing balance method
   (b) Sum of years digits method
   (c) Double declining method
3. Other methods:
   (a) Group depreciation method
   (b) Inventory system of depreciation
   (c) Annuity method
   (d) Depreciation fund method
   (e) Insurance policy method

1. UniformChargeMethods

In case of these methods, depreciation is charged on a uniform basis year after year. Such methods are considered appropriate only for such assets which are uniformly productive.

The following three methods fall in this category.

(a) **Fixed instalment method.** This is also termed as the Straight Line Method (*SLM*). According to this method, depreciation is charged evenly every year throughout the effective life of the asset. The amount of depreciation is calculated as follows:

$$\text{Depreciation} = \frac{\text{Original Cost of the Fixed Asset} - \text{Estimated Scrap Value}}{\text{Life of the Asset in Number of Accounting Periods}}$$

or

$$D = \frac{C - S}{N}$$

The depreciation to be charged each year can also be expressed as a percentage of cost. This percentage (R) can be calculated as follows:

or

$$R = \frac{D}{C} \times 100$$

For example, if an asset has been purchased for Rs 10,000 and it will have a scrap value of Rs 1,000 at the end of its useful life of 10 years, the amount of depreciation to be charged every year over the effective life of the asset will be computed as follows:

$$\text{Depreciation} = \frac{10{,}000 - 1{,}000}{10 \text{ years}}$$

= Rs 900 each year and Rate of Depreciation (R) 9%

Merits. (*i*) The method is simple to understand and easy to apply.

(ii) The value of the asset can be reduced to zero (or its scrap value) under this method.

(iii) The method is very suitable particularly in case of those assets which get depreciated more on account of the expiry of the period e.g., lease-hold properties, patents, etc.

Demerits. (*i*) The method does not take into account the effective utilization of the asset. The same amount of depreciation is charged from year to year irrespective of the use of the asset.

(ii) The total charge for use of the asset (i.e., depreciation and repairs) goes on increasing from year to year though the asset might have been used uniformly from year to year. For example, in the initial years, the amount spent on repairs is quite normal. It goes on increasing in the latter years. The amount of depreciation remains the same for each year. Thus, each subsequent year is burdened with greater charge for the use of asset on account of increasing cost on repairs.

(iii) The method tends to report an increasing rate of return on investment in the asset on account of the fact that net balance of the asset account is taken. For example, if the cost of an asset is Rs 10,000, life is 10 years and the net revenue before charging depreciation is Rs 2,000, the earnings for the first three years will be calculated as follows:

	Year 1	*Year 2*	*Year 3*
	Rs	*Rs*	*Rs*
Revenue	2,000	2,000	2,000
Less: Depreciation	1,000	1,000	1,000
Profit	1,000	1,000	1,000
Book Value of the asset			
(capital employed)	10,000	9,000	8,000
Rate of Return	10%	11.1%	12.5%

The idea of an increasing rate of return as an asset approaches retirement does not seem to be justifiable. The reason suggests that the rate of return either remains constant or actually decreases somewhat as the asset ages.

Illustration 8.1. A firm purchases a plant for a sum of Rs 10,000 on 1 January, 2000. Installation charges are Rs 2,000. Plant is estimated to have a scrap value of Rs 1,000 at the end of its useful life of five years. You are required to prepare the Plant Account for five years, charging depreciation according to the Straight Line Method.

Solution:

PLANT ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
2000			2000		
Jan. 1.	To Bank	12,000	Dec. 31	By Depreciation A/c	2,200
			Dec. 31	By Balance c/d	9,800
		12,000			12,000
2001			2001		
Jan. 1.	To Balance b/d	9,800	Dec. 31	By Depreciation A/c	2,200
			Dec. 31	By Balance c/d	7,600
		9,800			9,800
2002			2002		
Jan. 1.	To Balance b/d	7,600	Dec. 31	By Depreciation A/c	2,200
			Dec. 31	By Balance c/d	5,400
		7,600			7,600
2003			2003		
Jan.1.	To Balance b/d	5,400	Dec. 31	By Depreciation A/c	2,200
			Dec. 31	By Balance c/d	3,200
		5,400			5,400
2004			2004		
Jan. 1.	To Balance b/d	3,200	Dec. 31	by Depreciation A/c	2,200
			Dec. 31	By Balance c/d	1,000
		3,200			3,200

(b) **Depletion method.** This is also known as the productive output method. According to this method the charge for depreciation in respect of the use of an asset will be based on the following factors:

(i) Total amount paid

(ii) Total estimated quantities of the output available

(iii) The actual quantity taken out during the accounting year

The method is suitablein case of mines, quarries, etc., where it is possible to makean estimate of thetotal output likelyto be available. Depreciation is calculated per unit of output. The amount of depreciation to becharged in a particular year is computed bymultiplying the units ofoutput with the rateof depreciation per unit of output. For example, if a mine ispurchased for Rs 20,000 and it is estimated that the total quantity of mineral in the mine is 40,000 tonnes, the rate of depreciation per tonne would amount to 50 paise per tonne (Rs 20,000/40,000 tonnes). In case output in a year amounts to 10,000 tonnes, the amount of depreciation to be charged to the Profit and Loss Account would be Rs 5,000 (*i.e.,* 10,000 tonnes × Re 0.50).

The method has the advantage of correlating the amount of depreciation with the productive use of the asset. However, it requires making of a reasonably correct estimate of the output likely to be there. In the absence of a correct estimate, the amount charged by way of depreciation will not be correct.

(c) **Machine hour rate method.** This is also known as the Service Hours Method. This method takes into account the running time of the asset for the purpose of calculating depreciation. The method is particularly suitable for charging depreciation on plant and machinery, aircrafts, etc. The amount of depreciation is calculated as follows:

$$\frac{\text{Original Cost of the Asset} - \text{Scrap Value}}{\text{Life of the Asset in hours}}$$

For example, if a machine (having a scrap value of Rs 1,000) is purchased for Rs 20,000 and it has an effective life of 10 years of 1,000 hours each, the amount of depreciation per hour will be computed as follows:

$$\text{Depreciation} = \frac{\text{Original Cost} - \text{Scrap Value}}{\text{Life of the Asset in Hours}}$$

$$= \frac{(\text{Rs } 10{,}000 - \text{Rs } 1{,}000}{10{,}000 \text{ hours}}$$

$$= \text{Re } 0.90$$

This means that, there will be a depreciation of 90 paise in case the machine runs for an hour. If in a particular year, the machine runs for 600 hours, the amount of depreciation will be Rs 540 (*i.e.,* Re .90 × 600).

The method has the advantage of correlating the charge for depreciation, to the actual working time of the machine. However, this method can be used only in case of those assets whose life can be measured in terms of working time.

2. Declining Charge Depreciation Methods

In case of these methods, the amount charged for depreciation declines over the asset's expected life. These methods are suitable in those cases where (*a*) the receipts are expected to decline as the asset gets older and (*b*) it is believed that the allocation of depreciation should be related to the asset's of pattern expected receipts.

Following methods fall in this category.

(a) **Diminishing balance method**. According to this method, depreciation is charged on the book value of the asset each year. Thus, the amount of depreciation goes on decreasing every year. For example, if the cost of an asset is Rs 20,000, and the rate of depreciation is 10per cent, the amount of depreciation to be charged in the first year will be a sum of Rs 2,000. In the second year, depreciation will be charged at 10 per cent on the book value of the asset, *i.e.,* 18,000 (*i.e.,* Rs 20,000 – Rs 2,000) and so on.

The formula for calculating the rate of depreciation under the diminishing balance method (where 'n' = years of economic life of the asset) is as follows:

$$\text{Depreciation rate} = 1 - n\sqrt{\frac{\text{Net Residual Value}}{\text{Acquisition Cost}}}$$

For example, if the cost of an asset is Rs 10,000, the residual value is Rs 1,296, economic life is 4 years, than the rate of depreciation would be 40 per cent calculated as follows:

$$\text{Depreciation rate} = 1 - 4\sqrt{\frac{1{,}296}{10{,}000}}$$

$$= 1 - 6/10$$

$$= 40\%$$

Merits. (*i*) The method puts an equal burden for use of the asset on each subsequent year. The amount of depreciation goes on decreasing for each subsequent year while the charge for repairs goes on increasing for each subsequent year. Thus, increase in the cost of repairs for each subsequent year is compensated by decrease in the amount of depreciation for each subsequent year.

(*ii*) The method is simple to understand and easy to follow.

Demerits. (*i*)The value of the asset cannot be brought down to zero under this method.

(*ii*) The determination of a suitable rate of depreciation is also difficult under this method as compared to the Fixed Instalment Method.

Illustration 8.2 A firm purchases a plant and machinery on 1 January 2000, for Rs 10,000. Prepare a Plant Account for three years, charging depreciation @ 10% p.a. according to the Diminishing Balance Method.

Solution

Plant and Machinery Account

Date	*Particulars*	*Amount*	*Date*	*Particulars*	*Amount*
2000			2000		
Jan. 1	To Bank	10,000	Dec. 31	By Depreciation	1,000
			Dec. 31	By Balance c/d	9,000
		10,000			10,000
2001			2001		
Jan. 1	To Balance b/d	9,000	Dec. 31	By Depreciation	900
			Dec. 31	By Balance c/d	8,100
		9,000			9,000
2002			2002		
Jan. 1	To Balance b/d	8,100	Dec. 31	By Depreciation	810
			Dec. 31	By Balance c/d	7,290
		8,100			8,100

(b) **Sum of years digits (or SYD) method.** This method is based on the pattern of the Diminishing Balance Method. The amount of depreciation to be charged to the Profit and Loss Account under this method goes on decreasing every year. The depreciation is calculated according to the following formula:

$$\frac{\text{Remaining Life of the Asset (including the current year)}}{\text{Sum of all the digits of the life of the asset in years}} \times \text{Original Cost}$$

For example, if the cost of an asset is Rs 10,000 and it has an effective life of 5 years, the amount of depreciation to be written off each year will be computed as follows:

$$\text{1st year} = \frac{5}{1+2+3+4+5} \times 10{,}000$$

$$= \frac{5}{15} \times 10{,}000$$

$$= \frac{10{,}000}{3} = \text{Rs } 3{,}333$$

$$\text{2nd year} = \frac{4}{15} \times 10{,}000 = \text{Rs } 2{,}666$$

$$\text{3rd year} = \frac{3}{15} \times 10{,}000 = \text{Rs } 2{,}000$$

$$\text{4th year} = \frac{2}{15} \times 10{,}000 = \text{Rs } 1{,}333$$

$$\text{5th year} = \frac{1}{15} \times 10{,}000 = \text{Rs } 667$$

(c) **Double declining balance method.** This method is similar to reducing or declining balance method explained above except that the rate of depreciation is charged at the rate which is twice the straight line rate. While computing this rate two things have been kept in mind:

(a) No allowance is to be made for the scrap value of the asset.

(b) The total cost should not be reduced by charging the depreciation to an amount lower than the estimated scrap value of the asset.

The method is prevalent in USA and is permitted under the Federal Tax Laws.

Illustration 8.3. A plant having a scrap value of Rs 1,000 and life of 5 years was purchased for Rs 10,000 in January, 2000. You are required to calculate the amount depreciation for each of the years according to the Double Declining Method.

Solution: According to the Fixed Instalment Method (without considering the salvage value) the depreciation would amount to Rs 2,000 (i.e., Rs 10,000, 5 years) each year. The rate of depreciation therefore comes to 20%. In case of the Double Declining Method, the rate of depreciation would be twice of this rate, *i.e.,* 40%. The amount of depreciation for each year would therefore be as follows:

Year	*Book value in the beginning*	*Amount of Depreciation of the year*
1	10,000	4,000
2	6,000	2,400
3	3,600	1,440
4	2,160	860
5	1,300	300*

* The depreciation at 40% come to Rs 520. However, since the value of the asset has not to be reduced below the scrap value of the asset (*i.e.,* Rs 1,000), only a sum of Rs 300 will be charged by way of depreciation.

The declining charge methods of depreciation are preferred over uniform charge methods of depreciation on account of the following reasons:

(i) The total cost for use of the asset is evenly spread over the useful life of the asset. Such cost of the use of the asset includes both depreciation and repairs. With the asset growing order, the repair cost goes on increasing while the amount of depreciation goes on decreasing. Thus, increase in the repairs cost is compensated by decrease in the depreciation cost.

(ii) The rate of depreciation in case of declining charge methods of depreciation is higher as compared to the rates in case of uniform charge methods of depreciation. Thus, the charge for depreciation in the initial years will be more and this will result in a considerable tax advantage to the business in these years when the demand for funds is also more. Higher depreciation in the initial years is also beneficial because a rupee saved today is much more important than a rupee saved in future. Thus, accelerated depreciation creates a shield that enables the business to retain more resources in the early years than it can be under the straight line method. These resources can be reinvested for more profits.

3. Other Methods

The following are some of the other methods of providing depreciation.

(a) **Group depreciation method.** Under this method, all homogenous assets, generally having similar average life expectancy are grouped together in a single asset category. One summary account is established for each group and original cost of all assets in the group is charged to this account. Depreciation is charged for the group in total and not item by item. The essential features of this method are as follows:

(i) A summary account is established for each category of homogeneous assets e.g., 10 motor vehicles owned by a Company may be put in one account while 15 typewriters owned by the company may be but in another account.

(ii) Depreciation is charged for the group in total at a rate based on expected average service life and scrap values of the assets of the group.

(iii) On purchase of an asset, the group asset account is debited with cost.

(iv) The amount of depreciation is calculated on the balance in the group asset account. It is debited to Depreciation Account (or P & L Account) and credited to the Accumulated Depreciation Account.

(v) In case an asset is sold, the amount received on account of sale of the asset is credited to the group asset account. The difference between the cost of the asset and the sales value is transferred to Accumulated Depreciation Account.

It should be noted that no single item of the group can be considered to have a book value. Hence, no gain or loss is recorded on the disposal of any item of the group in the normal course of events.

Illustration 8.4. A company purchased 10 identical machines on 1 January at a cost of Rs 11,000 each. Each having a zero scrap value and an average life of 5 years. At the end of the 2nd year, the company sold one machine for Rs 6,000 and purchased another for Rs 14,000 in the beginning of the 3rd year.

Journalize the above transaction in the books of the company for the first three years.

Solution:

COMPUTATION OF DEPRECIATION RATE

Cost of 10 Machines (10 ×11,000)	Rs 1,10,000
Less: Scrap value	Nil
Depreciation to be written off over 5 years	1,10,000
Yearly Depreciation	22,000
Rate of Depreciation 20%	

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Date	*Particulars*		*Dr. Amount Rs*	*Cr. Amount Rs*
1st Year				
	Machines A/c	Dr.	1,10,000	
	To Bank			1,10,000
	(For machines purchased)			
	Depreciation A/c	Dr.	22,000	
	To Accumulated Depreciation A/c			22,000
	(For depreciation @ 20% on Rs 1,10,000			
2nd Year				
	Depreciation A/c	Dr.	22,000	
	To Accumulated Depreciation A/c			22,000
	(For depreciation on Rs 1,10,000)			
	Bank A/cDr.		6,000	
	Accumulated Depreciation A/c	Dr.	5,000	
	To Machines A/c			11,000
	(Being sale of machines)			
3rd Year			14,000	
	Machines A/c	Dr.	14,000	
	(Being purchase of Machine)			
	Depreciation A/c	Dr.	22,600	
	To Accumulated Depreciation A/c			22,600
	(Being depreciation of Machines on Rs 1,13,000 @ 20%)			

(b) **Inventory system of depreciation.** The method is followed in case of those assets which are of small value such as loose tools or where the life of the asset cannot be ascertained with certainty e.g., live stock etc. In case of these assets the depreciation is charged on the following basis:

Cost of the assets in working condition at the beginning of the accounting year	....
Add: Cost of the assets purchased during the accounting year	....
Less: Cost of the assets in working condition at the end of the accounting year.	....
	....
Depreciation to be charged	....

For example, a firm has loose tools in working condition costing Rs 2,000 on 1.1.1995 and purchases during 1995 loose tools worth Rs 3,000. The cost of the loose tools in working condition on 31.1.1995 is Rs 2,000. The amount of depreciation to be charged to the Profit and Loss Account comes to Rs 3,000 (*i.e.,* Rs 2,000 + 3,000 – Rs 2,000).

The following journal entry is passed for recording the amount of depreciation:

Depreciation A/c Dr.
To Asset Account

(c) **Annuity method.** The Fixed Instalment Method and the Reducing Balance Method of charging depreciation ignore the interest factor. The Annuity Method takes care of this factor. Under this method, the depreciation is charged on the basis that besides losing the original cost of the asset, the business also loses interest on the amount used for buying the asset. The term "Interest" here means the interest which the business could have earned otherwise if the money used in purchasing the asset would have been invested in some other form of investment. Thus, according to this method, such an amount is charged by way of depreciation which takes into account not only the cost of the asset but also interest thereon at an accepted rate. The amount of interest is calculated on the book value asset, in the beginning of each year. The amount of depreciation is uniform and is determined on the basis of the annuity table.

An extract from such a table has been given as an *Appendix* at the end of this book.

The following journal entries are passed in case depreciation is charged according to this method.

(i) On purchase of asset:

Asset Account Dr.
To Bank

(ii) For charging interest:

Asset Account Dr.
To Interest Account

(iii) For charging depreciation:

Depreciation Account Dr.
To Asset Account

Illustration 8.5. A firm purchases a lease hold property for a period of five years for Rs 10,000 on 1.1.1995. It decides to write off the lease by the Annuity Method presuming the rate of interest at 5% p.a. The Annuity Table shows that the annual amount necessary to write off Re 1 at 5% p.a. is Re 0.230976. You are required to prepare the Leasehold Hold Property Account for five years and show the net amount to be charged to the Profit & Loss Account for these five years.

Solution:

Dr. LEASEHOLD PROPERTY ACCOUNT *Cr.*

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1995			1995		
Jan. 1	To Bank	10,000.00	Dec. 31	By Depreciation	2,309.76
Dec. 31	To Interest	500.00	Dec. 31	By Balance c/d	8,190.24
		10,500.00			10,500,00
1996			1996		
Jan. 1	To Balance b/d	8,190.24	Dec. 31	By Depreciation A/c	2,309.76
Jan. 31	To Interest	409.52	Dec. 31	By Balance c/d	6,290.00
		8,599.76			8,599.76
1997			1997		
Jan. 1	To Balance b/d	6,290.00	Dec. 31	By Depreciation A/c	2,309.76
Dec. 31	To Interest	314.50	Dec. 31	By Balance c/d	4,294.74
		6,604.50			6,604.50

(Contd...)

1998			1998		
Jan. 1	To Balance b/d	4,294.74	Dec. 31	By Depreciation A/c	2,309.76
Dec. 31	To Interest	214.74	Dec. 31	BY Balance c/d	2,199.72
		4,509.48			4,509.48
1999			1999		
Jan. 1	To Balance b/d	2,199.72	Dec. 31	By Depreciation A/c	2,309.76
Dec. 31	To Interest	110.04			
		2,309.76			2,309.76

STATEMENT SHOWING THE AMOUNT CHARGEABLE TO THE PROFIT & LOSS ACCOUNT

Year	*Depreciation (debited)*	*Interest (credited)*	*Net Charge against profits*
1995	2,309.76	500.00	1,809.76
1996	2,309.76	409.52	1,900.24
1997	2,309.76	314.50	1,995.26
1998	2,309.76	214.74	2,095.02
1999	2,309.76	110.04	2,199.72
	11,548.80	1,548.80	10,000.00

(d) **Depreciation (or sinking) fund method.** One of the objectives of providing for depreciation (as explained earlier) is to provide for replacement of the asset at the end of its useful life. In case of the three methods discussed earlier, the amount of depreciation charged from the Profit & Loss Account continues to remain in the business. However, this amount may get invested in the course of running the business in some other assets. It may, therefore, not be possible for the business to have sufficient liquid resources to purchase a new asset at the time when it needs funds for replacement. The Depreciation Fund Method takes care of such a contingency. According to this method, the amount charged by way of depreciation is invested in certain securities carrying a particular rate of interest. The amount received on account of interest from these securities is also invested from time to time together with the annual amount charged by way of depreciation. At the end of the useful life of the asset, when replacement is required, the securities are sold away and the money realized on account of the sale of the securities is used for purchase of a new asset. The method has the advantage of providing a separate sum for replacement of the asset. However, the method has a disadvantage. It puts an increasing burden on the profit and loss of each year on account of a fixed charge for depreciation but increasing charge for repairs.

The accounting entries are as follows:

(a) At the end of the first accounting year

(i) On setting aside the amount for depreciation:

Depreciation Account (or Profit & Loss Account) Dr.
To Depreciation Fund Account
(The amount to be charged by way of depreciation is determined on the basis of the Sinking Fund Table)

(ii) For investing the money charged by way of depreciation:

Depreciation Fund Investment A/c Dr.
To Bank

(b) At the end of each subsequent accounting year

(iii) For receipt of interest

Bank A/c Dr.
To Depreciation Fund A/c
(Interest will be received at the specified rate on balance of Depreciation Fund Investment outstanding in the beginning of each year)

(iv) For setting aside the amount of depreciation:

Profit and Loss A/c Dr.
To Depreciation Fund A/c

(v) For investing the money:

Depreciation Fund Investment A/c Dr.

To Bank

(Annual instalment plus interest received)

(c) At the end of the last year

(vi) For receipt of interest:

Bank A/c Dr.

To Depreciation Fund A/c

(vii) For setting aside the amount for depreciation:

Profit and Loss A/c

To Depreciation Fund A/c

(No investment will be made at the end of the last year, since the asset is due for replacement and no purpose will be served by simply investing the money and then selling the investment either on the same day or on the subsequent day.)

(viii) For the sale of investments:

Bank A/c Dr.

To Depreciation Fund Investment A/c

(ix) The profit or loss on sale of Depreciation Fund Investments will be transferred to the Depreciation Fund Account.

(x) For sale of the old asset:

Bank A/c Dr.

To Asset Account

(xi) The balance in the Depreciation Fund represents accumulated depreciation. It will be transferred to the Old Asset Account.

(xii) The balance in the Old Asset Account represents profit or loss. It will be transferred to the Profit and Loss Account.

(xiii) The proceeds realized on account of sale of the asset and investment will be utilized for purchase of new asset.

New Asset A/c Dr.

To Bank

CHECK YOUR PROGRESS

1. State whether each of the following statements is True or False:
   (a) The objective of charging Profit and Loss Account with the amount of depreciation is to spread the cost of an asset over its useful life for the purpose of income determination.
   (b) The amount of depreciation is credited to the Depreciation Fund Account in case of the Annuity Method.
   (c) The charge for use of the asset remains uniform each year in case of the straight line method.
   (d) Depreciation is charged on the book value of the asset each year in case of the Diminishing Balance Method.
   (e) The Depletion Method is suitable for charging depreciation in case of live stock or loose tools.
   (f) Net charge to the Profit and Loss Account is the same under both the Annuity Method and the Depreciation Fund Method.
   (g) The amount of depreciation is credited to the Depreciation Fund Account in the Depreciation Fund Method.
   (h) The asset appears always at original cost in case depreciation is credited to the Provision for Depreciation Account.
   (i) In Case of the Insurance Policy Method, the depreciation is credited to the Asset Account.

Illustration 8.6. Suresh bought a plant on 1.1.1995 for a sum of Rs 1,00,000 having a useful life of 5 years. It is estimated that the plant will have a scrap value of Rs 16,000 at the end of its useful life. Suresh decides to charge depreciation according to the depreciation fund method. The depreciation fund investments are expected to earn interest @ 5% p.a. the Sinking Fund table shows that Re 0.180975 if invested yearly at 5% p.a. produces Re 1 at the end of 5 years. The investments are sold at the end of the 5th year for a sum of Rs 65,000. A new plant is purchased for Rs 1,20,000 on 1.1.1990. The scrap of the old plant realizes Rs 17,000.

You are required to prepare the necessary accounts in the books of Suresh.

Solution:

PLANT ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1995			1995		
Jan. 1	To Bank	1,00,000	Dec. 31	By Balance c/d	1,00,000
1996			1996		
Jan. 1	To Balance b/d	1,00,000	Dec. 31	By Balance c/d	1,00,000
1997			1997		
Jan. 1	To Balance b/d	1,00,000	Dec. 31	By Balance c/d	1,00,000
1998			1998		
Jan. 1	To Balance b/d	1,00,000	Dec. 31	By Balance c/d	1,00,000
1999			1999		
Jan. 1	To Balance b/d	1,00,000	Dec. 31	By Depreciation Fund A/c	83,478
Dec. 31	To P & L A/c (Profit)	478	Dec. 31	By Bank (Scrap sold)	17,000
		1,00,478			1,00,478

NEW PLANT ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
2000					
Jan.1	To Bank A/c	1,20,000			

DEPRECIATION FUND ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1995			1995		
Dec. 31	To Balance c/d	15,202	Dec. 31	By P & L A/c	15,202
1996			1996		
Dec. 31	To Balance c/d	31,164	Jan. 1	By Balance b/d	15,202
			Dec. 31	By Bank (Interest)	760
			Dec. 31	By P & L A/c	15,202
		31,164			31,164
1997			1997		
Dec. 31	To Balance c/d	47,924	Jan. 1	By Balance b/d	31,164
			Dec. 31	By Bank (Interest)	1,558
			Dec. 31	By P & L A/c	15,202
		47,924			47,924
1998			1998		
Dec. 31	To Balance c/d	65,522	Jan. 1	By Balance b/d	47,924
			Dec. 31	By Bank (Interest)	2,396
			Dec. 31	By P & L A/c	15,202
		65,522			65,522
1999			1999		
Dec. 31	To Depreciation Fund Investment A/c (loss on sale of investment)	522	Jan. 1	By Balance b/d	65,522
			Dec. 31	By Bank (Interest)	3,276
			Dec. 31	By P & L A/c	15,202
Dec. 31	To Plant A/c (accumulated depreciation)	83,478			
		84,000			84,000

DEPRECIATION FUND INVESTMENT ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1995			1995		
Dec. 31	To Bank	15,202	Dec. 31	By Balance c/d	15,202
		15,202			15,202
1996			1996		
Jan. 1	To Balance b/d	15,202	Dec. 31	By Balance c/d	31,164
Dec. 31	To Bank (15,202 + 760)	15,962			
		31,164			31,164
1997			1997		
Jan. 1	To Balance b/d	31,164	Dec. 31	By Balance c/d	47,924
Dec. 31	To Bank (15,202 + 1,558)	16,760			
		47,924			47,924
1998			1998		
Jan. 1	To Balance b/d	47,924	Dec. 31	By Balance c/d	65,522
Dec. 31	To Bank (15,202 + 2,396)	17,598			
		65,522			65,522
1999			1999		
Jan. 1	To Balance b/d	65,522	Dec. 31	By Bank	65,000
				By Depreciation Fund A/c (loss on sale of investment)	522
		65,522			65,522

Note: The amount to be charged to the Profit and Loss Account has been arrived as follows:

Original Cost of the Plant	1,00,000
Less: Estimated scrap value	16,000
Depreciation on the plant for its whole life	84,000

The amount to be charged to the

Profit and Loss Account $= \text{Rs}\, 84{,}000 \times 0.180975$

$= \text{Rs}\, 15{,}201.90$

or $= \text{Rs}\, 15{,}202$

(e) **Insurance Policy Method.** This method is similar to the Depreciation Fund Method as explained above. However, instead of investing the money in securities, an insurance policy for the required amount is taken. A fixed amount as premium is paid every year. However, this amount will have to be paid at the beginning of each year. At the end of the specified period, the insurance company pays the agreed amount with which the new asset can be purchased.

The accounting entries can be put as follows:

(a) First and subsequent years

In the beginning of the year for insurance premium paid:

Depreciation Insurance Policy A/c Dr.

To Bank

At the end of the year for providing depreciation:

Profit and Loss A/c Dr.

To Depreciation Provision A/c

(with the amount of premium paid)

(b) *At the end of the last year*

On realization of money from the insurance company:

Bank A/c Dr.

To Depreciation Policy A/c

For transfer of profit on insurance policy:

Depreciation Provision A/c Dr.

To Depreciation Provision A/c

For transfer of accumulated depreciation to the Asset Account:

Depreciation Provision A/c Dr.

To Asset A/c

On purchase of new asset:

New Asset A/c Dr.

To Bank

Illustration 8.7. A firm purchases a lease for 3 years for Rs 30,000 on 1.1.1997. It decided to provide for its replacement by means of an Insurance Policy for Rs 30,000. The annual premium is Rs 9,500.

On 1.1.2000, the lease is renewed for a further period of 3 years for Rs 30,000. You are required to show the necessary Ledger Accounts.

Solution:

LEASE ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1997			1997		
Jan. 1	To Bank	30,000	Dec. 31	By Balance c/d	30,000
1998			1998		
Jan. 1	To Balance b/d	30,000	Dec. 31	By Balance c/d	30,000
1999			1999		
Jan. 1	To Balance b/d	30,000	Dec. 31	By Dep. Provision A/c	30,000

DEPRECIATION PROVISION ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1997			1997		
Dec. 31	To Balance c/d	9,500	Dec. 31	By P and L A/c	9,500
1998			1998		
Dec. 31	To Balance c/d	19,000	Jan. 1	By Balance b/d	9,500
			Dec. 31	By P and L A/c	9,500
		19,000			19,000
1999			1999		
Dec. 31	To Lease Account	30,000	Jan. 1	By Balance b/d	19,000
			Dec. 31	By P and L A/c	9,500
			Dec. 31	By Depreciation Insurance Policy A/c	1,500
		30,000			30,000

DEPRECIATION INSURANCE POLICY ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1997			1997		
Jan. 1	To Bank – (Premium)	9,500	Dec. 31	By Balance c/d	9,500
1998			1998		
Jan. 1	To Balance b/d	9,500	Dec. 31	By Balance c/d	19,000
Jan. 1	To Bank – (Premium)	9,500			
		19,000			19,000
1999			1999		
Jan. 1	To Balance b/d	19,000	Dec. 31	By Bank	30,000
Jan. 1	To Bank – (Premium)	9,500			
Dec. 31	To Profit – (Transferred to Depreciation Provision A/c)	1,500			
		30,000			30,000

LEASE (NEW) ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
2000					
Jan. 1	To Bank	30,000			

Depreciation on an asset purchased in the course of a year. There are two alternatives available regarding charging of depreciation on an asset which has been purchased during the course of an accounting year.

(a) Depreciation may be charged for the full year irrespective of the date of purchase at the given rate.

(b) Depreciation may be charged only for the part of the year for which the asset could have been made available for use on account of its being purchased during the course of the year. For example, if the asset has been purchased on 1 July, 2000 and the accounting year ends on 31 December, depreciation may be charged only for a period of six months.

Tutorial Note. The students are advised to give the assumption made by them in the absence of any instructions in the question. However, if the rate of depreciation has been given as a certain percentage per annum and the date of the purchase of the asset has been given, it would be advisable to charge depreciation only for the part of the accounting year for which the asset has been made available for use.

Sale of an asset during the year. In case an asset is sold during the course of the year, the amount realized should be credited to the Asset Account. Depreciation for the period for which the asset has been used should be written off in the usual manner. Any balance in the Asset Account representing profit or loss on sale of the asset should be transferred to the Profit and Loss Account.

Illustration 8.8. A firm purchases a truck for a sum of Rs 1,00,000 on 1 January 1999. It charges 20% depreciation per annum according to the Diminishing Balance Method. The truck was sold on 1 July, 2000 for a sum of Rs 80,000. You are required to prepare the Truck Account for 1999 and 2000.

Solution:

TRUCK ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1999			1999		
Jan. 1	To Bank	1,00,000	Dec. 31	By Depreciation	20,000
			Dec. 31	By Balance c/d	80,000
		1,00,000			1,00,000
2000			2000		
Jan. 1	To Balance b/d	80,000	July 1	By Depreciation (depreciation for 6 months)	8,000
Dec. 31	To P & L A/c (profit on sale)	8,000		By Bank (Sale Proceeds)	80,000
		88,000			88,000

In case it is desired to prepare separately Provision for Depreciation Account, Truck Disposal Account etc., the solution of the question will be as follows:

TRUCK ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1999			1999		
Jan. 1	To Bank A/c	1,00,000	Dec. 31	By Balance c/d	1,00,000
		1,00,000			1,00,000
2000			2000		
Jan. 1	To Balance b/d	1,00,000	July 1	By Asset Disposal A/c	1,00,000
		1,00,000			1,00,000

PROVISION FOR DEPRECIATION ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1999			1999		
Dec. 31	To Balance c/d	20,000	Dec. 31	By Depreciation A/c (or P & L a/c)	20,000
		20,000			20,000
2000			2000		
July 1	To Truck Disposal A/c	28,000	Jan. 1	By Balance b/d	20,000
			July 1	By Depreciation A/c (Dep. for 6 months)	8,000
		28,000			28,000

TRUCK DISPOSAL ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
2000			2000		
July 1	To Truck A/c	1,00,000	July 1	By Provision for Dep. A/c	28,000
Dec. 31	To P & L A/c (profit on sale)	8,000	July 1	By Bank (sale proceeds)	80,000
		1,08,000			1,08,000

Change in the Method of Depreciation

Sometimes a change in the method of depreciation may be required. For example, a firm may change the method of depreciation from Fixed Instalment Method to Reducing Balance Method or *vice versa.* In such a case, there can be two different situations:

(i) Change in the method of depreciation may be desired from the current year onwards. In such a case, depreciation will be charged according to the new method from the current year (*See Illustrations 8.9 and 8.12*).

(ii) Change in the method of depreciation may be desired from a back date. This will require necessary adjustments to be made in the current year for any extra or less depreciation charged in earlier years. In such a case, the best course would be to compute the amount of depreciation which has already been charged according to the old method and the amount of depreciation that is to be charged according to the new method. The difference if any should be credited (or debited) to the Asset Account in the current year and should be shown as a separate charge (or income) in the Profit and Loss Account of the current year of the firm. (*See Illustrations 8.10 and 8.11*).

Illustration 8.9. On 1st July, 1997, a company purchased a Plant for Rs 20,000 Depreciation was provided at 10% per annum on straight line method on 31st December every year. With effect from 1.1.1999, the company decided to change the method of depreciation to Diminishing Balance Method @ 15% p.a. On 1.7.2000, the plant was sold for Rs 12,000. Prepare Plant Account from 1997 to 2000.

Solution :

PLANT ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1997			1997		
July 1	To Cash	20,000	Dec. 31	By Depreciation	1,000
			Dec. 31	By Balance c/d	19,000
		20,000			20,000
1998			1998		
Jan. 1	To Balance b/d	19,000	Dec. 31	By Depreciation	2,000
			Dec. 31	By Balance c/d	17,000
		19,000			19,000
1999			1999		
Jan. 1	To Balance b/d	17,000	Dec. 31	By Depreciation	2,550
				By Balance c/d	14,450
		17,000			17,000
2000			2000		
Jan. 1	To Balance b/d	14,450	June 31	By Dep. (for 6 months)	1,084
			July 1	By Cash	12,000
			July 1	By P and L A/c	1,366
		14,450			14,450

Illustration 8.10. On the basis of the information given in Illustration 8.9, prepare Plant Account from 1997 to 2000, if the firm decides on 1.1.1999 to charge depreciation according to Diminishing Balance Method *w.e.f.* 1.7.1997 and to make adjustments for arrears of depreciation in the year 1999.

Solution:

PLANT ACCOUNT

Date	Particulars	Amount Rs	Date	Particulars	Amount Rs
1997			1997		
July 1	To Cash	20,000	Dec. 31	By Depreciation	1,000
			Dec. 31	By Balance c/d	19,000
		20,000			20,000
1998			1998		
Jan. 1	To Balance b/d	19,000	Dec. 31	By Depreciation	2,000
			Dec. 31	By Balance c/d	17,000
		19,000			19,000
1999			1999		
Jan. 1	To Balance b/d	17,000	Dec. 31	By Balance of arrears	
				Dep. for 1997 & 1998	1,275
			Dec. 31	By Depreciation for 1999	2,359
			Dec. 31	By Balance c/d	13,366
		17,000			17,000
2000			2000		
Jan. 1	To Balance b/d	13,434	June 30	By Dep. (for 6 months)	1,002
			July 1	By Bank (Sale)	12,000
			July 1	By P and L A/c	
				(loss on sale)	364
		13,366			13,366

Working Notes:

1. Adjustment for arrears of depreciation in 1999.

Year	*Fixed Instalment Method*	*Diminishing Balance Method*
1997 (for half year)	1,000	1,500
1998	2,000	2,775
	3,000	4,275

Extra depreciation to be charged in 1999 is Rs 1,275 on account of change in the method of depreciation.

2. Depreciation for 1999 on Rs 15,725 at 15% comes to Rs 2,359.

Illustration 8.11. A firm purchased a plant for Rs 10,000 on 1.1.1995. It was charging depreciation at 10% p.a. according to the fixed instalment method. At the end of 1998, the firm decided to change the method of depreciation from the Fixed Instalment Method to the Diminishing Balance Method w.e.f. 1.1.1995. The rate of depreciation was to be at 12% p.a. You are required to prepare the Plant Account for the three years ending 31 December, 1998 and also show how the depreciation item would appear in the Profit and Loss Account of the year 1998.

Solution:

COMPUTATION OF DEPRECIATION

Fixed Instalment Method			*Diminishing Balance Method*		
Year	*Book value of the asset*	*Depreciation*	*Year*	*Book value of the assest*	*Depreciation*
1995	10,000	1,000	1995	10,000	1,200
1996	9,000	1,000	1996	8,800	1,056
1997	8,000	1,000	1997	7,744	929
		3,000			3,185

From the above figures, it is clear that on account of change in the method of depreciation Rs 185 will have to be charged as extra depreciation for the last 3 years in the year 1998 besides the usual depreciation for the year. In 1998, the depreciation will be charged according to the Diminishing Balance Method which comes to Rs 818 on the book value of Rs 6,815 (i.e., Rs 7,744 – Rs 929). The Plant Account can now be prepared as follows.

PLANT ACCOUNT

Date	*Particulars*	*Amount Rs*	*Date*	*Particulars*	*Amount Rs*
1995			1995		
Jan. 1	To Bank	10,000	Dec. 31	By Depreciation	1,000
				By Balance c/d	9,000
		10,000			10,000
1996			1996		
Jan. 1	To Balance b/d	9,000	Dec. 31	By Depreciation	1,000
				By Balance c/d	8,000
		9,000			9,000
1997			1997		
Jan. 1	To Balance b/d	8,000	Dec. 31	By Depreciation (extra for 1995-1997)	185
				By Depreciation for 1998 (according to the Diminishing Balance Method)	818
				By Balance c/d	6,997
		8,000			8,000

PROFIT AND LOSS ACCOUNT

Dr *.for the year ending 31.12.1999* *Cr.*

Particulars		*Amount Rs*	*Particulars*	*Amount Rs*
To Depreciation for 1998	818			
Add : Additional depreciation for 1995 to 1997 on account of change to Diminishing Balance Method from Fixed Instalment Method	185	1,003		

8.13 DEPRECIATION OF DIFFERENT ASSETS

The following observations can be made regarding charging of depreciation on different assets:

1. **Goodwill.** Depreciation does not arise in the value of the goodwill of the business unless the profits of the firm are declining. Since, goodwill is an intangible asset, it will be advisable to write off the value of the goodwill over a reasonable period. The amount written off should be shown separately in the Profit and Loss Account.
2. **Freehold land.** No depreciation need be charged in case of such properties.
3. **Freehold buildings, plants, machinery, ship, etc.** Fixed Instalment Method or Diminishing Balance Method may be used for charging depreciation on these assets. The endeavour should be to write off the asset during its effective life. In case of Plant and Machinery, the Machine Hour Rate method can also be profitably used.
4. **Leasehold land and buildings.** The Fixed Instalment Method should generally be used for writing off depreciation in respect of such assets.

However, the Depreciation Fund Method or Insurance Policy Method can also be used profitably for assets coming in the 3rd and 4th category discussed above.

5. **Loose tools, jigs, livestock, etc.** Revaluation Method is the most appropriate method for charging depreciation on these assets.
6. **Patents, trademarks, etc.** These assets have a maximum legal life. However, their commercial life may be much shorter. Such assets should, therefore, be depreciated according to the Fixed Instalment Method in a way so that they are written off within the legal or commercial life, whichever is shorter.
7. **Mines, oil wells, quarries, etc.** Depreciation should be charged according to the Depletion Method in case of these assets.

It should be noted that the method of charging depreciation in respect of assets should be consistent year after year. In case the method of depreciation is changed, such facts together with the effect on profit on account of change in the method of depreciation has to be disclosed by way of a note in the final accounts of the business. Similarly, if it has not been possible to charge depreciation on assets on account of inadequacy of profits in any year, such facts should also be disclosed in the Final Accounts of the business for that particular year.

CHECK YOUR PROGRESS

2. Choose the most appropriate answer:
   (i) Depreciation is the process of
      (a) apportionment of the cost of the asset over its useful life.
      (b) valuation of assets.
      (c) maintenance of asset in a state of efficiency.
   (ii) Machine Hour Rate Method of charging depreciation is useful when
      (a) output can be effectively measured.
      (b) use of the asset can be measured in terms of time.
      (c) utility of the asset can be directly related to its productive use.

(iii) Profit or Loss on depreciation fund investment is transferred to:

(a) Profit or Loss Account. (b) the Asset Account. (c) Depreciation Fund Account.

(iv) The profit on depreciation policy is transferred to:

(a) Depreciation Reserve Account. (b) Profit and Loss Account. (c) Asset Account.

(v) In case of Annuity Method, the amount of depreciation is

(a) Increasing every year. (b) Fixed for all the year. (c) Decreasing every year.

(vi) For providing depreciation on leasehold property, the appropriate method of depreciation is

(a) Replacement Method. (b) Revaluation Method.

(vii) Depletion method of depreciation is used in

(a) cattle, loose tools etc. (b) mines, quarries etc. (c) machinery, building furniture etc.

(viii) The interest lost on the acquisition of an asset is taken into account in calculating depreciation in

(a) Depletion Method (b) Annuity Method (c) Diminishing Balance Method.

(ix) In this method depreciation is charged by allocating depreciable cost in proportion of the annual output to the probable life-time output.

(a) Working Hours Method. (b) Production Units Method. (c) Revaluation Method.

(x) In case of diminishing return method, the depreciation is charged on the:

(a) Original cost of the asset. (b) Books value of the asset. (c) Market value of asset.

(xi) In case of diminishing balance method, the total charge for the use of the asset each year is almost the same because of

(a) Fixed depreciation plus increasing charge for repairs.

(b) Reducing depreciation plus reducing charge for repairs.

(c) Reducing depreciation plus increasing charge for repairs.

8.14 DEPRECIATION ON REPLACEMENT COST

In recent years, there has been a lot of controversy regarding charging of depreciation on historical vs. replacement cost of the asset. It is being argued by the promoters of 'replacement cost' that since one of the major objectives of providing depreciation is to provide enough funds for the replacement of an asset at the end of its useful life, it will be appropriate to providefor depreciation on the replacement cost of the asset rather than its historical cost. This is particularly true in the context of present inflationary conditions. If depreciation is charged on the basis of historical cost, there will not be enough funds to replace the asset at the end of its useful life of account substantial increase in the price of the new asset to be purchased for replacing the old asset. Thus, they argue that the very purpose of providing depreciation is completely defeated if the depreciation is charged on the basis of historical cost of the asset.

There is considerable strength in the arguments put forward by the protagonists of charging depreciation on the replacement cost. However, the following are the practical difficulties in adopting this approach.

1. It is difficult to estimate the replacement cost well in advance. The cost can be correctly known only when the asset is replaced.
2. The new asset purchased for replacing the old asset is always of a better type in respect of its quality as well as efficiency. Of course, one has to pay more for the new asset, but the profitability of the business also increases on account of new and better quality of the asset. In case depreciation is charged on replacement cost, depreciation is charged for the improved asset even when such asset has not been used for generating revenue during those years.
3. Income Tax Authorities do not give recognition to the concept of charging depreciation on replacement cost.
4. Under the Companies Act, depreciation is to be charged only on original cost of the asset. Any profit or loss made on scrapping the asset over its book value should be credited or debited to the Profit and Loss Account of the year in which the asset is scrapped.
5. Businessmen favour charging of depreciation on replacement cost under inflationary conditions. It is doubtful whether they would favour charging depreciation on the replacement cost of the asset in periods when the prices are falling.

On account of the above practical difficulties, it will be advisable to charge depreciation on the historical cost of the asset. However, in case it is desired to provide enough funds for replacement of the asset at the end of its useful life, the following steps may be taken.

1. A replacement reserve may be created in the books of accounts of the business. The additional amount required for replacing the asset over and above the original cost of the asset may be estimated. Every year, an appropriate amount may be transferred from the P & LAccount besides usual depreciation on the asset to provide for additional amount required for replacement of the asset over and above the original cost of the asset. It may be debited to the Profit and Loss Appropriation Account and credited to the Replacement Reserve Account.
2. The Replacement Reserve Account should be credited every year with interest at the current rate on the accumulated balance standing to the credit of this account.

In case the above procedure is followed, the business will have sufficient funds to replace the old asset by a new one as and when the necessity arises.

8.15 DEPRECIATION POLICY

The management has to adopt a suitable depreciation policy keeping in view the following objectives:

(i) Recovery of the original investment, i.e., the acquisition cost of the asset, before the expiry of the economic life of the asset.

(ii) Ensuring a uniform rate of return on investments.

(iii) Generating sufficient funds for the replacement of the asset after the expiry of its economic life.

(iv) Deriving maximum tax benefit.

(v) Ascertainment of correct profit or loss.

The above objectives can be considerably achieved if the management takes care of the following aspects in framing its depreciation policy.

(i) **Selection of an appropriate method.** The management should select an appropriate method keeping in view the nature of asset and the prime objective of the management.

(ii) **Periodic review of provision**. The choice of the method determines the amount of the depreciation and the mode of its recording. However, the management must review periodically whether the provision for depreciation which is being made is proper or not. Any under or over provision in the context of changed circumstances should properly be adjusted in the books of accounts.

(iii) **Evaluation and disclosure of depreciation policy.** The depreciation policy being followed by the business should be evaluated in the context of tax, independence of price level changes, Government's regulations, etc. The effect of any change in the depreciation policy in an accounting period should be quantified and disclosed in the financial statements of the business.

8.16 ACCOUNTING STANDARD 6 (REVISED): DEPRECIATION ACCOUNTING

The following are the salient features of the Revised Accounting Standard on Depreciation Accounting issued by the Institute of Chartered Accountants of India in September, 1994.[1]

1. The standard applies to all depreciable assets except the following items to which special considerations apply:
   (a) forests, plantations and similar regenerative natural resources;
   (b) wasting assets including expenditure on exploration for the extraction of minerals, oils, natural gas and similar non/ regenerative resources;
   (c) expenditure on research and development;
   (d) goodwill;
   (e) livestock;
   (f) land unless it has a limited useful life for the enterprise.
2. The depreciable amount of a depreciable asset should be allocated on a systematic basis to each accounting period during the useful life of the asset.
3. The depreciation method selected should be applied consistently from period to period. A change from one method of providing depreciation to another should be made only if the adoption of the new method is required by statute or for

1. Chartered Accountant, Sep. 1994, p. 77.

compliance with an accounting standard or if it is considered that the change would result in a more appropriate preparation or presentation of the financial statements of the enterprise. When such a change in the method of depreciation is made, depreciation should be recalculated in accordance with the new method from the date of the asset coming into use. The deficiency or surplus arising from retrospective recomputation of depreciation in accordance with the new method should be adjusted in the accounts in the year in which the method of depreciation is changed. In case the change in the method results in deficiency in depreciation in respect of past years, the deficiency should be charged in the statement of profit and loss. In case the change in the method results in surplus, the surplus should be credited to the statement of profit and loss. Such a change should be treated as a change in accounting policy and its effect should be quantified and disclosed.

4. The useful life of a depreciable asset should be estimated after considering the following factors:
   (i) expected physical wear and tear;
   (ii) obsolescence;
   (iii) legal or other limits on the use of the asset.
5. The useful lives of major depreciable assets or classes of depreciable assets may be reviewed periodically. Where there is a revision of the estimated useful life of an asset, the unamortised depreciable amount should be charged over the revised remaining useful life.
6. Any addition or extension which becomes an integral part of the existing asset should be depreciated over the remaining useful life of that asset. The depreciation on such addition or extension may also be provided at the rate applied to the existing asset. Where an addition or extension retains a separate identity and is capable of being used after the existing asset is disposed of, depreciation should be provided independently on the basis of an estimate of its own useful life.
7. Where the historical cost of a depreciable asset has undergone a change due to increase or decrease in long-term liability on account of exchange fluctuations, price adjustments, changes in duties or similar factors, the depreciation on the revised unamortised depreciable amount should be provided prospectively over the residual useful life of the asset.
8. Where the depreciable assets are revalued, the provision for depreciation should be based on the revalued amount and on the estimate of the remaining useful lives of such assets. In case the revaluation has a material effect on the amount of depreciation, the same should be disclosed separately in the year in which revaluation is carried out.
9. If any depreciable asset is disposed of, discarded, demolished or destroyed, the net surplus or deficiency, if material, should be disposed separately.
10. The following information should be disclosed in the financial statements:
    (i) the historical cost or other amount substituted for historical cost of each class of depreciable assets;
    (ii) total depreciation for the period for each class of assets; and
    (iii) the related accumulated depreciation.
11. The following information should also be disclosed in the financial statements along with the disclosure of other accounting policies:
    (i) depreciation methods used; and
    (ii) depreciation rates or the useful lives of the assets, if they are different from the principal rates specified in the statute governing the enterprise.

The standard has become mandatory in respect of accounting periods beginning on or after 1 April, 1995.

8.17 SUMMARY

- **Meaning of Equities:** The rights to properties are called Equities. Equities may be divided into two principal types:
  (i) The rights of the creditors; and
  (ii) The rights of the owners.
- **Meaning of Fixed Assets:** Fixed Assets are assets held with the intention of being used on a continuous basis for the purpose of producing or providing goods or services. They are not held for resale. It may be noted that only fixed assets are subject to depreciation.
- **Meaning of Depreciation:** It is a gradual decrease in the value of an asset due to wear and tear, exhaustion, obsolescence, efflux of time and accidents.

- **Meaning of Depreciation Accounting:** It is mainly concerned with a rational and systematic distribution of cost over the estimated useful life of the asset.
- **Objective of Providing Depreciation:** The following are objectives of providing depreciation:
  - (i) Ascertainment of true profits
  - (ii) Presentation fo true financial positiion
  - (iii) Replacement of assets
- **Methods for Providing Depreciation:** The following are various methods for prodiving depreciation:
  1. Uniform charge methods
     - (a) Fixed instalment method
     - (b) Depletion method
     - (c) Machine hour rate method
  2. Declining charge or accelerated depreciation methods:
     - (a) Diminishing balance method
     - (b) Sum of years digits method
     - (c) Double declining method
  3. Other methods:
     - (a) Group depreciation method
     - (b) Inventory system of depreciation
     - (c) Annuity method
     - (d) Depreciation fund method
     - (e) Insurance policy method

Depreciation of Different Assets: The following observations can be made regarding charging of depreciation of different assets:

- (i) **Goodwill:** Since, goodwill is an intangible asset, it will be advisable to write off the value of the goodwill over a reasonable period. The amount written off should be shown separately in the Profit and Loss Account.
- (ii) **Freehold land:** No depreciation need be charged in case of such properties.
- (iii) **Freehold buildings, plants, machinery, ship, etc.:** Fixed Instalment Method or Diminishing Balance Method may be used for charging depreciation on these assets.
- (iv) **Leasehold land and buildings:** The Fixed Instalment Method should generally be used for writing off depreciation in respect of such assets.
- (v) **Loose tools, jigs, live stock, etc.:** Revaluation Method is the most appropriate method for charging depreciation on these assets.
- (vi) **Patents, trademarks, etc.:** Such assets should be depreciated according to the Fixed Instalment Method in a way so that they are written off within the legal or commercial life, whichever is shorter.
- (vii) **Mines, oil wells, quarries, etc.:** Depreciation should be charged according to the Depletion Method in case of these assets.

Depreciation on Replacement Cost: On account of practical difficulties, it will be advisable to charge depreciation on the historical cost of the asset. However, in case it is desired to provide enough funds for replacement of the asset at the end of its useful life, the following steps may be taken:

- (i) A replacement reserve may be created in the books of accounts of the business.
- (ii) The Replacement Reserve Account should be credited every year with interest at the current rate on the accumulated balance standing to the credit of this account.

8.18 KEY TERMS

- **Amortization:** The process of writing off the intangible assets.
- **Capital:** Owners' equity in the business.
- **Current Assets:** Assets, which have been acquired with the intention of converting them into cash during the normal operating cycle of the business.
- **Depletion:** The portion of the cost of the natural resources recognized as an expense for each period.
- **Dilapidation:** Damage done to a building or other property during tenancy.
- **Depreciation:** The portion of the cost of tangible operating assets (other than land) recognized as an expense for each period.
- **Depreciation Accounting:** A system of accounting which aims to distribute the cost or other basic values of tangible capital assets (less salvage, if any) over the estimated useful life of the asset in a systematic and rational manner.
- **Equities:** The rights to properties are called Equities.
- **Fixed Assets:** Assets held with the intention of being used on a continuous basis for the purpose of producing or providing goods or services and are not held for resale in the normal course of business.
- **Intangible Assets:** Assets which have no physical existence.
- **Liabilities:** Financial obligations of the enterprise other than the owners'.
- **Wasting Assets:** All natural resources that are subject to exhaustion through extraction.

8.19 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*a*) True, (*b*) False, (*c*) False, (*d*) True, (*e*) False, (*f*) True, (*g*) True, (*h*) True, (*i*) False
2. (*i*) (*a*), (*ii*) (*b*), (*iii*) (*c*), (*vi*) (*a*), (*v*) (*b*), (*vi*) (*c*), (*vii*) (*b*), (*viii*) (*b*), (*xi*) (*b*), (*x*) (*b*), (*xi*) (*c*).

8.20 QUESTIONS AND EXERCISES

1. Explain the need and significance of depreciation. What factors should be considered for determining amount of depreciation?
2. Distinguish between "straight line method" and "diminishing balance method" of providing depreciation. Which one of the above two methods would you recommend to provide depreciation on Plant and Machinery?
3. Explain the circumstances under which different methods of depreciation can be employed.

8.21 PRACTICAL PROBLEMS

Straight Line Method

1. On 1st January, 1998, a merchant purchased some furniture costing Rs 55,000. It is estimated that its working life is 10 years at the end of which it will fetch Rs 5,000. Additions are made on 1 January, 1998 and 1 July 2001, to the value of Rs 9,500 and Rs 8,400 (residual values Rs 500 and Rs 400 respectively). Show the Furniture Account for the first four years, if depreciation is written off according to the straight line method.

   [**Ans.** Balance of Furniture Account on 1 January., 2002 Rs 49,800]

2. A company provides depreciation under the straight line method at the rate of 10% p.a. The balance standing in the Plant and Machinery Account on 31 December 1995, after writing off depreciation for the year, was Rs 1,95,150 (total cost price of the plant was Rs 3,58,000).

   During January 1996 a new plant was purchased at a cost of Rs 29,500 and one machine which had cost Rs 5,500 in 1984 was sold as scrap for Rs 400.

   During January 1997, there were additions costing Rs 18,000 and a machine which had cost Rs 7,000 in 1992 was sold for Rs 3,500.

   Write up the Plant and Machinery Account for 1996 and 1997.

   [**Ans.** Balance as on 31 December, 1996 Rs 1,85,900, Dec. 31, 1997, Rs 1,60,550]

   [**Hint.** Profit of Rs 400 on machinery sold as scrap will be taken direct to P & L Account]

3. The following balances appear in the books of Mahajan Brothers:

		Rs
Jan. 1, 2000	Machinery Account	40,000
Jan. 1, 2000	Provision for Depreciation	18,000

On 1st January, 2000 they decided to sell a machinery for Rs 4,350. This machine was purchased for Rs 8,000 in January, 1996.

You are required to prepare Machinery Account and Provision for Depreciation Account on 31st Dec. 2000, assuming the firm has been charging depreciation at 10% p.a. on straight line method.

[**Ans.** Balances: Machinery Account Rs 32,000; Provision for Depreciation Account Rs 18,000]

Diminishing Balance Method

4. A plant is purchased for Rs 20,000. It is depreciated at 5% per annum on reducing balance for five years when it becomes obsolete due to new method of production and is scrapped. The scrap produces Rs 5,385. Show the plant account in the ledger.

[**Ans.** Loss on sale Rs 10,091; Depreciation 1st year Rs 1,000; 2nd year Rs 950; 3rd year Rs 902; 4th year Rs 857; 5th year Rs 815]

5. On 1 January 1992 Bhola Nath Dutt & Sons purchased a machine costing Rs 1,00,000. Its working life is 10 years. It has been decided to depreciate it at the rate of 12 ½ per cent on the Diminishing Balance Method. Show the Machinery Account for first three years.

6. If an asset was purchased for Rs 50,000 on 1st January, 1998, what would be its book value three years after if it was depreciated according to the following methods: (*i*) Straight Line Method, and (*ii*) Written Down Value Method. The rate of depreciation is 10% per annum. Show your answer by a tabular ledger account.

[**Ans.** Straight Line Method Rs 35,000; Written Down Value Method Rs 36,450]

Depreciation Fund Method

7. A company purchased a four years' lease on 1 January, 1995 for Rs 20,150. It is decided to provide for the replacement at the end of four years by setting up a Depreciation Fund. It is expected that investments will fetch interest at 4 per cent. Sinking Fund tables show that to provide the requisite sum at 4 per cent at the end of four years, an investment of Rs 4,745.02 is required. Investments are made to the nearest rupee.

   On December 31, 1998, the investments are sold for Rs 14,830. On 1st January, 1999, the same lease is renewed for a further period of 4 years by payment of Rs 22,000.

   Show journal entries and give the important ledger accounts to record the above.

[**Ans.** Amount credited to the Profit and Loss Account at the end of December, 1998 Rs 17.56]

Insurance Policy Method

8. Chilies Ltd. acquired a long-term lease of property on payment of Rs 60,000. A Leasehold Redemption Policy was taken out on which an annual premium of Rs 1,440 was payable. The surrender value of the policy on 31st March, 1997 was Rs 12,896 to which amount the policy account stood adjusted. Next premium was paid on 20th December, 1997 and the surrender value on 31st March, 1998 was Rs 14,444.

   (i) Show the Redemption Fund Account and the Policy Account for the year ended 31 March 1998.

   (ii) Assuming that on maturity, a sum of Rs 60,100 was received and the balance in Policy Account then stood at Rs 59,920 give the ledger accounts showing the entries necessary to close the accounts concerned.

[**Ans.** (*i*) Balance at the end of 1998 Fund A/c & Policy A/c Rs 14,444 each,

(*ii*) Transfer to P & L A/c profit on maturity Rs 100]

Depletion Method

9. Burdwan Collieries Ltd. acquired the lease right for 20 years of a mine on 1 January, 1989 on a lump payment of Rs 5,00,000 to the landlord. It was estimated by the expert that the coal deposit of the mine was Rs 20,00,000 tonnes, 75 per cent, of which could be raised within the time period. The company decided to write off the Lease Account under straight line method of depreciation. The Lease Account was shown accordingly for the first five years. On 31st October, 1994, the Board of Directors decided to depreciate the Lease on "Depletion" method with retrospective effect from 1 January, 1989. The annual raising were:

1989	20,000 tonnes
1990	30,000 tonnes
1991	1,00,000 tonnes
1992	2,00,000 tonnes
1993	2,00,000 tonnes
1994	2,00,000 tonnes

You are required to show the Lease A/c from 1 January, 1989 to 31 December, 1994 showing clearly your calculations.

[**Ans.** Arrears of depreciation in 1994 Rs 58,333, Balance in the Lease Account at the end of 1994 Rs 2,50,000]

Group Depreciation Method

10. The valuation of a group of assets (plant and machinery), on 1 January, 1994 was Rs 32,000 and the estimated life was 8 years. The following purchases and sales took place upto 31 December, 1996:

    Purchases: March 31, 1994, Cost Rs 15,000, estimated life 10 years.

    Sept. 30, 1995, Cost Rs 12,000, estimated life 6 years.

    April 31, 1996, Cost Rs 20,000, estimated life 8 years.

    Sales: Out of initial group of assets, a machine (whose valuation on 1 January, 1994 was Rs 5,000) sold for Rs 4,700 on 30 June, 1996.

    Assuming the break-up value of each asset to be 10 per cent of the initial valuation or original cost, prepare the Asset Account for the first three years.

    [**Ans.** Balance on 31 December 1996, Rs 57,424]

Change and Disposal

11. A company purchased a second-hand machine on 1 January, 1994 for Rs 37,000 and immediately spent Rs 2,000 on its repairs and Rs 1,000 on its erection. On 1 July, 1995 it purchased another machine for Rs 10,000 and on 1 July, 1996 it sold off the first machine for Rs 28,000 bought another for Rs 25,000. On 1 July, 1997, the second machine was also sold off for Rs 2,000.

    Depreciation was provided on machinery at 10 per cent on the original cost annually on 31 December. In 1995, however, the company changed the method of providing depreciation and adopted the written down value method, the rate of depreciation being 15 per cent per annum.

    Give the Machinery Account for four years commencing from the acquisition of the machine. Amounts to be calculated to nearest ten rupees.

    [**Ans.** Balance in the Machinery Account on 31.12.1997 Rs 19,650, Loss on sale of machine in 1995 Rs 300, in 1997 Rs 5,270]

12. A second-hand machinery was purchased on 1 January 1995, for Rs 30,000 and Rs 6,000 and Rs 4,000 were spent on its repairs and erection immediately. On 1st July, 1996, another machinery was purchased for Rs 26,000 and on 1st July, 1997, the first machinery having become obsolete was auctioned for Rs 30,000. On the same date another machine was purchased for Rs 25,000. On 1st July, 1998 the second machinery was also sold off and it fetched Rs 23,000.

    Depreciation was provided on machinery at the rate of 10 per cent on the original cost annually on 31 December. In 1997, the method of providing depreciation was changed to the written down (diminishing value) method, the rate of depreciation being 15 per cent.

    You are required to prepare a machinery account for all the calendar years mentioned above.

    [**Ans.** No Profit or Loss on machinery sold in 1997. Profit on sale of Machinery in 1998 Rs 3,580, Balance in the Machinery Account Rs 19,656]

8.22 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy.*

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management.*

UNIT 9 COMPANY FINANCIAL STATEMENTS

Structure

9.0 Introduction
9.1 Unit Objectives
9.2 Meaning and Types of Financial Statements
9.3 Nature of Financial Statements
9.4 Limitations of Financial Statements
9.5 Preparation of Company Financial Statements
9.6 Profit and Loss Account
9.7 Balance Sheet
9.8 Summary
9.9 Key Terms
9.10 Answers to 'Check Your Progress'
9.11 Questions and Exercises
9.12 Practical Problems
9.13 Further Reading

9.0 INTRODUCTION

In the preceding unit, we have explained the preparation and presentation of financial statements for a non-corporate entity. In the present unit, we are explaining the preparation and presentation of financial statements for a corporate entity. It may be noted that in the latter case, the financial statements are prepared as per the requirements of Schedule VI to the Companies Act, 1956. These requirements along with appropriate illustrations are being incorporated in this unit.

9.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Understand the concept of financial statements
- Identify the various types of financial statements
- Understand the nature and limitations of financial statements
- Learn the basic requirements and the formats of income statement and balance sheet of a company

9.2 MEANING AND TYPES OF FINANCIAL STATEMENTS

A financial statement is an organized collection of data according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm. It may show a position at a moment in time as in the case of a balance sheet, or may reveal a series of activities over a given period of time, as in the case of an Income Statement.[1]

Thus, the term financial statements generally refers to two basic statements: (*i*) the Income Statement, and (*ii*) the Balance Sheet. Of course, a business may also prepare (*iii*) a Statement of Retained Earnings, and (*iv*) a Statements of Changes in Financial Position in addition to the above two statements.

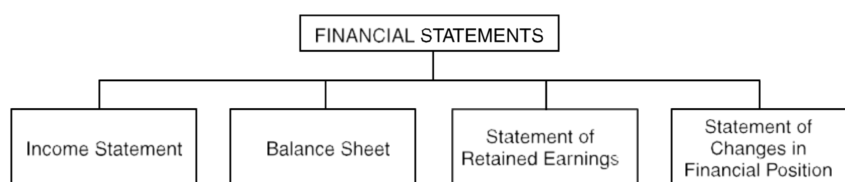

Fig. 9.1 *Financial Statements of a Company*

The meaning and significance of each of these statements is being briefly explained below:

(i) **Income statement:** The Income Statement (also termed as Profit and Loss Account) is generally considered to be the most useful of all financial statements. It explains what has happened to a business as a result of operations between two

[1] Hampton John J., *Financial Decision Making,* Ed. 1977, p. 62.

balance sheet dates. For this purpose it matches the revenue and costs incurred in the process of earning revenues and show the net profit earned or loss suffered during a particular period.

(ii) **Balance sheet:** It is a statement of financial position of a business at a specified moment of time. It represents all assets owned by the business at a particular moment of time and the claims (or equities) of the owner and outsiders against those assets at that time. It is in a way, a snapshot of the financial condition of the business at that time.

(iii) **Statement of retained earnings:** The term retained earnings means the accumulated excess of earnings over losses and dividends. The balance shown by the Income Statement is transferred to the Balance Sheet through this statement, after making necessary appropriations. It is, thus, a connecting link between the Balance Sheet and the Income Statement. It is fundamentally a display of things that have caused the beginning-of-the-period retained earnings balance to be changed into the one shown in the end-of-the-period retained earnings in the balance sheet.

The statement is also termed as Profit and Loss Appropriation Account in case of companies.

(iv) **Statement of changes in financial position:** The Balance Sheet shows the financial condition of the business at a particular moment of time while the Income Statement discloses the results of operations of business over a period of time. However, for a better understanding of the affairs of the business, it is essential to identify the movement of working capital or cash in and out of the business. This information is available in the statement of changes in financial position of the business. The statement may emphasize any of the following aspects relating to change in financial position of the business:

(a) Change in the firm's working capital or Funds Flow Statement

(b) Change in the firm's cash position or Cash Flow Statement

The preparation and utility of these statements have been explained in detail later in the book.

9.3 NATURE OF FINANCIAL STATEMENTS

According to the American Institute of Certified Public Accountants, financial statements reflect "a combination of recorded facts, accounting conventions and personal judgements and the judgements and conventions applied affect them materially." This implies that data exhibited in the financial statements we affected by recorded facts, accounting conventions and personal judgements.

1. **Recorded facts.** The term recorded facts means facts which have been recorded in the accounting books. Facts which have not been recorded in the financial books are not depicted in the financial statements, however material they might be. For example, fixed assets are shown at cost irrespective of their market or replacement price since such price is not recorded in the books.
2. **Accounting conventions.** Accounting conventions imply certain fundamental accounting principles which have been sanctified by long usage. For example, on account of the convention of '*Conversatism*', provision is made for expected losses but expected profits are ignored. This means that the real financial position of the business may be much better than what has been shown by the financial statements.
3. **Personal judgements.** Personal judgements have also an important bearing on the financial statements. For example, *the choice of selecting method of depreciation* lies on the accountant. Similarly, the mode of *amortization* of *fictitious assets* also depends on the personal judgement of the accountant.

9.4 LIMITATIONS OF FINANCIAL STATEMENTS

Financial statements are prepared with the objective of presenting a periodical review or report on the progress of the business by the management and deal with the (*i*) status of the investments in the business and (*ii*) results achieved during the period under review. However, these objectives are subject to certain limitations as given below:

1. **Financial statements are essentially interim reports.** The profit shown by the Profit and Loss Account and the financial position as depicted by the Balance Sheet is not exact. The exact position *can be known only when the business is closed down.* Again, the existence of contingent liabilities, deferred revenue expenditure etc., make them more imprecise.
2. **Accounting concepts and conventions.** Financial statements are prepared on the basis of certain accounting concepts and conventions. On account of this reason, the financial position as disclosed by these statements may not be realistic. For example, fixed assets in the balance sheet are shown on the basis of '*going concern concept'.* This means that value placed on fixed assets in the balance sheet may not be the same which *may be realized on their sale*. On account of convention of conservatism, the income statement may not disclose true income of the business since probable losses are considered while probable incomes are ignored.

3. **Influence of personal judgement.** Many items are left to the personal judgement of the accountant. For example, the method of depreciation, mode of amortization of fixed assets, treatment of deferred revenue expenditure all depend upon the personal judgement of the accountant. The soundness of such judgment will necessarily depend upon his competence and integrity. However, the convention of consistency acts as a controlling factor on making indiscreet personal judgements.
4. **Disclose only monetary facts.** Financial statements do not depict those facts which cannot be expressed in terms of money. For example, development of a team of loyal and efficient workers, enlightened management, the reputation and prestige of management with the public, are matters which are of considerable importance for the business, but they are nowhere depicted by financial statements.

An investor while relying on financial statements must keep the above limitations in view.

9.5 PREPARATION OF COMPANY FINANCIAL STATEMENTS

The financial statements, as discussed above, basically comprise of two statements *viz.* income statement or profit and loss account and the balance sheet. They are usually prepared at the end of the accounting period, hence they are also termed as final accounts of the company. In case of companies, the final accounts have been termed as annual accounts and balance sheet. Section 210 of the Companies Act governs the preparation of the final accounts of a company. The important provisions regarding the preparation of the above accounts are as follows:

(i) At every annual general meeting of the company, the Board of Directors of the Company shall lay before the company:

(a) the balance sheet as at the end of the accounting period, and

(b) a profit and loss account for that period.

In the case of a company not carrying on business for profit, an income and expenditure account shall be laid before the company at its annual general meeting instead of profit and loss account.

(ii) The profit and loss account (or the income and expenditure account) relate to the period—

(a) in the case of first annual general meeting of the company from the date of incorporation of the company to a date not more than 9 months before the meeting and

(b) in the case of any subsequent annual general meeting from the date immediately after the period for which account was last submitted to not more than 6 months before the meeting.

The period for which the account has been prepared is called the financial year. It may be less or more than a calendar year but it shall not exceed 15 months. However, with the permission of the Registrar, it may extend to 18 months.

According to Section 211, the profit and loss account and the balance sheet of a company must give a true and fair view of the state affairs of the company. The balance sheet should be in the form as given in Part *I* of Schedule *VI* or as near thereto as the circumstances admit. The form has been given latter in the unit. The profit and loss account should comply with the requirements of Part *II* of Schedule *VI* to the Companies Act. Part *III* to Schedule *VI* only interprets certain terms used in Schedule *VI*, Part *I* and Part *II*. Part *IV* has been added *w.e.f.* 15.5.1995. Part *IV* comprises of Balance Sheet Abstract an a Company's General Business Profile.

According to Companies (Amendment) Act, 1999 (*w.e.f.* 31.10.1998), every Profit & Loss Account and Balance Sheet has to comply with the accounting standards as issued by the Institute of Chartered Accountants of India a consulation with National Advisory Committee on Accounting Standards established under the Companies Act. Where the profit and toss account and balance sheet do not comply with the accounting standards, such companies shall disclose in its profit and loss account and balance sheet the following:

(a) deviations from the accounting standards,

(b) the reasons for such deviations, and

(c) the financial effects arising from such deviations.

The balance sheet and profit and loss account of the company have to be duly signed on behalf of the company by persons as per the provisions of Section 215 of the Companies Act. They should be accompanied with the Directors' and Auditors' report. The Directors' report should contain besides other prescribed particulars, the amount if any which the board recommends to be paid by way of dividend and a statement showing the name of every employee of company who has been paid remuneration for that year at a rate which is not less than Rs. 2,00,000 per month.*

A copy of the final accounts (*i.e.*, the profit and loss account and the balance sheet together with Directors' and Auditors' reports) should be sent not less than 21 days before the date of the annual general meeting to every member

* Raised from Rs. 1,00,000 p.m. *w.e.f.* 17.4.2002.

of the company, every debenture-holder and every trustee for the debenture holders. Three copies of such accounts and reports must be filed with the Registrar within 30 days from the date on which they were so laid in the meeting.

In the following pages, we are giving the particulars as required by Schedule *VI* both in respect of the profit and loss account and the balance sheet and the special points which the students must keep in mind while preparing them.

9.6 PROFIT AND LOSS ACCOUNT

Requirements of the Profit & Loss Account

The requirements of the profit and loss account can be put into two categories:

1. General Requirements; and
2. Special Requirements as per Schedule *VI*, Part *II*

1. General Requirements. These basically relate to three matters :

(i) **Heading.** In case of companies; it is not necessary to split the profit and loss account into three sections *viz*. Trading Account, Profit and Loss Account and Profit & Loss Appropriation Account. Of course splitting up of the account into three sections is not forbidden and should be done to give a better view about the profit earned and distributed by the company during a particular period.

The Profit & Loss Account can be prepared under two headings:

(a) Profit & Loss Account giving details regarding the Gross Profit and the Net Profit earned by the company during a particular period.

(b) Profit & Loss Appropriation Account giving details regarding the balance of Profit & Loss A/c brought forward from the last year, the Net Profit (or loss) terned (or made) during the year and appropriations made during the year.

Items which are shown in the Profit & Loss Account are popularly termed as items appearing "above the line". While the items which are shown in the Profit & Loss Appropriation Account are popularly termed as items appearing "below the line".

(ii) **Provision for Taxation.** Companies are charged income tax at a high rate. Usually the tax rate is about 40% or more of the taxable profits. Though provision for taxation is an appropriation of profits, yet the common practice is to show it "above the line" *i.e*., in the Profit & Loss Section and not in Profit & Loss Appropriation Section. In other words, profit after tax is taken from "Profit & Loss Account" to "Profit & Loss Appropriation Account". However, tax for a previous period new provided or refunded for is charged or credited to the P & L Appropriation Account.

(iii) **Accounting Year.** Though the Companies Act permits a company to select any period of 12 months as its accounting year, on account of tax laws it has become almost obligatory for every company to close its books of accounts on 31st March, every year.

2. Special Requirements as per Schedule *VI*, Part *II*. The Profit & Loss Account of a company must be prepared in accordance with the requirement of Part *II* of Schedule *VI* of the Companies Act, 1956. These requirements are summarised as follows:

(i) The Profit & Loss Account should clearly disclose the result of the working of the company during the period covered by the account. It should disclose separately incomes and expenses of a non-recurring nature and exceptional transactions. The Profit & Loss Account should particularly disclose information in respect of the following items:

(a) The turn-over of the company

(b) Commission paid to sole-selling agents

(c) Commission paid to other selling agents

(d) Brokerage and discount on sales other than the usual trade discount

(e) Opening and closing of goods, purchases made or cost of goods manufactured or value of services rendered during the period covered by the account.

(f) Interest on company's debentures and other fixed loans

(g) Amount charged as income tax

(h) Remuneration payable to the managerial personnel

(i) Amount paid to auditor for services rendered as — (*a*) auditor and (*b*) as advisor in any other capacity *viz*. taxation matters, company law matters, management services etc.

(j) The details of licensed, installed and actual capacity utilized

(k) Value of imports, earnings in foreign exchange and amounts remitted during the year in foreign currencies on account of dividends.

For the sake of convenience of the students, we are giving below format of Profit & Loss Account of a company:

.....Company Limited

PROFIT AND LOSS ACCOUNT

For the year.........

To Opening Stock	....	By Sales (*less* returns)	....
To Purchase (*less* returns)	....	By Closing Stock	
To Wages	....	By Gross Loss (c/d)*	....
To Manufacturing Expenses	....		
To Gross Profit (c/d)*	....		
	....		....
To Gross Loss b/d*	....	By Gross Profit b/d*	....
To Salaries	....	By Dividends	....
To Rent	....	By Net Loss c/d**	....
To Insurance	....		
To Lighting	....		
To Auditors' Fees	....		
To Depreciation	....		
To Travelling & Conveyance	....		
To Printing & Stationery	....		
To Directors' Fees	....		
To Managing Director's	....		
Remuneration	....		
To Provision for Taxation	....		
To Net Profit c/d**	....		....

*/** of the two only one figure will appear.

PROFIT & LOSS APPROPRIATION ACCOUNT

For the year ending

	Rs.		Rs.
To Net Loss for the year*	....	By Balance b/d	....
To Transfer to Reserves	....	By Net Profit for the year*	....
To Proposed Dividends	....	By Balance c/d**	....
To Balance c/d**	....		
	....		....

*/** of the two only one figure will appear.

9.7 BALANCE SHEET

According to Section 210 of the Companies Act, a company is required to prepare a balance sheet at the end of each trading period. Section 211 requires the balance sheet to be set up in the prescribed form. This provision is not applicable to banking, insurance, electricity and other companies governed by special Acts. The Central Government has also the power to exempt any class of companies from compliance with the requirements of the prescribed form if it deems so to be in public interest. The object of prescribing the form is to elicit proper information from the company so as to give a 'true and fair' view of the state of the company's affairs. As a matter of fact, both window dressing and creating secret reserves will be considered against the provisions of Section 211.

Schedule *VI*, Part *I* gives the prescribed form of a company's balance sheet. Notes and instructions regarding various items have been given in brackets below each item. It may be noted that if information required to be given under any of the items or sub-items in the prescribed form cannot be conveniently given on account of lack of space, it may given in a separate schedule or schedules. Such schedules will be annexed to and form part of the balance sheet.

Schedule *VI*, Part *I* permits presentation of balance sheet both in horizontal as well as vertical forms. The forms with necessary notes, explanations, etc. are given in the following pages:

HORIZONTAL FORM OF BALANCE SHEET
SCHEDULE VI PART I
(See Section 211)

Balance Sheet of ...... (*Here enter the name of the company*)
as on .... (*Here enter the date as which the balance sheet is made out*)

Figures for the previous year Rs.	*Liabilities*	*Figures for the current year Rs.*	*Figures for the previous year Rs.*	*Assets*	*Figures for the current year Rs.*
	Share Capital *Authorised*: ..... shares of Rs......each *Issued:* (distinguishing between the various classes of capital and stating the particulars specified below, in respect of each class)... Shares of Rs ..... each Subscribed : (distinguishing between the various classes of capital and stating the particulars specified below, in respect of each class) .... shares of Rs. .... called up. (Of the above shares .... shares are allotted as fully paid up pursuant to a contract without payment being received in cash. Of the above shares.....shares are allotted as fully paid up by way of bonus shares) Specify the source from which bonus shares are issued, *e.g.*, capitalisation of profits or Reserves or from Securities Premium Account. *Less:* Calls unpaid; (i) By directors (ii) By others *Add*: Forfeited Shares: (amount originally paid up) (Any capital profit on reissue of forfeited shares should be transferred to Capital Reserves) **Note:** 1. Terms of redemption or conversion (if any) of any redeemable preference capital are to be stated toge-			**Fixed Assets** Distinguishing as far as possible between expenditure upon (a) Goodwill (b) Land (c) Building (d) Leaseholds (e) Railway Sidings (f) Plant and Machinery (g) Furniture and Fittings (h) Development of Property (i) Patents, Trade Marks and Designs (j) Livestock, and (k) Vehicles, etc. (Under each head, the original cost and the additions thereto and deductions therefrom during the year and the total depreciation written off or provided up to the end of the year is to be stated. Depreciation written off or provided shall be allotted under the different asset heads and deducted in arriving at the value of Fixed Assets. In every case where the original cost cannot be ascertained, without unreasonable expense or delay, the valuation shown by the books is to be given. For the purpose of this paragraph, such valuation shall be the net amount at which an asset stood in the company's books at the commencement of this Act after deduction of the amounts previously provided or written off for depreciation or diminution in value, and where any such asset is sold, the amount of sale proceeds	

Figures for the pre- vious year Rs.	*Liabilities*	*Figures for the current year Rs.*	*Figures for the pre- vious year Rs.*	*Assets*	*Figures for the current year Rs.*
	ther with earliest date of redemption or conversion. 2. Particulars of any option on unissued Share Capital are to be specified. 3. Particulars of the different classes of preference shares are to be given. These particulars are to be given along with Share Capital. In the case of subsidiary companies, the number of shares held by the holding company as well as by the ultimate holding company and its subsidiaries shall be separately stated in respect of Subscribed Share Capital. (The auditor is not required to certify the correctness of such share-holdings as certified by the management). **Reserves and Surplus:** (1) Capital Reserves (2) Capital Redemption Reserves between : (3) Securities Premium Account (showing detail of its utilisation in the manner provided in Section 78 in the year of utilisation). (4) Other Reserves specifying the nature of each Reserve and the amount in respect thereof. *Less :* Debit balance in profit and loss account (if any). (The debit balance in the Profit and Loss Account shall be shown as a deduction from the uncommitted reserves, if			shall be shown as deduction. Where sums have been written off on a reduction of capital or a revaluation of assets, every balance sheet (after the first balance sheet) subsequent to the reduction or revaluation shall show the reduced figures with the date of the reduction in place of the original cost. Each balance sheet for the first five years subsequent to the date of the reduction, shall show also the amount of the reduction made. Similarly, where sums have been added by writing up the assets, every balance sheet subsequent to such writing up shall show the increased figures with the date of the increase in place of the original cost. Each balance sheet for the first five years subsequent to the date of the writing up shall also show the amount of increase made). **Investments:** Showing nature of investment and mode of valuation, for example, cost or market value, and distinguishing bet between: (1) Investments in Government or Trust Securities. (2) Investments in Shares, Debentures or Bonds. (Showing separately shares fully paid up and partly paid up and also distinguishing the different classes of shares and showing also in similar details investments in shares, debentures or bonds of subsidiary companies). (3) Immovable Properties. (4) Investments in the Capital of Partnership Firms. (Aggregate amount of Company's	

(*Contd.*)

Figures for the pre-vious year Rs.	*Liabilities*	*Figures for the current year Rs.*	*Figures for the pre-vious year Rs.*	*Assets*	*Figures for the current year Rs.*
	any). (5) Surplus, *i.e.* balance in profits and loss account after providing for proposed allocation, namely : dividends, bonus and reserves. (6) Proposed additions to Reserves. (7) Sinking Funds. Additions and deductions since last balance sheet to be shown under each of the specified heads. The word "fund" in relation to any "Reserve" should be used only where such Reserve is specifically represented by earmarked investments. **Secured Loans:** (1) Debentures (2) Loans and Advances from Banks. (3) Loans and Advances from subsidiaries. (4) Other Loans and Advances. (Loans from directors and/or manager should be shown separately) Interest accrued and due on Secured Loans should be included under the appropriate sub-heads under the head "Secured Loans." The nature of security to be specified in each case. Where loans have been guaranteed by managers and/or directors, a mention thereof shall also be made and also the aggregate amount of such loans under each head. In case of Debentures, terms of redemption or conversion (if any) are to be stated together with earliest date of			quoted investments and also the market value thereof shall be shown). (Aggregate amount of company's unquoted invest-ments shall also be shown). **Current Assets, Loans and Advances** *(A) CURRENT ASSETS:* (1) Interest accrued on Investments: (2) Stores and Spare Parts. (3) Loose Tools. (4) Stock-in-trade. (5) Work-in-Progress. (In respect of (2) and (4) mode of valuation of stock shall be stated and the amount in respect of raw materials shall also be stated separately where practicable. Mode of valuation of work-in-progress shall be stated]. (6) Sundry Debtors (a) Debts outstanding for a period exceeding six months. (b) Other debts : *Less*: Provision. (The amounts to be shown under Sundry Debtors shall include the amounts due in respect of goods sold or services rendered or in respect of other contractual obligations but shall not include the amounts which are in the nature of loans or advances). In regard to Sundry Debtors particulars to be given separately of: (*a*) debts considered good and in respect of which the company is fully secured;	

Figures for the previous year Rs.	*Liabilities*	*Figures for the current year Rs.*	*Figures for the previous year Rs.*	*Assets*	*Figures for the current year Rs.*
	redemption or conversion. **Unsecured Loans:** (1) Fixed Deposits, (2) Loans and advances (from subsidiaries). (3) Short-Term Loans and Advances: (a) From Banks. (b) From Others. (Short-term loans Include those which are due for repayment not later than one year as at the date of the balance sheet. (4) Other Loans and Advances: (a) From Banks. (b) From Others. (Loans from directors and/or manager should be shown separately). Interest accrued and due on Unsecured Loans should be included under the appropriate sub-heads under the head "Unsecured Loans." (Where Loans guaranteed by manager, and/or directors, a mention thereof shall also be made together with the aggregate amount of such loans under each head. This does not apply to Fixed Deposits). **Current Liabilities and Provisions:** *A. Current Liabilities* (1) Acceptances. (2) Sundry Creditors. (i) Total dues to small scale undertakings (inserted *w.e.f.* 2.2.1999) (ii) Total dues of creditors other than small scale industrial undertakings (inserted *w.e.f.* 2.2.1999) (3) Subsidiary Companies. (4) Advance payments and unexpired discounts for the portion for which value has			(b) debts considered good for which the company holds no security other than the debtor's personal security; and (c) debts considered doubtful or bad. 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 of private companies respectively in which any director is a partner or a director or a member to be separately stated. Debts due from other companies under the same management within the meaning of sub-section (1-B) of Section 370 to be disclosed with the names of the companies. The maximum amount due by directors of other officers of the company at any time during the year to be shown by way of a note. The provision to be shown under this head should not exceed the amount of debts stated to be considered doubtful or bad and any surplus of such provision, if already created, should be shown at every closing under "Reserves and Surplus" (in the Liabilities side) under a separate sub-head "Reserve for Doubtful or Bad Debts.") (7A) Cash balance on hand. (7B) Bank Balances: (a) with Scheduled Banks. (b) with others. (In regard to bank balances	

(*Contd.*)

Figures for the previous year Rs.	*Liabilities*	*Figures for the current year Rs.*	*Figures for the previous year Rs.*	*Assets*	*Figures for the current year Rs.*
	still still be given, *e.g.* in the case of the following companies: Newspaper, Fire Insurance, Theatres, Clubs, Banking, Steamship companies, etc. (5) Unclaimed Dividends. (6) Other Liabilities (if any) (7) Interest accrued but not due on loans. (The names of small-scale industrial undertakings to whom the company owes any sum including interest which is outstanding for more than 30 days, are to be disclosed (inserted *w.e.f.* 22.5.2002) *B. Provisions* (8) Provision for Taxation (9) Proposed Dividends. (10) For Contingencies. (11) For Provident Fund schemes. (12) For insurance, pension and similar staff benefit schemes. (13) Other provisions. A foot-note to the balance sheet may be added to show separately: (1) Claims against the company not acknowledged as debts. (2) Uncalled liability on shares partly paid. (3) Arrears of fixed cumulative dividends. (The period for which the dividends are in arrears or if there is more than one class of shares, the dividends on each such class that are in arrears, shall be stated. The			particulars to be given separately of: (a) the balance lying with Scheduled Banks on current accounts, call accounts and deposit accounts. (b) the names of the bankers other than Scheduled Banks and the balances lying with each such banker on current account, call account and deposit account and the maximum amount outstanding at any time during the year with each such banker, and (c) the nature of the interest, if any, of any director or his relative in each of the bankers other than Scheduled Banks referred to in (*b*) above! (*B*) *Loans and Advances:* (8) (*a*) Advances and loans to subsidiaries. (*b*) Advances and loans to partnership firms in which the company or any of its subsidiaries is a partner. (9) Bills of Exchange. (10) Advances recoverable in cash or in kind or for value to be received, *e.g.*, Rates, Taxes, Insurance, etc. (11) Balance with Customs, Port Trust, etc. (where payable on demand). [The instructions regarding Sundry Debtors apply to "Loans and Advances" also. The amounts due from other companies under the same management within the meaning of sub-section (1-B) of Section 370 should also be given with the names of the companies; the maximum amount due from every one of these at any time during the year must be shown].	

(*Contd.*)

Figures for the pre- vious year Rs.	*Liabilities*	*Figures for the current year Rs.*	*Figures for the pre- vious year Rs.*	*Assets*	*Figures for the current year Rs.*
	amount shall be stated before deduction of income-tax, except that in case of the tax-free dividends the amount shall be shown free of income tax and the fact that it is so shown shall be stated). (4) Estimated amount of contracts remaining to be executed on capital account and not provided for. (5) Other moneys for which the company is contingently liable. (The amount of any guarantees given by the company on behalf of directors or other officers of the company shall be stated and where practicable, the general nature and amount for each such contingent liability, if material, shall also be specified).			**Miscellaneous Expenditure** (to the extent not written off or adjusted). (1) Preliminary expense. (2) Expenses including commission or brokerage or underwriting or subscription of shares or debentures. (3) Discount allowed on the issue of shares or debentures. (4) Interest paid out of capital during construction (also stating the rate of interest). (5) Development expenditure not adjusted. (6) Other sums (specifying nature). **Profit and Loss Account** (Show here the debit balance of profit and loss account carried forward after deduction of the uncommitted reserves, if any).	

...Limited

BALANCE SHEET

As on ....

Fig- ures for the pre- vious year	*Liabilities*	*Figures for the current year*	*Fig- ures for the pre- vious year*	*Assets*	*Figures for the current year*
	SHARE CAPITAL			FIXED ASSETS	
	Authorised :				
....	... shares of Rs.........each	....	....	Goodwill	....
....	Issued :		....	Land	....
....	Share of Rs........ each	....	....	Building	....
	Subscribed :			Plant	....
	... Share of Rs. ... each ... Rs.			Vehicles	....
	Per share called up				
....	Less : Calls in Arrears Rs....	....			

(*Contd.*)

Figures for the previous year	*Liabilities*	*Figures for the current year*	*Figures for the previous year*	*Assets*	*Figures for the current year*
				INVESTMENTS	
....			....	Government Securities	....
	RESERVES & SURPLUS		....	Shares	....
....	Securities Premium	....	....	Debentures and Bonds	
....	General Reserve	....			
....	Profit & Loss Balance	....		CURRENT ASSETS,	
	(Profit)			LOANS & ADVANCES	....
				A. Current Assets :	
			....	Stock in trade	....
	SECURED LOANS		....	Loose Tools	....
....	Debentures	....	....	Work-in-progress	....
....	Loans from Banks	....	....	Sundry Debtors	....
	UNSECURED LOANS		....	Cash & Bank Balance	....
....	Fixed Deposits	....		B. LOANS & ADVANCES	....
....	Loans from Banks	....	....	Bills of Exchange	....
	CURRENT LIABILITIES				
	AND PROVISIONS		....	Advances to Subsidiaries	....
	A. Current Liabilities		....	Balance with custom	....
....	Bills Payale	....		authorities	....
....	Sundry Creditors	....		MISC. EXPENDITURE	....
....	Unclaimed Dividends	....	....	Preliminary Expenses	....
	B. Provisions		....	Under-writing Commission	....
....	Provision for Taxation	....		Discount on Issue of Shares	....
....	Proposed Dividends	....		PROFIT & LOSS	
	Contingent Liabilities		....	ACCOUNT (*Loss*)	....
	(*i*) Claims against company		....		
	not acknowledged				
	as debts				
	(*ii*) Uncalled liability on				
	shares partly paid				
	(*iii*) Arrears of fixed cumu-				
	lative dividends	....	....		
....		....	....		....

VERTICAL FORM OF BALANCE SHEET*

Name of the Company ....

Balance Sheet as at .... Rupees in Lakhs

Particulars	*Schedule No.*	*Figures as at the end of the current financial year*	*Figures as at the end of the previous financial year*
I. Sources of Funds			
(1) *Shareholders' Funds*			
(*a*) Capital	*I*	2,700	2,700
(*b*) Reserves and Surplus	*II*	600	200
(2) *Loan Fund*			
(*a*) Secured Loans	*III*	6,000	5,000
(*b*) Unsecured Loans	*IV*	200	—
Total		9,500	7,900

(*Contd.*)

Particulars	*Schedule No.*	*Figures as at the end of the current financial year*		*Figures as at the end of the previous financial year*	
II. Applications of Funds					
(1) Fixed Assets	*V*				
(*a*) Gross Block		10,000		8,000	
(*b*) Less : Depreciation		1,500		800	
(*c*) Net Block		8,500		7,200	
(*d*) Capital Work-in-Progress		200		100	
(2) Investments	*VI*		8,700		7,300
(3) Current Assets, Loans and Advances	*VII*		80		80
(*a*) Inventories		2,000		1,500	
(*b*) Sundry Debtors		500		300	
(*c*) Cash and Bank Balances		100		150	
(*d*) Other Current Assets		400		100	
(*e*) Loans and Advances		200		200	
		3,200		2,250	
Less : Current Liabilities and Provisions	*VIII*				
(a) Liabilities		2,000		1,200	
(b) Provisions		480		530	
		2,480		1,730	
Net Current Assets	(*VII*) - (*VIII*)		720		520
(4) (*a*) Miscellaneous Expenditure to the extend not written off or adjusted			—		—
(*b*) Profit and Loss Account			—		—
Total			9,500		7,900

CHECK YOUR PROGRESS

1. True or False:
   (i) A company's Profit & Loss Account is to be prepared as per the requirements of Schedule VI, Part II.
   (ii) In case of companies gross profit and net profit are required to be computed separately.
   (iii) The Profit & Loss Account should give separate details regarding remuneration paid to the auditors for audit and other services.
   (iv) Loose tools are shown as an item of current assets in a company's balance sheet.
   (v) Debit balance of the Profit & Loss Account is shown on the assets side of the company's balance sheet.
   (vi) Provision for taxation is shown below the line in the company's Profit & Loss Account.

Illustration 9.1. Mention the major headings under which the assets of a company are to be shown in the Balance Sheet as per Schedule *VI* of the Companies Act.

Solution:

The major headings under which the assets of a company are to be shown as per Schedule *VI* are as follows:

1. Fixed Assets
2. Investments
3. Current Assets, Loans and Advances
4. Miscellaneous Expenses
5. Profit & Loss A/c (Debit Balance).

Illustration 9.2. Mention the major headings under which the liabilities of a company are to be displayed as per Schedule *VI* of the Companies Act.

Solution:

The major headings under which the liabilities of a company are to be displayed as per schedule *VI* of the Companies Act are as follows:

1. Share Capital
2. Reserves and Surplus
3. Secured Loans
4. Unsecured Loans
5. Current Liabilities & Provisions
6. Contingent Liabilities : They are to be shown in the inner column of the balance sheet or outside the balance sheet in the form of a foot-note.

Illustration 9.3. Define Contingent Liability and state the items which are to be placed under the heading "contingent liabilities" in a company's balance sheet.

Solution:

Contingent liability means "an obligation relating to an existing condition or situation which arise in view of depending on the occurrence or non-occurrence of one or more uncertain future events." In other words, such a liability may or may not happen.

The following are the items which are placed as Contingent Liabilities in a company's balance sheet:

1. Claims against the company not acknowledged as debts.
2. Uncalled amount on the partly paid shares held by the company.
3. Arrears of fixed cumulative dividends on preference shares.
4. Estimated amount of contracts remaining to be executed on capital accounts and not provided for.
5. Other monies for which the company is contingently liable.

Illustration 9.4. Re-arrange the following items under appropriate heads:

(*a*) Live stock, (*b*) Loose tools, (*c*) Goodwill, (*d*) Trade marks, (*e*) Bills Receivable, (*f*) Debtors, (*g*) Land, (*h*) Leasehold, (*i*) Stock-in-trade, (*j*) Stores and spate parts, (*k*) Furniture, (*n*) Vehicles, (*m*) Advance to subsidiary, (*n*) Cash with Bank, (*o*) Cash in hand, (p) Work-in-progress, (*q*) Plant, (*r*) Interest accrued, (*s*) Deposits with Port Trust and Electricity supply company.

Fixed Assets	*Current Assets*	*Loans and Advances*
Goodwill	Interest accrued	Advances to Subsidiary
Land	Store and spare parts	Bills Receivable
Leasehold	Loose tools	Deposits with Port Trust
Plant	Stock-in-trade	and Electricity Supply
Furniture	Work-in-progress	Company
Trade-marks	Debtors	
Live stock	Cash in hand	
Vehicles	Cash with bank	

Illustration 9.5. *A* Ltd. has an authorized capital of 10,000 shares of Rs 10 each. It offers 8,000 shares to the public for subscription. The public subscribes for only 6,000 shares. *A* Ltd. calls Rs 6 per share. All shareholders pay the amount called up except a holder of 100 shares who fails lo M the second call of Rs 2 per share.

Show the above transactions under the, head 'share capital' in the balance sheet of *A* Ltd.

Solution:

A Ltd.

Extracts from Balance sheet as on ___________

Liabilities		Rs
Share Capital:		
Authorised:		
10,000 shares of Rs 10 each		1,00,000
Issued Capital:		
6,000 shares of Rs 10 each		60,000
Subscribed:		
6,000 shares of Rs 10 each Rs 6 per share called up	36,000	
Less : Calls in arrears on 100 shares @ Rs 2 per share	200	35,800

Illustration 9.6. *B* Ltd. has an authorized capital of 10,000 equity shares of Rs 10 each and 10,000 preference shares of Rs. 10 each. Out of these shares 5,000 equity shares were issued fully paid to the vendors towards payment of the assets purchased from them. The remaining equity shares and preference shares were offered to the public for subscription, which were fully subscribed. The equity shares were fully called up while only Rs 8 per share was called on preference shares. All share holders paid the called up money except the following :

(i) A shareholder holding 200 equity shares failed to pay the final call money of Rs 2 per share. The shares were forfeited.

(ii) A holder of 100 preference shares paid the final call of Rs 2 per share with the first call on those shares. Show the above transactions in the company's balance sheet under the head 'share capital'.

Solution:

B Ltd.

EXTRACTS FROM BALANCE SHEET AS ON............

Liabilities	Rs
Share Capital :	
Authorised :	
10,000 Equity shares of Rs 10 each	1,00,000
10,000 Preference shares of Rs. 10 each	1,00,000
Issued :	
10,000 Equity shares of Rs 10 each	1,00,000
10,000 Preference shares of Rs 10 each (of the above shares),	1,00,000
5,000 Equity shares of Rs 10 each have been allotted as fully paid to vendors for consideration of other than cash)	
Subscribed :	
9,800 Shares of Rs 10 each fully called up	98,000
(Of the above, 5,000 shares have been issued for consideratioin other than cash)	
10,000 Preference Shares of Rs 10 each Rs 8 per share called and paid up	80,000
	1,78,000
Add : Forfeited shares (200 equity shares @ Rs 8 each)	1,600
Add : Calls received in advance (on 100 Preference Shares at the rate of Rs 2 each)	200
	1,79,800

CHECK YOUR PROGRESS

2. Select the most appropriate answer :

(i) The Directors' Report must give details of employees who have been paid a monthly remuneration of not less than–

(a) Rs. 2,00,000 (b) Rs. 60,000 (c) Rs. 1,00,000

(ii) Balance Sheet of a company is to be prepared in the format given in —

(a) Schedule VI, Part I. (b) Schedule VI, Part II. (c) Table A.

(iii) The companies now prefer to close their account for the accounting your ending on —

(a) 31st December (b) 31st March (c) 30th June.

Illustration 9.7. Rearrange the following in the form of a Company Balance Sheet as per Schedule VI Part I of the Companies Act, 1956:

	Rs.
Prepaid Rent	1,000
Underwriting Commission	1,500
Stores and Spares	6,000
Patents	2,000
Bills Payable	30,000
Unclaimed Dividend	12,000

Accounts Receivable	11,000
Shares in NTPC Ltd.	20,000
Deposits with ICICI Bank	50,000
Share Premium	75,000

Solution :

COMPANY'S BALANCE SHEET

Liabilities	*Amount Rs*	*Assets*	*Amount Rs*
Share Capital		**Fixed Assets**	
Authorised, Subscribed and		Patents	2,000
Paid up Capital	—	**Investments**	
Reserves and Surplus:		Shares in N.T.P.C. Ltd.	20,000
Share Premium	75,000	**Current Assets, Loans**	
Secured Loans	—	**and Advances**	
Unsecured Loans	—	(A) Current Assets	
Current Liabilities		Stores & Spares	6,000
and Provisions:	—	Accounts Receivable	11,000
(A) Current Liabilities		Deposits with ICICI Bank	50,000
Bills Payable	30,000	(B) Loans and Advances	
Unclaimed Dividends	12,000	Prepaid Rent	1,000
(B) Provisions	—	**Miscellaneous Expenditure**	
		Underwriting Commission	1,500
		P & L Account	

Illustration 9.8. The following balances have been extracted from the books of Rama Ltd. on 31.12.2006 :

Share Capital Rs. 10,00,000; Share Premium Rs 1,00,000; 12% Rs 5,00,000; Creditors Rs 2,00,000; Proposed Dividend Rs 50,000; Profit and Loss Account (Dr.) Rs. 50,000; Livestock Rs 9,00,000; Government Bonds 4,00,000; Work-in-progress Rs 4,00,000; and Discount on Issue of 12% Debentures Rs 1,00,000.

Prepare the Balance Sheet of the Company as per Schedule VI Part 1 of the Companies Act 1956.

Solution.

Ram Ltd.

BALANCE SHEET

As on 31st Dec. 2006

Liabilities	*Amount Rs*	*Assets*	*Amount Rs*
Share Capital:		**Fixed Assets :**	
Authorised, Issued & Subscribed	10,00,000	Livestock	9,00,000
Reserves & Surplus:		**Instruments**	
Share Premium	1,00,000	Government Bonds	4,00,000
Secured Loans:		**Current Assets, Loans**	
12% Debentures	5,00,000	**& Advances**	
Current Liabilities		(A) Current Assets	
& Provisions:		Work-in-progress	4,00,000
(A) Current Liabilities:		**(B)** Loans & Advances	—
Creditors	2,00,000	**Miscellaneous Expenditures**	1,00,000
Proposed Dividends	50,000	**Profit & Loss Account**	50,000
(B) Provisions	—		
	18,50,000		18,50,000

9.8 SUMMARY

- Final accounts of a corporate entity include an Income Statement (Profit & Loss Account), Profit & Loss Appropriation Account, Cash Flow Statement and Balance Sheet.
- The Profit & Loss Account is to be prepared as per the requirements of Schedule VI Part II, while a balance sheet is to be prepared as per Schedule VI Part I to the Companies Act.

9.9 KEY TERMS

- **Balance Sheet.** A statement of financial position of business at a specified moment of time.
- **Company Final Accounts.** The term includes the profit and loss account (or income and expenditure account in cash of a company not carrying on business for profit) and balance sheet of a company prepared as per the requirements of Schedule *VI* to the Companies Act.
- **Financial Statement.** Organised collection of data according to logical and consistent accounting procedures.
- **Income Statement.** A financial statement which presents the revenues and expenses of an enterprise for an accounting period and shows the excess of revenues over expenses (or *vice-versa*). It is also known as Profit & Loss Statement/ Account.
- **Profit & Loss Appropriation Account.** An account showing distribution of earning durings a particular period.
- **Schedule *VI*.** A schedule attached to the Companies Act consisting basically of two parts. Part *I* gives the form of company's balance sheet while part *II* specifies matters which are to be incorporated in the company's profit and loss account.

9.10 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*i*) T; (*ii*) F; (*iii*) T; (*iv*) T; (*v*) T; (*vi*)
2. (*i*) (*a*); (*ii*) (*a*); (*iii*) (*a*)

9.11 QUESTIONS AND EXERCISES

1. Explain the term 'financial statements'. Discuss their various types.
2. Explain the requirements of Schedule *VI*, Part *II*, regarding the items to be given in a company's profit & loss account.
3. Give in a summarized form, the horizontal form of company's balance sheet as per Schedule *VI*, Part *I* of the Companies Act, 1956.
4. Give the main heads under which the various items appear in case of' vertical form of a company's balance sheet.
5. Draw up a pro forma Balance Sheet of a company.
6. Name the major heading into which the liabilities side of a company's balance sheet is organized and presented.
7. Mention the major heads (in the required serial order) under which various assets of a company are to be presented as per the requirements of the Indian Companies Act.
8. Prepare a layout of information required to be given under the heading "Share Capital" on the liabilities side of a company's Balance Sheet.
9. State the major heads on the assets side of Balance Sheet of a company as per Schedule VI, Part *I* of the Indian Companies Act, 1956.
10. What is a Contingent Liability? Where is it shown in the Balance Sheet? Give three examples of Contingent Liabilities.
11. State any five items which are shown under the heading 'Miscellaneous Expenditure' in the Balance Sheet of a Company as per Schedule *VI*, Part *I* of the Companies Act, 1956.
12. State any five items which are shown under the' heading 'Reserves and Surplus' in the Balance Sheet of a company as per Schedule *VI* Part *I* of the Companies Act, 1956.

9.12 PRACTICAL PROBLEMS

1. Under what headings of Balance Sheet of a company will you classify the following items:

(i) Sundry Debtors (*ii*) Share Premium

(*iii*) Goodwill

[**Ans.** (*i*) Current Assets, Loans & Advances; (*ii*) Reserves & Surplus; (*iii*) Fixed Assets]

2. How would you disclose the following items in the Balance Sheet of a limited company:

(i) Loose Tools (*ii*) Stock

(*iii*) Goodwill (*iv*) Discount on issue of debentures not yet written off

(*v*) Bills Payable (*vi*) Preliminary Expenses

(*vii*) Unclaimed Dividends (*viii*) Share Premium Account

[**Ans.** (*i*) Current Assets, Loans & Advances; (*ii*) Current Assets, Loans & Advances; (*iii*) Fixed Assets; (*iv*) Miscellaneous Expenditure; (*v*) Current Liabilities & Provisions; (*vi*) Miscellaneous Expenditure; (vii) Current Liabilities & Provisions; (viii) Reserves & Surplus.]

3. Under what headings will you show the following items in the Balance Shed of a company:

(i) Securities Premium Account (*ii*) Preliminary Expenses

(*iii*) Bills Receivable (*iv*) Goodwill

(*v*) Authorised Capital

[**Ans.** (*i*) Reserves & Surplus (*ii*) Miscellaneous Expenditure (*iii*) Current Assets & Loans & Advances (*iv*) Fixed Assets (*v*) Share Capital.]

4. State the relevant main headings under which the following items would be disclosed in the Balance Sheet of a limited company:

(i) Goodwill (*ii*) Bills Receivable

(*iii*) Authorised Capital (*iv*) Preliminary Expenses

(*v*) Provision for Tax

[**Ans.** (*i*) Fixed Assets (*ii*) Current Assets & Loans & Advances (*iii*) Share Capital (*iv*) Miscellaneous Expenditure (*v*) Current Liabilities & Provisions.]

5. Under what headings you will show the following items in the Balance Sheet of a joint stock company:

(i) Authorised Capital (*ii*) Share Forfeiture Account

(*iii*) Capital Reserve (*iv*) Secured Debentures

(*v*) Provision for Tax

[**Ans.** Share Capital (*ii*) Share Capital (*iii*) Reserves & Surplus (*iv*) Second Loans (*v*) Current Liabilities & Provisions.]

6. Under what major heads the following items on the Assets side of the Balance Sheet of a company will be presented?

(i) Furniture and Fixtures Account

(ii) Discount on issue of debentures account

[**Ans.** (*i*) Fixed Assets (*ii*) Miscellaneous Expenditure.]

7. Under what major heads the following items on the liability side of de Balance Sheet of a company will be presented?

(i) Share Forfeited Account (*ii*) Securities Premium Account

(*iii*) Unclaimed Dividends (*iv*) Debentures Account

[**Ans.** (*i*) Share Capital (*ii*) Reserves & Surplus (*iii*) Current Liabilities & Provisions (*iv*) Secured Loans.]

8. From the following details compute the amount of current assets to be shown in the company's balance sheet as per Schedule *VI* :

	Rs.
Cash	48,000
Debtors	50,000
Stock	60,000
Trade-Creditors	60,000
Land	20,000
Investments	40,000
Interest Accrued on Investments	5,000
Loose Tools	10,000

[**Ans.** Rs. 1,73,000]

9. Compute the amount of (*a*) Current liabilities; (*b*) Provision; and (*c*) Unsecured loans from the following details:

	Rs.
Bills Payable	10,000.
Sundry Creditors	20,000
Short-term loans from subsidiary companies	20,000
	Rs.

Amount due for purchases from subsidiary companies	10,000
Proposed Dividends	20,000
Unclaimed Dividends	10,000
Employees' Provident Fund	30,000
Provisions for Taxation	30,000
Loans from Bank	20,000
Fixed Deposits	10,000

[**Ans.** (*a*) Rs. 50,000 (*b*) Rs. 80,000 (*c*) Rs. 50,000]

10. Compute the amount of contingent liabilities from the following details:

(i) A customer of the company has filed a claim of Rs. 10,000 for the alleged loss suffered by him on account of faulty quality of the company's goods. The company has challenged the claim in the Court of Law.

(ii) The company holds 1,000 equity shares of Rs. 10 each in X Ltd. Rs. 6 per share has been called up so far.

(iii) The company's share capital consists of 10% cumulative preference shares of Rs. 1,00,000. On account of heavy losses the company could not declare dividends on these shares for the last two years.

(iv) The company has to pay to its retired employees Rs. 20,000 on account of pension and gratuity.

(v) The estimated amount of contracts to be executed on capital account is Rs. 50,000. No provision has yet been made for these contracts.

(vi) The company has given its acceptances in favour of its creditors Rs. 20,000.

[**Ans.** Rs. 84,000]

11. Y Udyog Ltd. has the authorized capital of Rs. 1,00,000 divided into equity shares of Rs. 10 each. The company invited applications for 5,000 shares. Applications for 4,000 shares were received. All calls were made and were duly received except the final call of Rs. 2 per share on 100 shares. Out of the shares on which the final call was not received 75 shares were forfeited. Show how the share capital will appear in the Balance Sheet of the company as per Schedule *VI*, Part *I* of the Companies Act, 1956.

[**Ans.** Total of B/S Rs. 39,800]

12. The following balances have been extracted from the books of Ramesh & Company :

Share Capital Rs. 5,00,000; Share Premium Rs. 50,000; 12% Debentures Rs. 2,50,000; Creditors Rs. 1,00,000; Proposed Dividend Rs. 25,000; Profit and Loss (Dr) Rs. 25,000; Freehold Property Rs. 4,50,000; Shares in ICICI Rs. 2,00,000; Work- in-Progress Rs. 2,00,000; Discount on Issue of Debentures Rs. 50,000.

Prepare the Balance Sheet of the Co. as per Schedule *VI* Part *I* of the Companies Act, 1956.

[**Ans.** Balance Sheet Total Rs. 9,25,000]

13. Prepare a Balance Sheet of V.T. Ltd. as on March 31, 1995 as per provision of Part *I*, Schedule *VI* under Section 211 of the Companies Act, 1956 from the following information:

	Rs.
General Reserve	3,000
Debentures	3,000
Profit & Loss A/c (Cr.)	1,200
Depreciation on Fixed Assets	700
Gross Fixed Assets	9,000
Current Liabilities	2,500
Preliminary Expenses	300
Preference Share Capital	5,000
Current Assets	6,100

[**Ans.** Balance Sheet Total Rs. 14,700]

14. The following balances are supplied, on the basis of which you m required to show the major appropriate heads under which the items given below will appear in the Balance Sheet of Veekay Ltd. as on 31st March, 1995:

	Rs.
Plant and Machinery	5,60,000
Building	10,00,000
Equity Share Capital (Authorised)	20,00,000
Equity Shares of Rs.100 each Rs. 70 called and paid up	14,00,000
10% Debentures	55,000
Discount on Issue of 10% Debentures	5,000
Furniture & Fixture	15,000
Long-Term Bank Loan (Secured)	1,25,000

[**Ans.** Balance Sheet Total Rs. 1,58,000]

9.13 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.
Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 10 CORPORATE DISCLOSURE & FINANCIAL REPORTING

Structure

10.0 Introduction
10.1 Unit Objectives
10.2 Meaning of Corporate Disclosure & Financial Reporting
10.3 Annual Report
10.4 Illustrative Example
10.5 Summary
10.6 Key Terms
10.7 Answers to 'Check Your Progress'
10.8 Questions and Exercises
10.9 Further Reading

10.0 INTRODUCTION

Finance is called as the lifeblood of a business. The efficiency of the organization is, therefore, to a great extent governed by the regularity of the flow of financial information to those who are the real stakeholders in the business, i.e., management, shareholders, employees, government etc. The present chapter deals with different aspects of financial reporting and disclosures with an illustrative example.

10.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Understand the meaning and objectives of Corporate Disclosure/Financial Reporting
- State the key components of corporate financial statements
- List the matters to be specified in Directors' and Auditors' Report
- State the importance of corporate governance and its key contents

10.2 MEANING OF CORPORATE DISCLOSURE & FINANCIAL REPORTING

Corporate Disclosure Financial Reporting is concerned with providing useful information or disclosure to the user groups of financial statements, *i.e.*, shareholders, creditors, potential investors etc. Financial reporting, thus includes "not only the financial statements but also other means of communicating information that relates directly or indirectly to the information provided by the accounting system, *i.e*., information about an enterprise's resources, obligations, earnings, etc:''[1]

The management of an enterprise may communicate information to external parties by means of financial statements and other financial information. The corporate annual reports form one of the most common means of financial reporting. Such reports incorporate not only income statement, balance sheet and statement of retained earnings but also important accounting ratios, graphs, diagrams, etc., all meant for providing useful information to the interested parties.

Objectives of Corporate Disclosure Financial Reporting

The basic objective of financial reporting is to provide information useful for making economic decisions. According to *SFAC*-1, Financial Reporting should provide the following information:

1. *Information for investment and credit decisions.* Financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit, and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information-with reasonable diligence.
2. *Information for assessing cash flow prospects.* Financial reporting should provide information to help present and potential investors and creditors and other users in assessing the amounts, timing and uncertainty of prospective cash receipts from dividends or interest and the proceeds from the sale, redemption, or maturity of securities or loans. The prospects for those cash receipts are affected by an enterprise's ability to generate enough cash to meet its obligations when due and its other cash operating needs, to reinvest in operations and to pay cash dividends and may also be

[1] Statement of Financial Accounting Concepts (*SFAC*) No. 1 issued by the Financial Accounting Standards Board (*FASB*) USA. Nov. 1978

affected by perceptions of investors and creditors generally about the ability, which affect market prices of the enterprise's securities. Thus, financial reporting should provide information to help investors, creditors and others to assess the amount, timing and uncertainty of prospective net cash inflows to the related enterprise.

3. *Information about economic resources, etc.* Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources (obligations of the enterprise to transfer resources to other entities and owners' equity), and the effects of transactions, events and circumstances that change resources and claims to those resources.
4. *Information about financial performance.* Financial reporting should provide information about an enterprise's financial performance during a period. Investors and creditors often use information about the past to help in assessing the prospects of an enterprise. Thus, although investment and credit decisions reflect investors' and creditors' expectations about future enterprise performance, those expectations are commonly based at least partly on evaluations of past enterprise performance.
5. *Information about liquidity, solvency and funds flow.* Financial reporting should provide information about how an enterprise obtains and spends cash, about its borrowing and repayment of borrowing, about its capital transactions, including cash dividends and other distributions of enterprise resources to owners, and about other factors that may affect an enterprise's liquidity or solvency.
6. *Information about management's performance.* Financial reporting should provide information about how management of an enterprise has discharged its stewardship responsibility to owners (stockholders) for the use of enterprise resources entrusted to it.
7. *Information useful to management*. Financial reporting should provide information that is useful to managers and directors in making decisions in the interest of owners.

On the basis of the above, the main objectives of the financial reporting can be summarised as follows:[1]

(i) To provide information which if useful to investors, creditors and others in making rational decisions.
(ii) To assist investors and creditors in assessing future net cash flows to the enterprise in respect of amount, timing and uncertainty.
(iii) To identify entity resources (assets) and claims against resources, both creditor's claims (liabilities) and owner's claims (owner's equity).
(iv) To show how an enterprise obtains resources and what it uses them for.
(v) To provide information about enterprise performance and earnings potential.

In conclusion it may be said that financial reporting is not end in itself. It is only a means of providing information which may be useful in making business and economic decisions. The objective of financial reporting are not immutable. They are affected by the economic, legal, political and social environment in which financial reporting takes place. Moreover the objectives are also affected by the characteristics and limitations of the kind of information that financial reporting can provide. Since management knows more about the enterprise and its affairs than investors, creditors or other outsiders, it can increase the usefulness of financial information by identifying certain events and circumstances and expanding their financial effects on the enterprise.

Annual Reports: Corporate Financial Reporting in India

As mentioned in the preceding unit, non corporate entities in India are not subject to much or legislative or statutory requirements for financial reporting. However, corporates in India, whether public or private, are subject to regulation due to various enactments *viz*., the Companies Act, 1956 and regulatory bodies *viz*., the Securities and Exchange Board of India (SEBI), the Institute of Chartered Accountants of India (ICAI), the concerned stock exchange where the company is going to have its securities listed.

10.3 ANNUAL REPORT

Every company is required to submit at its Annual General Meeting the report regarding the activities of the company during the preceding financial year. such a report is termed as "Annual Report" of the company. It basically comprises of the following documents relating to the company:

(i) Balance Sheet
(ii) Profit and Loss Account
(iii) Auditor's Report
(iv) Board of Directors Report

According to Section 210 of the Companies Act, at every Annual General Meeting, the Board of Directors of the Company will have to lay before the members a Balance Sheet as at the end of the period specified and profit and loss account for that period. According to Section 211, every Profit and Loss Account and Balance Sheet of the company has

1. Kenneth S. *Accounting Theory*, Grid Publishing Inc. Columbiz 1982, p. 153

to be in the prescribed format and comply with the prescribed accounting standards. It has to be accompanied with a Board of Directors' Report and the Auditors Report. Moreover, in case of listed companies, the cash flow statement is also to be prepared and presented. According to Section 212, the balance sheet of a holding company has to include certain particulars as to its subsidiaries also.

Thus, the following are the key components of the corporate financial statements required for effective financial reporting:

1. **Profit and Loss Account:** As mentioned above, Section 210 of the Companies Act requires every company carrying business for profit, to submit before its members at its annual general meeting Profit & Loss Account disclosing the profit or loss made during the specified period. It may be noted that the profit & loss account is usually prepared in 3 sections showing gross profit, net profit and appropriation out of profit separately. It is prepared as per the requirements of Schedule VI (Part II) of the Companies Act, 1956.
2. **Balance Sheet:** According to Section 210, a company is also required to place before its members, at every annual general meeting, a Balance Sheet at the end of a specified period giving a true and fair view of the state of affairs of the companies. The Balance Sheet is to be prepared in the format given in the Part I of Schedule VI of the Companies Act, 1956.

   A detailed explanation about both the above statements has already been given in the preceding pages.

   According to Section 212, a copy of each of the following documents relating to each of its subsidiaries is to be attached with the Balance Sheet of a holding company:

   (a) Balance Sheet
   (b) Profit & Loss Account
   (c) Board of Directors' Report
   (d) Auditors' Report
   (e) Statement of Holding Company's interest in the subsidiary company.
3. **Cash Flow Statement:** It is a statement reporting cash flows during the period for which the financial statements are prepared, classified by operating, investing and financing activities. It is to be prepared by every listed company or every business enterprise whose annual turn over exceeds to Rs. 50 crores as per AS 3 (Revised) "Cash Flow Statement" issued by ICAI.
4. **Consolidated Financial Statements:** Every listed company or a business enterprise whose turnover exceeds Rs. 50 crores per annum has to prepare consolidated financial statements of the group besides independent financial statements of each enterprise. They are to be prepared in accordance with AS 21 and AS 24, issued by ICAI.
5. **Auditors' Report:** Accounts of all the companies, whether public or private are to be audited by the qualified auditors. According to Section 227 of the Companies Act, 1956, the auditors should make a report to the members of the company regarding the Balance Sheet and Profit & Loss Account, and all documents annexed with it should be laid before the members at the Annual General Meeting. The report of the auditors shall state as under:

   (a) Whether in his opinion and to the best of his information and according to the explanations given to him, the said accounts (*i*) give the information required by the Act in the manner so required, and (*ii*) give a true and fair view of the state of affairs of the company as at the end of its financial year and of the profit and loss for the period;

   (b) Whether he has obtained all the information and explanations, which to the best of his knowledge and belief, were necessary for the purpose of his audit;

   (c) Whether in his opinion, proper books of accounts as required by law have been kept by the company so far as appears from his examination of those books, and proper returns adequate for the purpose of his audit have been received from branches not visited by him;

   (d) Whether the company's Balance Sheet and Profit & Loss Account dealt with by the report are in agreement with the books of account and returns; and

   (e) Whether the auditor has received and considered the report on the accounts of the branch office.
6. **Board of Directors' Report.** According to section 217 of the Companies Act, 1956 the Board of Directors report should contain details regarding the following matters:

   (1) There shall be attached to every Balance Sheet laid before a company in general meeting, a report by its Board of Directors, with respect to–

      (a) the state of the company's affairs;

      (b) the amounts; if any, which it proposes to carry to any reserves in such balance sheet;

      (c) the amount, if any, which it recommends should be paid by way of dividend;

      (d) material changes and commitments, if any, affecting the financial position of the company which have occurred between the end of the financial year of the company to which the Balance Sheet relates and the date of the report;

(e) the conservation of energy, technology absorption, foreign exchange earnings and outgo, in such manner as may be prescribed.

(2) The Board's report shall, so far as is material for the appreciation of the state of the company's affairs by its members, not in the Board's opinion be harmful to the business of the company or of any of its subsidiaries, deal with any changes which have occurred during the financial year–

(a) in the nature of the company's business;

(b) in the company's subsidiaries or in the nature of the business carried on by them; and

(c) generally in the classes of business in which the company as an interest.

(3) The name of every employee of the company who has been paid remuneration for that year at a rate which is not less than such sum as may be prescribed.

(4) The Board's report shall also include a **Director's Responsibility Statement** indicating therein

(a) that in the preparation of the annual accounts, the applicable accounting standards have been followed along with proper explanation relating to material departures;

(b) that the directors have selected such accounting policies and applied them consistently and made judgements and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year and of the profit or loss of the company for that period.

(c) that the directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities;

(d) that the directors have prepared the annual accounts on a going concern basis.

(5) The Board's report shall also specify the reasons for the failure, if any, to complete the buy-back within the time specified in sub-section (4) of Section 77A.

(6) The Board shall also be bound to give the fullest information and explanations in its report aforesaid, or, in cases falling under the proviso to Section 222, in an addendum to that report, on every reservation, qualification or adverse remark contained in the auditors' report.

(7) The Board's report and any addendum thereto shall be signed by its chairman if he is authorized on that behalf by the Board; and where he is not so authorized, shall be signed by such number of directors as are required to sign the Balance Sheet and the Profit and Loss Account of the company by virtue of sub-sections (1) and (2) of Section 215.

(8) The Board's report shall be signed by its Chairman.

(7) Report on Corporate Governance: Corporate governance requires by corporations, timely and accurate disclosure on all matters relating to them, *viz.*, financial position, performance, ownership and governance of the corporation etc.

The objective of the corporate governance is compliance with corporate laws and rules on the legislative side and proper accounts to the stakeholders legally and morally. Corporate governance is essential not only for gaining credibility and trust but also as a strategy for survival, consolidation and growth.

The main constituents of the corporate governance are the Shareholders, Board of Directors and the Management.

SEBI now requires every listed company to have a separate section on corporate governance in the Annual Report of the company with a detailed compliance report on corporate governance. In order to make the report really meaningful and informative to the shareholders, the suggested list of items to be included in the corporate governance report has been made pretty exhaustive. These include the following:

(a) **Board of Directors:** The board of directors of the company shall have an optimum combination of executive and non-executive directors with not less than 50% of the Board comprising non-executive directors. While the Board with a non-executive chairman is to have at least one-third as independent directors, the Board with an Executive Chairman is to have at least half of the Board as independent directors.

(b) **Audit Committee:** Every company is required to set up a qualified and independent Audit Committee, consisting of minimum 3 members, all being non-executive directors, and majority of them being independent and with at least one having financial and accounting knowledge. The Chairman of the Committee shall be one independent director. The Finance Director, Head of Internal Audit and when required, a representative of the External Auditor are to be present as invitees for the meetings of the Audit Committee. The Audit Committee shall meet at least thrice a year and once in every six months. The clause also defines the powers and the role of the Committee fairly extensively.

(c) **Remuneration of Directors:** The remuneration of non-executive directors is to be decided by the Board of Directors and there is a requirement for adequate disclosure of the same in the annual report. This is bound to act as a deterrent to many promoters in remunerating the directors disproportionately.

(d) **Board Meetings:** There have to be at least four meetings of the Board of Directors each year. The clause requires some minimum information to be made available to the Board as per an exhaustive Annexure. Some of the information which is to be made available to the Board relates to the following: Annual Operating Plans, Capital Expenditure, Budgets and Updates, Joint Venture or Collaboration Agreements, Investments, Show-cause Notices, Demands, Non-compliances, Accidents, Effluent on Pollution Problems, Labour Problems etc. The Boards are, therefore, expected to be more well-informed and effective as a result of this requirement.

(e) **Directors' Report:** As part of the Directors' Report or as an addition thereto, there is a need for a Management Discussion and Analysis Report which should discuss the Industry Structure and Developments, Opportunities and Threats, Segment-wise or Product-wise performance, Outlook and such other matters. All pecuniary relationships or transactions of the non-executive directors vis-à-vis the company should be disclosed in the directors' report.

(f) **Disclosure to Shareholders:** In case of the appointment of a new Director or re-appointment of a Director, the shareholders must be provided with a brief resume of the Director like the nature of his expertise in specific functional areas, names of companies in which he holds directorships and committee memberships.

(g) **Shareholders'/Investors' Grievances Committee:** A Board Committee designated as 'Shareholders/Investors Grievance Committee' should be constituted under the chairmanship of a Non-executive Director to look into the redressing of shareholder and investor complaints like transfer of shares, non-receipts of dividends, warrants etc.

(h) **Compliance Certificate:** The Company is required to obtain a Certificate from the Auditors of the company regarding compliance of conditions of corporate governance as stipulated in the Clause. This Certificate is required to be not only annexed to the Directors' Report but also sent to the Stock Exchanges along with the annual returns of the company.

In order to encourage the companies to give meaningful information to the investors, the Institute of Chartered Accountants of India gives the annual awards for excellence in financial reporting. While making its choice the Institute looks into the information given by the companies in respect of the following matters:

1. Disclosure of Accounting Policies;
2. Statement of Changes in the Financial Position;
3. Disclosure of Unusual and Prior Period Items;
4. Use of vertical form as against conventional '*T*' form;
5. Use of charts, graphs, diagrams, etc.;
6. Computation of important accounting ratios;
7. Providing all other useful information, *viz.,* value added statements; current cost accounts; social cost benefit analysis; human resources, etc.;
8. The extent to which the directors' report is informative regarding operations of their organization, financial and otherwise, employer-employee relations, etc.

The discussion in the preceding pages is indicative of the fact that the accountants these days are making constant efforts to make the financial statements more informative and intelligible to the end-users.

CHECK YOUR PROGRESS

1. Enumerate the basic objectives of financial reporting.
2. State the key components of corporate financial statements.
3. What is the basis formulated by ICAI for granting Annual Awards for Excellence in Corporate Reporting?

10.4 ILLUSTRATIVE EXAMPLE

We are giving below the extracts from the Annual Report of HCL Office Automation Ltd. for giving an exhaustive understanding of the mode of financial reporting in case of a corporate enterprise.

HCL OFFICE AUTOMATION LTD.

REGD. OFFICE: 806, SIDDHARTH, 96, NEHRU PLACE, NEW DELHI 110 019

Directors' Report

To the Members,

The Directors of your Company here with present the Thirteenth Annual Report together with the Audited Accounts for the financial year ended 31st March, 2005.

FINANCIAL HIGHLIGHTS

	(Rs. in lacs)	
	2004-2005	2003-2004
Sales and other income	67.67	45.50
Profit before Interest, Depreciation and Tax	12.05	(0.12)
Finance Charges	0	0
Depreciation	12.30	13.57
Profit/(Loss) before Tax	(0.25)	(13.69)
Provision for Taxation	0	0.44
Net Profit/(Loss) (After Tax)	(0.25)	(13.25)
Balance of Profit/(Loss) carried forward to next year	(2441.88)	(2441.63)

PERFORMANCE

The other income of the Company was Rs. 68 Lacs as against Rs. 45 Lacs in the previous year. The loss for the year ended 31st March, 2005 was Rs. 0.25 Lacs as against loss of Rs. 13.25 Lacs in the previous year. No business could be transacted during the year by the Company.

FIXED DEPOSITS

As on 31st March, 2005, 92 nos. of deposit aggregating to Rs. 10.15 Lacs was unclaimed.

DIRECTORS

In accordance with the Articles of Association of the Company, Mr. S. Murali, Director will retire by rotation at the forthcoming Annual General Meeting and being eligible, offers himself for re-appointment. Mr. K.R. Vasudevan has been appointed as an Additional Director by Board at their meeting held on July 29, 2005 who will hold office till the conclusion of the forthcoming Annual General Meeting.

DIRECTORS' RESPONSIBILITY STATEMENT

Pursuant to Section 217(2AA) of the Companies Act, 1956, the Directors hereby confirm:

(i) that in the preparation of the annual accounts, the applicable accounting standards had been followed alongwith proper explanation relating to material departures;

(ii) that the directors had selected such accounting policies and applied them consistently and made judgements and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit or loss of the Company for that period;

(iii) that the directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;

(iv) that the directors had prepared the annual accounts on a going concern basis.

AUDITORS AND AUDITORS' REPORT.

The Auditors of the Company, M/s. S.D. Chopra & Associates, Chartered Accountants, retire at the forthcoming Annual General Meeting and being eligible offer themselves for re-appointment. The clause 3 referred to in the Auditors' Report are explained in Schedule 16 and, therefore, do not call for further comments.

PERSONNEL

Inter-personnel Relations in the Company during the period under review continued to be harmonious. The Board wishes to place on record their appreciation of the contribution made by all the employees to the operations of the Company during the year under review.

During the year, there were no employees covered under Section 217(2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975.

ADDITIONAL INFORMATION RELATING TO CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO.

As there has been no business activities in the Company during the year under review, the additional information required under Section 217(1)(e) of the Companies Act, 1956, read with the Companies (Disclosure of Particulars in the Report of the Board of Directors) Rules, 1988, is not provided.

CORPORATE GOVERNANCE

A separate report on "Corporate Governance" is annexed hereto as part of Annual Report.

ACKNOWLEDGEMENT

Your Directors wish to thank the Government authorities, financial institutions, bankers and shareholders for their co-operation and assistance extended to the Company.

On behalf of the Board of Directors

29th July, 2005 K.R. VASUDEVAN

Noida Manager

Report on Corporate Governance

1. COMPANY'S PHILOSOPHY ON CORPORATE GOVERNANCE

The Company continues to believe that it is necessary to be fair, transparent and equitable treatment to all stakeholders comprising shareholders, creditors, financiers and the like to achieve the goals of the Company. The Company complies with the requirements of Corporate Governance as introduced in Clause 49 of the Listing Agreement.

2. COMPOSITION CATEGORY AND DIRECTORSHIP IN OTHER COMPANIES

(i) Board of Directors:

Name of the Director	*Category*	*Designation*
Mr., K.R. Vasudevan	Executive	Manager
Mr. S. Murali	Non-Executive, Independent	Director
Mr. K.R. Radhakrishnan	Non-Executive, Independent	Director

(ii) Directors' Attendance Record:

During the financial year 2004-05, 4 meetings of the Board were held on 30th June, 2004, 30th July, 2004, 29th October, 2004 and 28th January, 2005.

Detail of Directors' attendance and other particulars are given below:

Name of Director	*No. of Board Meetings held*	*No. of Board Meetings attended*	*Last AGM attended (Yes/No)*
Mr. J.V. Ramamurthy	4	4 (Resigned w.e.f. July 29, 2005)	Yes
Mr. K.R. Vasudevan	4	Appointed on July 29, 2005	No
Mr. S. Murali	4	4	Yes
Mr. K.R. Radhakrishnan	4	4	Yes

(iii) Directorship in other companies and board committees:

S.N	*Name of the Director*	*Directorship in Public Limited companies*	*Membership in Board Committees*
1.	Mr. K.R. Vasudevan	1	NIL
2.	Mr. S. Murali	1	NIL
3.	Mr. K.R. Radhakrishnan	6	NIL

3. AUDIT COMMITTEE

The Company constituted the audit committee to review various areas of Committee, chaired by Mr. S. Murali, comprises of Mr. J.V. Ramamurthy and Mr. K.R. Radhakrishnan.

The Committee met 4 times during the financial year 2004-2005 on the following dates 30th June, 2004, 30th July, 2004, 29th October, 2004 and 28th January, 2005. All the members were present in all the four meetings.

4. REMUNERATION COMMITTEE

As neither remuneration nor sitting fees is paid to the Directors, no remuneration committee has been set up.

5. INVESTORS' GRIEVANCE COMMITTEE

(i) The Company has constituted a 'Shareholders/Investors Grievance Committee' headed by Mr. K.R. Radhakrishnan, a Non Executive Director to specifically look into redressal of Shareholders' and Investors' complaints. The Committee met four times during the year. The Company Secretary has been designated as the compliance officer of the Company in compliance with the Listing Agreement.

(ii) There were two complaints received during the year and there are no complaints not solved to the satisfaction of the shareholder. There was no share transfer pending as on 31st March, 2005.

6. SHAREHOLDERS' MEETINGS

Detail of the last three AGMs held

Year	*Date*	*Venue*	*Time*
2001-02	18st September, 2002	Air Force Auditorium, Subroto Park, New Delhi	4.00 P.M.
2002-03	8th September, 2003	Air Force Auditorium, Subroto Park, New Delhi	3.00 P.M.
2003-04	4th September, 2004	Air Force Auditorium, Subroto Park, New Delhi	10.00 A.M.

No special resolutions were put through Postal Ballot last year. At present, there are no resolutions which are required to be passed by postal ballot.

7. DISCLOSURES

Related Party Transactions:

There are no related party transactions of the Company of material nature, with Promoters, the Directors or the Management, their subsidiaries or relatives etc., that may have potential conflict with the interest of the Company at large.

Non Compliance by the Company, Penalties, Strictures:

The Company has complied with the requirements of the Stock Exchange/SEBI/any Statutory Authority on all matters related to capital markets during the last three years. There are no penalties or strictures imposed on the Company by Stock Exchange or SEBI or any statutory authorities relating to the above.

8. MEANS OF COMMUNICATION

(a) At present quarterly/half yearly reports are not being sent to each household of shareholders.

(b) The quarterly/half yearly/ annual accounts results are published in the English and Hindi Newspapers.

— which newspaper normally published in	The Statesman (English) Veer Arjun (Hindi)
— any website where displayed	No
— whether it also displays official news release	No
— whether presentations made to institutional investors or to analyst	No

(c) The Management Discussion and Analysis forms a part of the Annual Report.

9. GENERAL SHAREHOLDERS INFORMATION

(i) Annual General Meeting :

Day & Date	*Time*	*Venue*
Saturday, September 10, 2005	3.00 P.M.	Air Force Auditorium Subroto Park, New Delhi-110 010

(ii) Financial Calendar (tentative) for the year 2005-06:

Financial Reporting for the quarter ending 30th June, 2005	29th July, 2005.
Financial Reporting for the quarter ending 30th September, 2005	28th October, 2005
Financial Reporting for the quarter ending 31st December, 2005	27th January, 2006
Audited Results for the financial year ended 31sh March, 2006	26th June, 2006.

(iii) Next dates of Book Closure — 1st September, 2005 to 10th September, 2005 (Both days inclusive)

(iv) Dividend Payment Date — Not Applicable

(v) Listing on Stock Exchanges

The Shares of the Company are listed on the Stock Exchange at Mumbai. Listing fees for the period April 2005 to March 2006 has been paid to the Stock Exchange, Mumbai.

(vi) Stock Code

Trading Symbol on 'The Stock Exchange', Mumbai: 523519

(*vii*) Stock Market Data (Rs.):

MONTH	HIGH	LOW
APRIL, 2004	4.24	2.51
MAY, 2004	3.45	2.32
JUNE, 2004	3.50	1.74
JULY, 2004	3.35	1.90
AUGUST, 2004	4.00	2.30
SEPTEMBER, 2004	6.94	2.56
OCTOBER, 2004	10.56	4.10
NOVEMBER, 2004	17.10	11.61
DECEMBER, 2004	12.30	9.15
JANUARY, 2005	11.48	8.10
FEBRUARY, 2005	10.50	6.71
MARCH, 2005	9.75	5.41

(*Source : Closing share prices at Mumbai Stock Exchange*)

(viii) Registrar and Share Transfer Agents:

As per the provisions of the Listing Agreement entered with The Stock Exchange, Mumbai, the Company has appointed M/s. Skyline Financial Services Private Limited as a Common Registrar and Share Transfer Agents for the shares of the Company held in both physical as well as electronic modes. All correspondence with regard to share transfers and matters related therewith may directly be addressed to the Share Registrar and Transfer Agents at the address given below :

M/s. Skyline Financial Services Private Limited
123, Vinoba Puri, Lajpat Nagar II,
New Delhi-110 024.
Tel: 011-29833777, 011-29847136;
Fax: 011-29848352

(ix) Share Transfer System:

The shares received in physical mode by the Company's Registrar and Share Transfer Agents are transferred within a period of 25 days from the date of receipt.

(x) Distribution of Shareholding as on 31st March, 2005:

Category	No. of Shares	% holding
A. Promoters' holding		
1. Promoters		
– Indian Promoters	9,836,207	67.13
– Foreign Promoters	Nil	
2. Persons acting in concert	Nil	
Sub Total (A)	9,836,207	67.13
B. Non-Promoters' holding		
3. Institutional Investors		
a. Mutual Funds and UTI	10,878	0.07
b. Banks, Financial Institutions, Insurance Companies (Central/State Government Institutions/Non-government Institutions)	62,918	0.43
c. FIIs	Nil	-
4. Others		
a. Private Bodies Corporate	2,737,838	18.68
b. Indian Public	2,002,057	13.66
c. NRI/OCBs	2,788	0.02
d. Any other (Please specify)	Nil	-
Sub Total (B)	4,742,683	32.37
Grand Total (A + B)	1,46,52,686	100.00

(xi) Dematerialisation of shares and liquidity

The shares of the Company are compulsorily traded in dematerialised form with effect from 29th January, 2001. As on 31st March, 2005, 16.85% shares of the Company are held in dematerialised form.

(xii) There are no outstanding GDRs/ADRs/Warrants or any Convertible Instruments.

(xiii) Plant Locations: The Company does not have any manufacturing unit.

(xiv) Address for Correspondence

The shareholders may send their communication/grievances/queries to the Registrar and Share Transfer Agents at their address mentioned above or to Secretarial Department, HCL Office Automation Ltd, E-4, 5, 6, Sector XI, Noida -201 301 (Tel No.: 0120-2520977, Fax: 0120-2551519)

MANAGEMENT DISCUSSION AND ANALYSIS REPORT

As the Company could not undertake any business activities during the year under review there is nothing significant to be reported as Management Discussion & Analysis.

AUDITORS' CERTIFICATE ON COMPLIANCE WITH THE CONDITIONS OF CORPORATE GOVERNANCE UNDER CLAUSE 49 OF THE LISTING AGREEMENT(S)

To the Members of HCL Office Automation Ltd.

1. We have reviewed the implementation of Corporate Governance procedures by HCL Office Automation Ltd., during the year ended 31st March, 2005 with the relevant records and documents maintained by the Company, furnished to us for our review and the report on Corporate Governance as approved by the Board of Directors.
2. The compliance of conditions of corporate governance is the responsibility of the management. Our examination was limited to procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion of the financial statements of the Company.

   We further state that such compliance is neither an assurance as to the future viability of the Company nor the efficient or effectiveness with which the management has conducted the affairs of the Company.
3. On the basis of our review and according to the information and explanations given to us, the conditions of Corporate Governance as stipulated in Clause 49 of the listing agreement(s) with the stock exchange(s) have been complied with the Company.

S.D. CHOPRA
Proprietor
For and on behalf of
S.D. Chopra & Associates
Chartered Accountants

New Delhi
Date: 29th July, 2005.

Auditors' Report

To
The Members of
HCL Office Automation Limited.

1. We have audited the attached Balance Sheet of HCL Office Automation Limited, as at 31st March, 2005 the Profit and Loss Account and also the Cash Flow Statement for the year ended on that date annexed thereto. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. Except as matters stated in paragraph 3 below, we conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting, the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.
3. We draw attention to:
   (a) Note 5 on schedule – 16 regarding Deferred tax assets.
   (b) Note 9 on schedule – 16 through the company has incurred losses far in excess of paid up capital and reserves, since the director's are looking for right opportunity to explore the similar line of business of activity, the directors consider that it is appropriate to prepare, the financial statements on going concern basis.
4. As required by the Companies (Auditor 's Report) Order, 2003 issued by the Central Government of India in terms of sub-section (4A) of Section 227 of the Companies Act, 1956, we enclose in the Annexure a statement on the matters specified in paragraphs 4 & 5 of the said Order.
5. Further to our comments in the Annexure referred in paragraph 4 above, we report that:
   (i) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit.
   (ii) In our opinion, proper books of account as required by law have been kept by the company so far as appears from our examination of those books.
   (iii) The Balance Sheet, Profit and Loss Account and Cash Flow Statement dealt with by this report are in agreement with the books of account.
   (iv) In our opinion, the Balance Sheet, Profit and Loss Account and Cash Flow Statement dealt with by this report comply with the accounting standards referred to in sub-section (3C) of Section 211 of the Companies Act, 1956.
   (v) On the basis of written representations received from the directors, as on 31st March, 2005 and taken on record by the Board of Directors, we report that none of the directors is disqualified as on 31st March 2005 from being appointed as a director in terms of clause (g) of sub-section (1) of Section 274 of the Companies Act, 1956.
   (vi) Subject to the matters stated in paragraph 3, in our opinion and to the best of our information and according to the explanations given to us, the said accounts read together with the Accounting Policies and Notes thereon and attached thereto, give the information required by the Companies Act, 1956, in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:
      (a) in the case of the Balance Sheet, of the state of affairs of the Company as on 31st March, 2005;
      (b) in the case of the Profit and Loss Account, of the loss for the year ended on that date;
      (c) in the case of the Cash Flow Statement, of the cash flow for the year ended on that date.

For S.D. Chopra & Associates
Chartered Accountants

Place: New Delhi
Date: 27th June, 2005

S.D. Chopra
Proprietor

ANNEXURE TO THE REPORT OF THE AUDITOR'S TO THE MEMBERS OF HCL OFFICE AUTOMATION LIMITED ON THE ACCOUNTS FOR THE YEAR ENDED 31st MARCH, 2005

[Referred to in paragraph 4 of our report even date]

1. (*i*) The company has maintained proper records to show full particulars including quantitative details and situation of its fixed assets.
   (ii) The physical verification of the fixed assets has not been carried out during the year.
   (iii) None of the fixed assets have been disposed off during the year.
2. (*i*) The inventory has been physically verified during the year by the management. In our opinion, the frequency of verification is reasonable.
   (ii) The procedure of physical verification of inventories followed by the management are reasonable and adequate in relation to the size of the company and the nature of its business.
   (iii) The company is maintaining proper records of inventory. The discrepancies noticed on verification between the physical stocks and the book records were not material.
3. (*i*) The company has not taken any loans secured or unsecured from the firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956.
   (*ii*) The company has not granted any loans secured or unsecured to the firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956.
4. In our opinion and according to the information and explanations given to us, there are adequate internal control procedures commensurate with the size of the company and the nature of its business with regard to purchases of inventory, fixed assets and for the sale of goods and services. During the course of our audit, no major weakness has been noticed in the internal controls.
5. (*i*) According to the information and explanations given to us, we are of the opinion that the particulars of contracts or arrangements that need to be entered into the register maintained under Section 301 of the Companies Act, 1956 have been so entered.
   (*ii*) In our opinion and according to the information and explanations given to us, the transactions made in pursuance of contracts or arrangements have been made at price which are reasonable having regard to prevailing market prices at the relevant time.
6. The company has not accepted fixed deposits from the public during the year and the balance outstanding is only on account of unclaimed deposits.
7. There were no internal audit systems in operation during the year. However, the company has internal control procedures which, in our opinion, are adequate in relation to the size of the company.
8. The Central Government has not prescribed the maintenance of cost records by the company under Section 209(1)(d) of the Companies Act, 1956 for any of its products.
9. (*i*) According to the records of the company, the company is regular in depositing with appropriate authorities undisputed statutory dues including provident fund, investor education protection fund, employees state insurance, income tax, sales tax, wealth tax, service tax, cess and other statutory dues applicable to it.
   (ii) According to the information and explanations given to us, no undisputed amounts payable in respect of income tax, sales tax, wealth tax, service tax, custom duty and excise duty were outstanding, as at 31st March, 2005 for a period of more than six months from the date they become payable.
   (iii) According to the information and explanations given to us, the dues of Sales Tax, Customs Duty, Excise Duty which have not been deposited on account of any dispute and the forum where the dispute is pending are as under:

Nature of the statute	*Nature of the dues*	*Amount [Rs. in lacs]*	*Forum where dispute is pending*
Central Excise Act, 1944	Excise Duty	52.07	Dy. Commissioner/ Commissioner of Central Excise
Customs Act, 1962	Custom Duty	241.00	Supreme Court
		49.96	Collector of Custom
Central Sales Tax Act and Sales Tax Act of various states	Sales Tax	38.81	Sales Tax Tribunal
		20.99	Dy. Commissioner/ Commissioner (Appeal)

10. In our opinion, the accumulated losses of the company are more than fifty percent of its net worth. The company has not incurred cash losses during the financial year covered by our audit and has incurred cash losses in the immediately preceding financial year.
11. In our opinion and according to the information and explanations given to us, the company do not-have any borrowings from financial institutions, bank or debenture holders.
12. The company has not granted any loans, and advances on the basis of security by way of pledge of share etc.
13. Provisions of any special statute applicable to chit funds are not applicable to the company.
14. The company is not dealing or trading in shares, securities, debentures and other investments.
15. The company has not given any guarantee for loans taken by others from the banks or financial institutions.
16. The company has not raised any term loan during the year.
17. Based on our examination and in our opinion the company has not raised any short-term/long-term funds during the year.
18. The company has not made any preferential allotment of shares to parties and companies covered in the register maintained under Section 301 of the Act.
19. The company has not issued any debentures during the year.
20. The company has not made any public issue during the year.
21. According to the information and explanations given to us, no fraud on or by the company has been noticed or reported during the course of our audit.

For and on behalf of
S.D. Chopra & Associates
Chartered Accountants

Place : New Delhi
Date : 27th June, 2005

S.D. Chopra
Proprietor

Balance Sheet as at March 31, 2005

	Schedule	As at 31.03.2005 Rs/Lacs		As at 31.03.2004 Rs/Lacs	
SOURCES OF FUNDS					
Shareholders' Funds:					
Share Capital	1		1465.27		1465.27
Reserve and Surplus	2		658.40		658.40
Loans Funds :					
Unsecured Loans	3		324.04		325.21
Total			2447.71		2448.88
APPLICATION OF FUNDS					
Fixed Assets:					
Gross Block		262.40		262.40	
Less : Depreciation		190.48		178.18	
		71.92		84.22	
Investments	5	1.15		4.63	
Current Assets, Loans & Advances:					
Inventories	6	–		3.70	
Sundry Debtors	7	12.27		5.86	
Cash and Bank Balances	8	130.29		134.61	
Other Current Assets	9	14.75		14.75	
Loans and advances	10	16.47		17.39	
		173.78		176.31	
Less : Current Liabilities & Provisions:	11				
Current Liabilities		238.83		256.05	
Provisions		2.19		1.86	
		241.02		257.91	

Net Current Assets		–67.24	–81.60
Profit & Loss Account		2441.88	2441.63
Total		2448.88	2447.71
Accounting Policies	15		
Notes to Accounts	16		

This is the Balance Sheet referred to in our report of even date.

The Schedules referred to above form an integral part of the Balance Sheet.

S.D. Chopra, *Proprietor*, For and on behalf of S.D. Chopra & Associates, Chartered Accountants
K.R. RADHAKRISHNAN, *Director*
S. MURALI, *Director*
J.V. RAMAMURTHY, *Managing Director*
M. MUTHUKUMARASAMY, *Company Secretary*

New Delhi
27th June, 2005

Profit and Loss Account for the year ended March 31, 2005

	Schedule	Year Ended 31.03.2005 Rs./Lacs	Year Ended 31.03.2004 Rs./Lacs
INCOME:			
Other Income	12	67.67	45.50
		67.67	45.50
EXPENDITURE :			
Finished Goods Stock Written Off		3.70	–
Personnel	13	3.59	3.19
Administration, Selling & Distribution	14	48.33	42.43
Depreciation		12.30	13.57
PROFIT/(LOSS) BEFORE TAXATION		67.92	59.19
		(0.25)	(13.69)
Excess provision of Income tax of earlier year written back		–	0.44
PROFIT/(LOSS) AFTER TAX		(0.25)	(13.25)
LOSS BROUGHT FORWARD		(2441.63)	(2428.38)
Balance carried over		(2441.88)	(2441.63)
Basic and Diluted Earning/(Loss) Per Equity Share of Rs. 10/- each (Schedule 16, Note 11)		(0.002)	(0.09)
Accounting Policies	15		
Notes to Accounts	16		

This is the Profit and Loss Account referred to in our Report of even date.

The Schedules referred to above form an integral part of the Profit and Loss Account

S.D. Chopra, *Proprietor*, For and on behalf of S.D. Chopra & Associates, Chartered Accountants
K.R. RADHAKRISHNAN, *Director*
S. MURALI, *Director*
J.V. RAMAMURTHY, *Managing Director*
M. MUTHUKUMARASAMY, *Company Secretary*

New Delhi
27th June, 2005

Cash flow statement for the year ended March 31, 2005

	Year Ended 31.03.2005		**Year Ended 31.03.2004**	
		Rs./Lacs		**Rs/Lacs**
(A) Cash Flow from Operating Activities				
Net Profit/Loss (–) before tax		(0.25)		(13.69)
Adjustment for :				
Depreciation	12.30		13.57	
Interest and dividend income	(7.53)		(8.39)	
Credit balance written back	(13.85)		–	
Sales Tax/Excise claim received	(9.68)	(18.76)	(0.70)	4.48
Operating Profit/Loss (–) before working capital changes		(19.01)		(9.21)

Adjustments for :				
Trade and Other receivables	(11.40)		2.08	
Inventories	3.70		–	
Trade payables and other liabilities	(16.89)	(24.59)	4.02	6.10
Cash generated from/used in (–) operations		(43.60)		(3.11)
Direct tax paid	(1.25)		(1.18)	
Income tax refund	–	(1.25)	4.96	3.78
Cash flow before extra-ordinary items	(44.85)		0.67	
Credit balances written back		13.85		–
Sales tax/Excise claim received		9.68		0.70
Bad debts/ debit balances w/off		8.84		–
Net Cash from/used in (–) Operating Activities		(12.48)		1.37
(B) Cash flow from Investing Activities				
Interest and dividend received	5.85		10.17	
Purchase of fixed assets	–		(0.29)	
Sale of Investments	3.48	9.33	–	9.88
Net Cash from/ used in (–) investing activities		9.33		9.88
(C) Cash flow from Financing Activities				
Un-securred loans paid	(1.17)	(1.17)	(2.59)	(2.59)
Net cash from/used in (–) Financing Activities		(1.17)		(2.59)
Opening balance of Cash & Cash equivalents		134.61		125.95
Closing balance of Cash & Cash equivalents		130.29		134.61
Net Increase/Decrease (–) in Cash and Cash equivalents		(4.32)		8.66
Total (A) + (B) + (C)		(4.32)		8.66

This is the Cash Flow Statement referred to in our report of even date

	S.D. Chopra	K.R. RADHAKRISHNAN	S.MURALI	J.V. RAMAMURTHY
	Properietor	*Director*	*Director*	*Managing Director*
	For and on behalf of			
New Delhi	S.D. Chopra & Associates		M.MUTHUKUMARASAMY	
27th June, 2005	Chartered Accountants		*Company Secretary*	

Schedules to the Balance Sheet

	As at 31.03.2005	As at 31.03.2004
1. SHARE CAPITAL		
AUTHORISED		
5,00,00,000 Equity Shares of Rs. 10/- each	5000.00	5000.00
10,00,000 Preference Shares of Rs. 100/- each	1000.00	1000.00
	6000.00	6000.00
ISSUED, SUBSCRIBED & PAID UP		
1,46,52,686 (Previous Year: 1,46,52,686) Equity Shares of Rs. 10/- each fully paid up Our of the total above, 83,65,246 Equity Shares (2004-83,65,246) are held by HCL Peripherals Ltd., the holding company.	1465.27	1465.27
	1465.27	1465.27

Of the above equity shares :

(i) 49,64,529 (Previous Year: 49,64, 529) of Rs. 10/- each were allotted as fully paid up pursuant to a contract without payment being received in cash.

(ii) 47,23,6214 (Previous Year 47,23,614) of Rs. 10/- each were allotted as fully paid up pursuant to the Scheme of Amalgamation between erstwhile Sandarbh Properties Private Limited and the Company {Schedule 16, Note 2(a)}.

4. FIXED ASSETS
(Schedule 16 Note 3)

	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 01.04.04	Addition during the year	Deduction during the year	As at 31.03.05	As at 01.04.04	Addition during the year	Deduction during the year	As at 31.03.05	As at 31.03.05	As at 31.03.04
Land – Freehold	1.07	–	–	**1.07**	–	–	–	–	1.07	1.07
Plant & Machinery and Equipments	27.04	–	–	**27.04**	27.04	–	–	**27.04**	–	–
Furniture & Fixtures and Office Equipments	216.34	–	–	**216.34**	140.01	11.03	–	**151.04**	**65.30**	76.33
Vehicles	17.95	–	–	**17.95**	11.13	1.27	–	**12.40**	**5.55**	6.82
	262.40	–	–	**262.40**	178.18	12.30	–	**190.48**	**71.92**	84.22
Previous Year	262.11	0.29	–	262.40	164.62	13.57	–	178.18	84.22	–

2. RESERVES AND SURPLUS

(Schedule 16 Note 4)

	As at 31.03.2005 Rs/Lacs	As at 31.03.2004 Rs/Lacs
General Reserve	27.40	27.40
Capital Reserve	297.63	297.63
Security Premium	333.37	333.37
	658.40	658.40

3. UNSECURED LOANS

	As at 31.03.2005 Rs/Lacs	As at 31.03.2004 Rs/Lacs
Fixed Deposits {Including unclaimed deposits Rs. 10.15 lacs (Previous Year : Rs. 11.32 lacs)	10.15	11.32
Short-Term Loans from Corporates	313.89	313.89
	324.04	325.21

5. INVESTMENTS

Long term (Non-trade)		
Government Securities :		
370 units (Previous Year : 370 units) of Rs. 100/- each of Unit Trust of India under Vecaus-II scheme fully paid up*	0.37	0.37
	0.37	0.37
Quoted securities : {Schedule 16, Note 2(b)}		
Nil (Previous Year : 8700) Equity shares of Rs. 10/- each of HCL Infosystems Ltd. fully paid up (Sold during the year 8700 shares)	–	3.48
1933 (Previous Year : 1933) equity shares of Rs. 2/- each of HCL Technologies Ltd. fully paid up (Shares received in pursuant to scheme of arrangement between HCL Infosystems Ltd., HCL Technologies Ltd. and their respective shareholders and creditors.)	–	–
960 (Previous Year: 960) Equity shares of Rs. 10/- each of IDBI fully paid up. (Includes 360 bonus shares)	0.78	0.78
	0.78	4.26
Unquoted securities:		
10 (Previous Year: 10) Equity shares of Rs. 10/- each of Hinduja HCL Singtel Communications Pvt. Ltd. fully paid up (value Rs. 100/-).	0.00	0.00
	0.00	0.00
	1.15	4.63

6. INVENTORIES

Finished Goods	3.70	3.70
Less : Written off	3.70	–
	0.00	3.70

7. SUNDRY DEBTORS

(Unsecured - Considered good)		
Debts exceeding six months:	9.13	5.86
Less : Bad debts written off	5.89	–

		3.27	5.86
Other debts	3.27		5.86
		9.00	–
		12.27	5.86
8. CASH AND BANK BALANCES			
Cash in hand	0.08		0.17
Balance with Scheduled Banks			
– On Current Accounts	1.51		6.83
– On Margin Accounts	128.70		127.61
	130.29		134.61
9. OTHER CURRENT ASSETS			
Deposits	14.75		14.75
	14.75		14.75

Schedules to the Balance Sheet (contd.)

	As at 31.03.2005 Rs/Lacs		As at 31.03.2005 Rs/Lacs
(Unsecured – Considered Good)			
Advances recoverable in cash or in kind or for value to be received)	11.36		13.53
Advance Tax (net of provision)	5.11		3.86
	16.47		17.39
10. CURRENT LIABILITIES AND PROVISIONS			
(Schedule 16 Note 6)			
Current liabilities :			
Sundry Creditors	184.72		201.49
Sundry Deposits	5.37		5.37
Advance from Customers	48.74		49.19
	238.83		256.05
Provisions :			
For Gratuity and other employee benefits	2.19		1.86
		2.19	1.86
		241.02	257.91

* The Company is in the process of obtaining duplicate certificate in its name as the original certificate which was sent for endorsement, was lost in transit.

Note: Market value of quoted securities Rs. 8.17 lacs.

CHECK YOUR PROGRESS

Select the most appropriate answer:

1. Corporate governance requires, by corporations, timely and adequate disclosures on all matters concerning:
   (a) Financial position
   (b) Financial position and performance
   (c) Financial position, performance, ownership and governance of the corporation
2. SEBI has tried to make corporate governance effective by:
   (a) Amending Clause 49 in the Listing Agreement of the Stock Exchanges
   (b) Making the Institute of Chartered Accountants of India (ICAI) to issue requisite Accounting Standards
   (c) Bringing amendments in the Companies Act, 1956.
3. According to Clause 49, the non-executive directors should not be less than:
   (*a*) 50%
   of the total strength of

Select the most appropriate answer:

4. According to Clause 49, the Audit Committee should comprise a minimum of:

   (a) 5 members   (b) 3 members   (c)

5. The format of the balance sheet in the Companies Act has been prescribed by:

   (a) Schedule VI (Part I)   (b) Schedule VI (Part II)   (c) Schedule IV (Part III)

10.5 SUMMARY

- Financial reporting is basically concerned with providing useful information about the affairs of the organization concerning its performance, financial position, earnings potential etc. and which can help them in taking rational decisions.
- Corporate Annual Reports form the most common means of financial reporting.
- In India, the main constituents of corporate annual reports are Profit & Loss Account, Balance Sheet, Cash Flow Statement, Auditors' Reports, and the Report on Corporate Governance.

10.6 KEY TERMS

- **Financial Reporting**: A mechanism evolved for providing useful information to the user-group of financial statements, i.e., shareholders, creditors, potential investors etc.
- **Corporate Governance**: A mechanism requiring by corporations, timely and accurate disclosure on all matters relating to them, viz., financial position, performance, ownership and governance of the corporations etc.

10.7 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*c*), 2. (*a*), 3. (*a*), 4. (*c*), 5. (*a*)

10.8 QUESTIONS AND EXERCISES

1. Define Financial Reporting. State its objective.

2. Explain the key components of the corporate financial statements required by various authorities in India for effective corporate financial reporting.

3. Explain the concept of Corporate Governance. State the main provisions of Clause 49 relating to corporate governance.

10.9 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 11 FINANCIAL STATEMENTS: ANALYSIS AND INTERPRETATION

Structure

11.0 Introduction
11.1 Unit Objectives
11.2 Relationship between Analysis and Interpretation
11.3 Steps Involved in the Financial Statements Analysis
11.4 Ratio Analysis
11.5 Classification of Ratios
11.6 Profitability Ratios
11.7 Turnover Ratios
11.8 Financial Ratios
11.9 Advantages of Ratio Analysis
11.10 Limitations of Accounting Ratios
11.11 Computation of Ratios
11.12 Summary
11.13 Key Terms
11.14 Answers to 'Check Your Progress'
11.15 Questions and Exercises
11.16 Practical Problems
11.17 Further Reading

11.0 INTRODUCTION

In the preceding two units, we have explained the preparation and presentation of financial statements. Financial statements are prepared with the objective of knowing the profitability and financial soundness of the business. This requires proper analysis and interpretation of financial statements. This aspect has been discussed in detail in this unit.

11.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Understand the concept of financial statement analysis
- Differentiate between analysis and interpretation of financial statements
- Understand the steps involved in financial analysis
- Appreciate the utility of ratio analysis as a tool for financial analysis
- Classify the accounting ratios in different categories
- Understand and compute different accounting ratios
- Make critical analysis of financial statements on the basis of accounting ratios
- Explain the meaning of certain key terms

11.2 RELATIONSHIP BETWEEN ANALYSIS AND INTERPRETATION

Financial statements, as stated earlier, are indicators of the two significant factors:

1. Profitability
2. Financial soundness.

Analysis and Interpretation of financial statements, therefore, refers to such a treatment of the information contained in the Income Statement and the Balance Sheet so as to afford full diagnosis of the profitability and financial soundness of the business.

A distinction here can be made between the two terms—'Analysis' and 'Interpretation'. The term 'Analysis' means methodical classification of the data given in the financial statements. The figures given in the financial statements will not help one unless they are put in a simplified form. For example, all items relating to 'Current Assets' are put at one place while all items relating to 'Current Liabilities' are put at another place. The term 'Interpretation' means 'explaining the meaning and significance of the data so simplified'.

However, both ‘Analysis’ and ‘Interpretation’ are complementary to each other. Interpretation requires Analysis, while Analysis is useless without Interpretation. Most of the authors have used the term ‘Analysis’ only to cover the meanings of both analysis and interpretation, since analysis involves interpretation. According to Myers, “Financial statement analysis is largely a study of the 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.” For the sake of convenience, we have also used the term ‘Financial Statements Analysis’ throughout the unit to cover both analysis and interpretation.

11.3 STEPS INVOLVED IN THE FINANCIAL STATEMENTS ANALYSIS

The analysis of the financial statements requires:

(1) Methodical classification of the data given in the financial statements.

(2) Comparison of the various interconnected figures with each other which is popularly termed as ‘‘Ratio Analysis’’.

Each of the above steps has been explained in the following pages:

(1) **Methodical classification.** In order to have a meaningful analysis it is necessary that figures should be arranged properly. Usually instead of the two-column (*T* form) statements as ordinarily prepared, the statements are prepared in single (vertical) column form “which should throw up significant figures by adding or subtracting.” This also facilitates showing the figures of a number of firms or number of years side by side for comparison purposes.

OPERATING (INCOME) STATEMENT

for the year ending

Particulars		₹	₹
Gross Sales		....	....
Less: Sales Returns			
Sales Tax/Excise		....	....
Net Sales (or sales) for the year	(1)		....
Less: Cost of Sales:	(2)		
Raw Materials consumed		....	
Direct Wages		....	
Manufacturing Expenses		....	....
Add: Opening Stock of Finished Goods			....
Less: Closing Stock of Finished Goods			
Gross Profit	(1) – (2) = (3)		....
Less: Operating Expenses:	(4)		
Administration Expenses		....	
Selling and Distribution Expenses		....	....
Net Operating Profit (OPBIT)	(3) – (4)= (5)		....
Add. Non-trading Income			....
(such as dividends, interest received, etc.)			....
Less: Non-trading Expenses (such as discount on			....
issue of shares written off)		....	....
Income or Earning before Interest and Tax (EBIT)	(6)		....
Less: Interest on Debentures	(7)		....
Net Income or Earning before Tax (EBT)	(8)		....
Less: Tax	(9)		....
Income or Profit After Tax (PAT)	(10)		....

BALANCE SHEET

as on.......

Particulars		₹
Cash in Hand		....
Cash at Bank		....
Bills Receivable		....
Book Debts (less provision for bad debts)		....
Marketable Trade Investments		....
Liquid Assets	(1)	....
Inventories (stock of raw materials, finished goods, etc.)		....

Particulars			
Prepaid Expenses			....
Current Assets	(2)		....
Bills Payable			....
Trade Creditors			....
Outstanding Expenses			....
Bank Overdraft			....
Other Liabilities Payable within a year			....
Current Liabilities	(3)		....
Provision for Tax			....
Proposed Dividends			....
Other Provisions			....
Provisions	(4)		....
Current Liabilities and Provisions	(3) + (4) = (5)		....
Net Working Capital			....
[Current Assets– Current Liabilities and Provisions (2) – (5)]	(6)		....
Goodwill at cost*			....
Land and Building			....
Plant and Machinery			....
Loose Tools			....
Furniture and Fixtures			....
Investments in Subsidiaries			....
Patents, Copyright, etc.**			....
Fixed Assets	(7)		....
Capital Employed	(6) + (7) = (8)		....
Other Assets:	(9)		....
Investment in Government Securities, Unquoted Investments, etc.			....
Other Investments (non-trading)			....
Advances to Directors			....
Company's Net Assets	(8) + (9) = (10)		....
Debentures			....
Other Long-term Loans (payable after a year)			....
Long-term Loans	(11)		....
Shareholders' Net Worth	(10) – (11) = (12)		....
(or total tangible net worth)			....
Preference Share Capital	(13)		....
Equity Shareholders' Net Worth	(12) – (13) = (14)		....
Equity Shareholders' Net Worth is represented by:			....
Equity Share Capital			....
Forfeited Shares			....
Reserves			....
Surplus			....
Equity Shareholders' Claims			....
Less: Accumulated Losses		....	....
Miscellaneous Expenditure (such as preliminary expenses, discount on issue of shares or debentures not written off)		....	....
Equity Shareholders' Net Worth			....

* Goodwill to be included only when it has been paid for and has the value.

** Patents, Copyrights, etc., should be shown only when they have the value. In case these assets are valueless, they should not be included here but should be written off against shareholders' claims with other losses.

The process of methodical classification of the data will be clear with the help of the following illustration:

Illustration 11.1. Below is, given the Balance Sheet of Prospective Ltd. as on 31 March, 2006, together with the Profit and Loss Account.

BALANCE SHEET

as on 31 March, 2006 (` *in thousands*)

Liabilities	`	*Assets*		`
Equity Share Capital	500	Trade Investments		200
Dividend Equilisation Reserve	70	Patents		30
General Reserve	110	Land and Building (at cost)		320
Profit and Loss A/c	190	Plant and Machinery (at cost)		650
6 per cent Debentures	250	Cash at Bank		88
Bank Overdraft	150	Stock:		
Staff Provident Fund	80	Materials	90	
Creditors	210	Finished goods	160	
Unpaid Dividend	10	Work-in-progress	60	310
Proposed Dividend	60	Sundry Debtors	230	
Provision for Taxation	170	*Less*: Provision for		
Provision for Depreciation	250	doubtful debts	8	222
		Bills Receivable		30
		Staff provident fund investment		80
		Deposits with Customs Authorities		20
		Advance for Purchase of Machinery		60
		Preliminary Expenses		30
	2,050			2,050

PROFIT AND LOSS ACCOUNT

for the year ended 31 March, 2006 (` *in thousand*)

Particulars		`	*Particulars*		`
To Stock:			By Sales	2,000	
Materials	90		By Stock:		
Finished goods	120		Materials	90	
Work-in-progress	40	250	Finished goods	160	
To Purchase of Materials		850	Work-in-progress	60	310
To Wages		280	By Dividend on Investment		30
To Power		40	By Sales of Scrap		8
To Miscellaneous Factory Expenses		110			
To Office Salaries		80			
To Miscellaneous Expenses		90			
To Selling and Distribution Expenses		120			
To Advertisements		80			
To Preliminary Expenses		5			
To Debenture Interest		15			
To Depreciation:					
Plant	60				
Land and Building	12	72			
To Provision for Taxation		170			
To Proposed Dividend		60			
To Balance of Profit		126			
		2,348			2,348

You are required to present the information suitably summarised in Single-Column Statements (Vertical Form) showing distinctly the following:

(i) Total Capital employed

(ii) Shareholders' Funds

(iii) Gross Profit

(iv) Net Operating Profit

(v) Cost of goods sold.

Solution:

Prospective Limited
BALANCE SHEET
as on 31 March, 2006 (` *in thousands*)

Cash at Bank			88
Book Debts (net)			222
Bills Receivable			30
Liquid Assets	(1)		340
Deposit with Customs			30
Stock:			
Materials		90	
Finished goods		160	
Work-in-progress		60	310
Current Assets	(2)		680
Bank Overdraft			150
Creditors			210
Unpaid Dividend			10
Current Liabilities	(3)		370
Proposed Dividend			60
Provision for Taxation			170
Current Liabilities and Provisions	(4)		600
Net Working Capital	(2) – (4) = (5)		80
Land and Building (at cost)		320	
Plant and Machinery (at cost)		650	
Patents		30	
Fixed Assets		1,000	
Less: Provision for Depreciation	(6)	250	
Net Fixed Assets		750	
Advance against Machinery		60	
Trade Investments		200	
Total Fixed Investment	(7)		1,010
Staff Provident Funds Investments		80	
Less: Staff Provident Funds		80	Nil
Total Capital employed	(8)		1,090
Less: 6 per cent Debentures	(9)		250
Shareholders' Funds	(10)		840
Represented by:			
Equity Share Capital			500
General Reserve			110
Dividend Equalisation Reserve			70
Profit and Loss A/c (*Less:* Preliminary Expenses)			160
			840

PROFIT AND LOSS ACCOUNT
for the year ended 31 March, 2006 (` *in thousands*)

Sales			2,000
Less:	Cost of goods sold		1,284
	Gross Profit		716
Less:	Operating Expenses:		
	Salaries	80	
	Miscellaneous Expenses	90	
	Selling and Distribution Expenses	120	
	Advertisements	80	370
	Net Operating Profit		346
Add:	Non-operating Income (Dividends on Investments)	30	
Less:	Non-operating Expenses (interest on debentures)	15	15
			361
Less:	Preliminary Expenses written off		5
	Profit before Tax		356
Less:	Income Tax payable		170
	Profit after Tax		186
Less:	Proposed Dividend		60
	Profit retained in the business		126

STATEMENT OF COST OF GOODS SOLD

for the year ended 31 March, 2006 (` *in thousands*)

Cost of goods manufactured:			
Work-in-progress on 1 April, 1995			40
Materials consumed:	Opening stock	90	
	Purchases	850	
		940	
Less: Closing Stock		90	850
Wages			280
Power			40
Miscellaneous Factory Expenses			110
Depreciation			72
			1,392
Less: Sale of Scrap		8	
Work-in-progress on 31 March, 2006		60	68
Cost of goods manufactured			1,324
Add: Opening stock of Finished Goods			120
			1,444
Less: Closing Stock of Finished Goods			160
Cost of goods sold			1,284

11.4 RATIO ANALYSIS

Accounting ratios are relationships expressed in mathematical terms between figures which are connected with each other in some manner. Obviously, no purpose will be served by comparing two sets of figures which are not at all connected with each other. Moreover, absolute figures are also unfit for comparison.

CHECK YOUR PROGRESS

1. True or False

(a) Equity to fixed interest-bearing securities is Acid Test Ratio.
(b) Debt equity ratio is a 'Solvency Ratio'.
(c) Ratio analysis is a technique of planning and control.
(d) A firm's ability to meet the interest charge and repayment dues on long-term obligations is referred to as its solvency.
(e) Rate of return on capital employed is a turnover ratio.
(f) 'Acid Test' denotes liquidity.
(g) For Stock Turnover Ratio, average stock is to be calculated.
(h) A decreased Stock Turnover Ratio usually indicates expanding business.

2. The current ratio of a company is 2 : 1. Which of the following suggestions would improve the ratio, which would reduce it and which would not change it?

(a) To pay a current liability.
(b) To sell a motor car for cash at a slight loss.
(c) To borrow money on an interest-bearing promissory note.
(d) To purchase stocks for cash.
(e) To give interest-bearing promissory note to a creditor to whom money was owed on current account.

11.5 CLASSIFICATION OF RATIOS

Ratios can be classified into different categories depending upon the basis of classification.

Traditional Classification. This classification has been on the basis of the financial statements to which the determinants of a ratio belong. On this basis, the ratios could be classified as:

1. Profit and Loss Account Ratios, *i.e.*, ratios calculated on the basis of the items of the Profit and Loss Account only, *e.g.*, gross profit ratio, stock turnover ratio, etc.
2. Balance Sheet Ratios, *i.e.*, ratios calculated on the basis of the figures of Balance Sheet only, *e.g.*, current ratio, debt-equity ratio, etc.

3. Composite Ratios or Inter-statement Ratios, *i.e.*, ratios based on figures of profit and loss account as well as the balance sheet, *e.g.*, fixed assets turnover ratio, overall profitability ratio, etc.

Functional Classification. The traditional classification has been found to be too crude and unsuitable because analysis of Balance Sheet and Income Statement cannot be done in isolation. They have to be studied together in order to determine the profitability and solvency of the business. In order that ratios serve as a tool for financial analysis, they are classified according to their functions as follows:

1. Profitability Ratios,
2. Turnover Ratios, and
3. Financial Ratios.

In the following pages we are explaining the ratios covered by each of the above categories in detail.

11.6 PROFITABILITY RATIOS

Profitability is an indication of the efficiency with which the operations of the business are carried on. Poor operational performance may indicate poor sales and hence poor profits. A lower profitability may arise due to the lack of control over the expenses. Bankers, financial institutions and other creditors look at the profitability ratios as an indicator whether or not the firm earns substantially more than it pays interest for the use of borrowed funds and whether the ultimate repayment of their debt appears reasonably certain. Owners are interested to know the profitability as it indicates the return which they can get on their investments. The following are the important profitability ratios.

1. **Overall Profitability Ratio.** It is also called as ''Return on Investment'' (*ROI*). It indicates the percentage of return on the total capital employed in the business. It is calculated on the basis of the following formula:

$$\frac{\text{Operating Profit}}{\text{Capital Employed}} \times 100$$

The term capital employed has been given different meanings by different accountants. Some of the popular meanings are as follows:

(i) Sum-total of all assets whether fixed or current.

(ii) Sum-total of fixed assets.

(iii) Sum-total of long-term funds employed in the business, *i.e.*:

$$\text{Share Capital} + \text{Reserves and Surplus} + \text{Long-term Loans} + \left[\text{Non-business Assets} + \text{Fictitious Assets}\right]$$

In management accounting, the term capital employed is generally used in the meanings given in the point third above.

The term 'Operating Profit' means 'Profit before Interest and Tax'. The term 'Interest' means 'Interest on long-term borrowings'. Interest on short-term borrowings will be deducted for computing operating profit. Non-trading incomes such as interest on Government securities or non-trading losses or expenses such as loss on account of fire, etc., will also be excluded.

The computation of ROI can be understood with the help of the following illustration:

Illustration 11.2. From the following figures extracted from the Income Statement and the Balance Sheet of Anu Pvt. Ltd., calculate the Return on Total Capital Employed (ROI):

Particulars	`	*Particulars*	`
Fixed Assets	4,50,000	Reserves	1,00,000
Current Assets	1,50,000	Debentures	1,00,000
Investment in Government Securities	1,00,000	Income from Investments	10,000
Sales	5,00,000	Interest on Debentures at 10 per cent	
Cost of Goods sold	3,00,000	Provision for Tax at 50 per cent of Net Profits	
Share Capital:			
10 per cent Preference	1,00,000		
Equity	2,00,000		

Solution:

It will be appropriate to prepare the Profit and Loss Account and the Balance Sheet of the company before computation of the return on capital employed.

Anu Sales Pvt. Limited

PROFIT AND LOSS ACCOUNT

Particulars	`	*Particulars*	`
To Cost of goods sold	3,00,000	By Sales	5,00,000
To Interest on Debentures	10,000	By Income from Investments	10,000
To Provision for Taxation	1,00,000		
To Net Profit after Tax	1,00,000		
	5,10,000		5,10,000

BALANCE SHEET

as on.....

Liabilities	`	*Assets*	`
Share Capital:		Fixed Assets	4,50,000
10% Preference	1,00,000	Current Assets	1,50,000
Equity	2,00,000	Investment in Government Securities	1,00,000
Reserves	1,00,000		
10% Debentures	1,00,000		
Profit and Loss A/c	1,00,000		
Provision for Taxation	1,00,000		
	7,00,000		7,00,000

Return on total capital employed = $\dfrac{\text{Net Operating Profit before Interest and Tax}}{\text{Total Capital employed}} \times 100$

$= \dfrac{20,00,000}{5,00,000} \times 100$

= 40 per cent

Net Operating Profit = Net Profit + Provision for Tax – Income from Investments + Interest on Debentures

= ` 1,00,000 + ` 1,00,000 – ` 10,000 + ` 10,000

= ` 2,00,000

Capital employed = Fixed Assets + Current Assets – Provision for Tax

= ` 4,50,000 + ` 1,50,000 – ` 1,00,000

= ` 5,00,000

or Share Capital + Reserves + Debentures + Profit and Loss A/c Balance – Investments in Government Securities

= ` 3,00,000 + ` 1,00,000 + ` 1,00,000 + ` 1,00,000 – ` 1,00,000

= ` 5,00,000

Return on Investment (ROI) can be computed for computing the return for different purposes. Some of the ratios that are calculated are as follows:

(i) *Return of Shareholders' Funds.* In case it is desired to work out the profitability of the company from the shareholders' point of view, it should be computed as follows:

$$\frac{\text{Net Profit after Interest and Tax}}{\text{Shareholders' Fund}} \times 100$$

The term Net Profit here means 'Net Income after Interest and Tax'. It is different from the 'Net Operating Profit' which is used for computing the 'Return on Total Capital Employed' in the business. This is because the shareholders are interested in Total Income after Tax including Net-Non-operating Income (*i.e.,* Non-operating Income – Non-operating Expenses).

Taking the figures from Illustration 10.2, the Return on Shareholders' Funds will be computed as follows:

$$\frac{\text{` } 1,00,000}{\text{` } 5,00,000} \times 100 = 20 \text{ per cent}$$

(ii) *Return on Equity Shareholders' Funds.* The profitability from the point of view of the equity shareholders will be judged after taking into account the amount of dividend payable to the Preference Shareholders. The Return on Equity Shareholders' Funds will, therefore, be computed on the following basis:

$$\frac{\text{Net Profit after Interest, Tax and Preference Dividend}}{\text{Equity Shareholders' Fund}} \times 100$$

Taking figure from the Illustration 10.2, the Return on Equity Shareholders' funds will be computed as follows:

$$= \frac{₹\ 90,000}{₹\ 3,90,000} \times 100 = 23 \text{ per cent}$$

(iii) Return on Total Assets. This ratio is computed to know the 'Productivity of the Total Assets'. There are three methods for computing it:

(a) $$\frac{\text{Net Profit after Tax}}{\text{Total Assets}} \times 100$$

On the basis of the figure in the Illustration 1.2, the ratio will be:

$$= \frac{1,00,000}{7,00,000} \times 100$$

(b) $$\frac{\text{Net Profit after Tax + Interest}}{\text{Total Assets}} \times 100 = 14.29$$

On the basis of figures given in the Illustration 10.2, the ratio will be:

$$= \frac{1,00,000 + 10,000}{7,00,000} \times 100 = 15.71 \text{ per cent}$$

The inclusion of interest is conceptually sound because total assets have been financed from the 'pool' of funds supplied by the creditors and the owners. The objective of computing the 'Return on Total Assets' is to find out how effectively the funds pooled together have been used. Hence, it will be proper to include the interest in computing the Return on Total Assets.

A further modification of this formula has been suggested by many accountants. It excludes 'Intangible Assets' from the 'Total Assets'. However, it will be proper to exclude only fictitious assets and not all intangible assets. The term 'fictitious assets' includes assets such as Preliminary expenses, Debit balance in the Profit and Loss Account, etc. The Return on Assets, according to this method, may, therefore, be calculated as follows:

(c) $$= \frac{\text{Net Profit after Tax + Interest}}{\text{Total Assets excluding Fictitious Assets}} \times 100$$

(iv) Return on Gross Capital employed. The term Gross Capital employed means the total of Fixed Assets and the Current Assets employed in the business. The formula for its computation can be put as follows:

$$\frac{\text{Net Profit before Interest (on long as well as short-term borrowings) and Tax}}{\text{Gross Capital employed (i.e., Net Fixed Assets + Current Assets employed in the business)}}$$

On the basis of figures given in the Illustration 10.2, the Return on Gross Capital employed can be computed as follows:

$$\frac{2,00,000}{6,00,000} \times 100 = 33^{1}/ \text{ per cent}$$

Tutorial Note. The students are advised to give their assumptions regarding computation of 'Net Profits' as well as 'Capital employed' while calculating the Return on Investment (ROI).

Average Capital employed. Some people prefer to use 'Average Capital employed' (or average total assets, as the case may be) in place of only 'Capital employed' (or Total Assets). Average Capital employed is the average of the capital employed at the beginning and at the end of the accounting period. For example, if in Illustration 11.2 given above, the capital employed at the beginning of the accounting period was ₹ 4,50,000 the ROI will be calculated as follows:

$$\text{ROI} = \frac{\text{Net Profit before Interest and Tax}}{\text{Average Capital employed}} \times 100$$

$$= \frac{2,00,000}{1/2\,(5,00,000 + 4,50,000)} \times 100$$

$$= \frac{2,00,000}{4,75,000} \times 100 = 42.11 \text{ percent.}$$

It should be noted that while computing "Return on Investment" according to any of the above methods 'Abnormal Gains or Losses' should always be excluded form Net Profit.

Significance of ROI. The Return on Capital invested is a concept that measures the profit which a firm earns on investing a unit of capital. 'Yield on capital' is another term employed to express the idea. It is desirable to ascertain this periodically. The profit being the net result of all operations, the return on capital expresses all efficiencies or inefficiencies of a business collectively and, thus, is a dependable measure for judging its overall efficiency or inefficiency. On this basis, there can be comparison of the efficiency of one department with that of another, of one plant with that of another, one company with that of another and one industry with that of another. For this purpose, the amount of profits considered is that before making deductions on account of interest, income tax and dividends and capital is the aggregate of all the capital at the disposal of the company, viz., equity capital, preference capital, reserves, debentures, etc.

The Return on Capital when calculated in this manner would also show whether the company's borrowing policy was wise economically and whether the capital had been employed fruitfully. Suppose funds have been borrowed at 8 per cent and the Return on Capital is 7½ per cent, it would have been better not to borrow (unless borrowing was vital for survival). It would also show that the firm had not been employing the funds efficiently.

Return on Capital, as explained, may also be calculated on Equity Shareholders' capital. In that case, the profit after deductions for interest, income tax and preference dividend will have to be compared with Equity Shareholders' funds. It would not indicate operational efficiency or inefficiency but merely the maximum rate of dividend that might be declared.

The business can survive only when the return on capital employed is more than the cost of capital employed in the business.

2. Earning Per Share (EPS). In order to avoid confusion on account of the varied meanings of the term capital employed, the overall profitability can also be judged by calculating earning per share with the help of the following formula:

$$\text{Earning per Equity Share} = \frac{\text{Net Profit after Tax and Preference Dividend}^{1}}{\text{Number of Equity Shares}}$$

Illustration 11.3. Calculate the earning per share from the following data:

Net Profit before Tax ₹ 1,00,000.
Taxation at 50 per cent of Net Profit.

10 per cent Preference Share Capital (₹ 10 each)	₹ 1,00,000.
Equity Share Capital (₹ 10 shares)	₹ 1,00,000.

Solution:

$$\text{Earning per Share} = \frac{\text{Net Profit after Tax and Pref. Dividend}}{\text{Number of Equity Shares}}$$

$$= \frac{₹\ 40{,}000}{10{,}000} = ₹\ 4 \text{ per share}$$

Significance. The earning per share helps in determining the market price of the equity share of the company. A comparison of earning per share of the company with another will also help in deciding whether the equity share capital is being effectively used or not. It also helps in estimating the company's capacity to pay dividend to its equity shareholders.

Earnings Per Share (EPS – AS 20)

The Institute of Chartered Accountants of India (ICAI) has issued AS 20 – Earnings per Share which has become mandatory w.e.f. 1.4.2001 in respect of enterprises whose equity shares or potential equity shares are listed on a recognized stock exchange in India.

The Standard makes a distinction between basic and diluted earning per share. The enterprise has to give both types of earnings as per the standard.

Basic Earnings Per Share (BEPS). The basic earnings per share is computed as follows :

$$\frac{\text{Net Profit (or Loss) for the Period Attributable to Equity Shareholders}}{\text{Weighted Average Number of Equity Shares Outstanding during the year}}$$

The net profit for the above purpose means profit after deducting preference dividend and tax, excluding dividend tax on equity shares. The weighted average number of equity shares are the equility shares outstanding at the beginning of the period adjusted by the number of equity shares bought back or issued in the period multiplied by the time weighting factor.

Illustration 11.4. From the following details, compute the basic earnings per share:

Net profit for the year ending 31.12.2002 after tax and preference dividend	₹ 21,000
Equity as on 1.1.2002	1,800
Issued Equity Shares for Cash on 31.5.2002	600
Bought back Equity Shares on 1.11.2002	300

[1] Profit available for equity shareholders.

Solution :

Weighted Average Number of Equity Shares Outstanding $= (1{,}800 \times 12/12 + 600 \times 7/12 - 300 \times 2/12)$

$= 2{,}100$ shares

$$\text{Basic Earnings Per Share} = \frac{\text{Net Profit for the Period Attributable to Equity Shareholders}}{\text{Weighted Average No. of Equity Shares Outstanding during the Year}}$$

$$= \frac{21{,}000}{2{,}100}$$

= ₹ 10 per share

Diluted Earnings Per Share (DEPS). Diluted earnings per share are calculated when there are potential equity shares in the capital structures of the enterprise. A potential equity share is a financial instrument or other contract (e.g. Convertible Debentures, Convertible Preference Shares, Option Warrants etc.) that entitles or may entitle its holder to equity shares. The diluted earnings per share are calculated as follows:

$$\frac{\text{Adjusted Net Profit (or Loss) for the Period Attributable to Equity Shareholders}}{\text{Adjusted Weighted Average Number of Shares}}$$

Illustration 11.5. From the following details, calculate:

(a) Basic Earnings per Share; and

(b) Diluted Earnings per Share.

Net Profit for the year ending 31.12.2002 after Preference Dividend & Tax ₹ 1,00,000	
No. of Equity Shares as on 1.1.2002	50,000
No. of 12% Convertible Debentures of ₹ 100/- each	1,00,000

Each debentrue is convertible into 10 equity shares. The tax rate applicable to the company is 30%.

Solution :

$$\text{(a) Basic Earning per Share} = \frac{\text{Net Profit Available for Equity Shareholders}}{\text{No. of Equity Shares Outstanding}}$$

$$= \frac{1{,}00{,}000}{5{,}000}$$

= ₹ 20 per share

(b) Diluted Earnings per Share = Adjusted Net Profit for the Current Year

Net Profit after Interest Tax and Preference Dividend = ₹ 1,00,000

Add: Interest Expense after Tax effect

(₹ 1,20,000 – ₹ 36,000) = ₹ 84,00

₹ 1,84,000

No. of Equity shares Resulting from conversion of Debentures = 10,000

Total number of Equity Shares after conversion of Debentures into Shares = 60,000

$$\text{Diluted Earning per Share} = \frac{\text{Adjusted Net Profit for the Period for Equity Shareholders}}{\text{Adjusted Weighted Average no. of Shares}}$$

$$= \frac{₹\ 1{,}84{,}000}{60{,}000}$$

= ₹ 3.06 per share

3. Price Earning Ratio (PER). This ratio indicates the number of times the earning per share is covered by its market price. This is calculated according to the following formula:

$$\frac{\text{Market Price Per Equity Share}}{\text{Earning Per Share}}$$

For example, the market price of a share is ₹ 30 and earning per share is ₹ 5, the price earning ratio would be 6 (i.e., 30 ÷ 5). It means the market value of every one rupee of earning is six times or ₹ 6. The ratio is useful in financial forecasting. It also help in knowing whether the shares of a company are under or overvalued. For example, if the earning per share of AB Limited is ₹ 20, its market price ₹ 140 and earning ratio of similar companies is 8, it means that the market value of a share of AB Limited should be ₹ 160 (i.e., 8 × 20). The share of AB Limited is, therefore, undervalued in the market by ₹ 20. In case the price earning ratio of similar companies is only 6, the value of share of AB Limited should have been ₹ 120 (6 × 20), thus the share is overvalued by ₹ 20.

Significance. Price-earning ratio helps the investor in deciding whether to buy or not to buy the shares of a company at a particular market price.

4. Gross Profit Ratio. This ratio expresses relationship between gross profit and net-sales. Its formula is:

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

Illustration 11.6. Calculate the Gross Profit Ratio from the following figures:

Sales	₹ 1,00,000	Purchases	₹ 60,000
Sales Returns	10,000	Purchases Returns	15,000
Opening Stock	20,000	Closing Stock	5,000

Solution:

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

$$= \frac{\text{Net Sales} - \text{Cost of goods sold}}{\text{Net Sales}} \times 100$$

$$= \frac{₹\ 90{,}000 - ₹\ 60{,}000}{₹\ 90{,}000} \times 100$$

$$= \frac{₹\ 30{,}000}{₹\ 90{,}000} \times 100$$

$$= 33\frac{1}{3}\%$$

Significance. This ratio indicates the degree to which the selling price of goods per unit may decline without resulting in losses from operations to the firm. It also helps in ascertaining whether the average percentage of mark up on the goods is maintained.

There is no norm for judging the Gross Profit Ratio, therefore, the evaluation of the business on its basis is a matter of judgment. However, the gross profits should be adequate to cover operating expenses and to provide for fixed charges, dividends and building up of reserves.

5. Net Profit Ratio. This ratio indicates net margin earned on a sale of ₹ 100. It is calculated as follows:

$$\frac{\text{Net Operating Profit}}{\text{Net Sales}} \times 100$$

Net operating profit is arrived at by deducting operating expenses from Gross Profit.

Illustration 11.7. Calculate Net Profit Ratio from the following data:

Sales less Returns	₹ 1,00,000	Selling Expenses	₹ 10,000
Gross Profit	40,000	Income from Investments	5,000
Administration Expenses	10,000	Loss on account of fire	3,000

Solution:

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

$$= \frac{20{,}000}{1{,}00{,}000} \times 100 \qquad = 20 \text{ per cent}$$

Significance. This ratio helps in determining the efficiency with which affairs of the business are being managed. An increase in the ratio over the previous period indicates improvement in the operational efficiency of the business provided the gross profit ratio is constant. The ratio is thus an effective measure to check the profitability of a business.

An investor has to judge the adequacy or otherwise of this ratio by taking into account the cost of capital, the return in the industry as a whole and market conditions such as boom or depression period. No norms can be laid down. However, constant increase in the above ratio year after year is a definite indication of improving conditions of the business.

6. **Operating Ratio.** This ratio is a complementary of net profit ratio. In case the net profit ratio is 20 per cent, it means that the operating ratio is 80 per cent. It is calculated as follows:

$$\frac{\text{Operating Costs}}{\text{Net Sales}} \times 100$$

Operating costs include the cost of direct materials, direct labour and other overheads, *viz*., factory, office or selling. Financial charges such as interest, provision for taxation, etc., are generally excluded from operating costs.

For example, in the Illustration 10.4 given for the net profit ratio above, when the net profit ratio is 20 per cent, the operating ratio will be 80 per cent. The ratio can be calculated regarding each element of operating cost to sales, *viz*.

(*i*) Direct Material Cost to Sales $= \dfrac{\text{Direct Material Cost}}{\text{Net Sales}} \times 100$

(*ii*) Direct Labour Cost to Sales $= \dfrac{\text{Direct Labour Cost}}{\text{Net Sales}} \times 100$

(*iii*) Factory Overhead to Sales $= \dfrac{\text{Factory Overheads}}{\text{Net Sales}} \times 100$

Similarly, percentage of other operating costs such a administration and selling costs to sales can be computed.

Significance. This ratio is the test of the operational efficiency with which the business is being carried. The operating ratio should be low enough to leave a portion of sales to give a fair return to the investors.

A comparison of the operating ratio will indicate whether the cost component is high or low in the figure of sales. In case the comparison shows that there is increase in this ratio, the reason for such increase should be found out and management be advised to check the increased.

7. **Fixed Charges Cover.** The ratio is very important from the lender's point of view. It indicates whether the business would earn sufficient profits to pay periodically the interest charges. The higher the number, the more secure the lender is in respect of his periodical interest income. It is calculated as follows:

$$= \frac{\text{Income before Interest and Tax}}{\text{Interest Charges}}$$

This ratio is also called as "Debt Service Ratio".

The standard for this ratio for an industrial company is that interest charges should be covered six to seven times.

Illustration 11.8. The operating profit of *A* Ltd. after charging interest on debentures and tax is a sum of ` 10,000. The amount of interest charged is ` 2,000 and the provision for tax has been made of ` 4,000.

Calculate the interest charges cover ratio.

Solution:

$$\text{Interest Charges Cover} = \frac{\text{Net Profit before Interest and Tax}}{\text{Interest Charges}}$$

$$= \frac{\text{` } 16{,}000}{\text{` } 2{,}000} = 8 \text{ times}$$

In case it is desired to compute the 'fixed dividend cover' it can be computed on the following basis:

$$\text{Fixed Dividend Cover} = \frac{\text{Net Profit after Interest and Tax}}{\text{Preference Dividend}}$$

In the above illustration if the amount of Preference Dividend payable is a sum of ` 1,000, the fixed dividend cover will be computed as follows:

$$= \frac{\text{` } 10{,}000}{\text{` } 1{,}000} = 10 \text{ times}$$

8. **Debt Service Coverage Ratio.** The interest coverage ratio, as explained above, does not tell us anything about the ability of a company to make payment of principal amount also on time. For this purpose debt service coverage ratio is calculated as follows:

$$\text{Debt Service Coverage Ratio} = \frac{\text{Net Profit before Interest and Tax}}{\text{Interest} + \dfrac{\text{Principal Payment Instalment}}{\text{I-tax Rate}}}$$

The principle payment instalment is adjusted for tax effects since such payment is not deductible from net profit for tax purposes.

Illustration 11.9. Net profit before interest and tax ` 50,000. 10% Debentures (payable in 10 year in equal instalments) ` 1,00,000.

Tax Rate 50%

Calculate the Debt Service Coverage Ratio.

Solution:

$$\text{Debt Service Coverage Ratio} = \frac{\text{Net Profit before Interest and Tax}}{\text{Interest} + \dfrac{\text{Principal Payment Instalment}}{\text{I-tax Rate}}}$$

The ratio comes to 1.67. It means net profit before interest and tax covers adequately both interest and principal repayment instalment. Some accountants prefer to compute the Debt Service Coverage Ratio as under:

$$\frac{\text{Cash Profit available for Debts Service}}{\text{Interest + Principal Payment Instalment}}$$

Cash Profit available for debt service is computed by adding to Net Profit items like depreciation, interest on debt and amortization of items like goodwill, preliminary expenses, etc.

However, the former seems to be a better method since by giving the tax effect, it puts the two items interest and principal payment instalment on the same footing.

The higher the ratio, better it is.

9. **Payout Ratio.** This ratio indicates what proportion of earning per share has been used for paying dividend. The ratio can be calculated as follows:

$$\frac{\text{Dividend per Equity Share}}{\text{Earning per Equity Share}}$$

A complementary of this ratio is Retained Earning Ratio. It is calculated as follows:

$$= \frac{\text{Retained Earning per Equity Share}}{\text{Earning per Equity Share}}$$

or

$$= \frac{\text{Retained Earnings}}{\text{Total Earning}} \times 100$$

Illustration 11.10. Compute the Payout Ratio and the Retained Earning Ratio from the following data:

Net Profit	` 10,000	No. of Equity Shares	3,000
Provision for Tax	5,000	Dividend per Equity Share	Re 0.40
Preference Dividend	2,000		

Solution:

$$\text{Payout Ratio} = \frac{\text{Dividend per Equity Share}}{\text{Earning per Equity Share}} \times 100$$

$$= \frac{\text{Re } 0.40}{\text{Re } 1} \times 100 = 40 \text{ per cent}$$

$$\text{Retained Earning Ratio} = \frac{\text{Retained Earnings}}{\text{Total Earning}} \times 100$$

$$= \frac{\text{` } 1{,}8000}{\text{` } 3{,}000} \times 100 = 60 \text{ per cent}$$

$$= \frac{\text{Retained Earning per share}}{\text{Total Earning per share}} \times 100$$

$$= \frac{\text{Re .60}}{\text{Re 1}} \times 100 = 60 \text{ per cent}$$

Significance. The payout ratio and the retained earnings ratio are indicators of the amount of earnings that have been ploughed back in the business. The lower the payout ratio, the higher will be the amount of earnings ploughed back in the business and *vice versa.* Similarly, the lower the retained earnings ratio, the lower will be the amount of earnings ploughed back into the business and *vice versa.* A lower payout ratio or a higher retained earnings ratio means a stronger financial position of the company.

10. **Dividend Yield Ratio.** This ratio is particularly useful for those investors who are interested only in dividend income. The ratio is calculated by comparing the rate of dividend per share with market value. Its formula can be put as follows:

$$\frac{\text{Dividend per share}}{\text{Market Price per share}}$$

For example, if a company declares dividend at 20 per cent on its shares, each having a paid-up value of ` 8 and market price of ` 25, the dividend yield ratio will be calculated as follows:

Dividend per Share $= \frac{20}{100} \times 8 =$ ` 1.60

$$\text{Dividend Yield Ratio} = \frac{\text{Dividend per Share}}{\text{Market Price per Share}} \times 100 = \frac{1.6}{25} \times 100 = 6.4\%$$

Significance. The ratio helps an intending investor in knowing the effective return he is going to get on the proposed investment. For example, in the above case though the company is paying a dividend of 20 per cent on its shares, a person who purchases the shares of the company from the market will get only an effective return of 6.4 per cent. He, therefore, can decide whether he should opt this investment or not.

CHECK YOUR PROGRESS

3. Assuming the current ratio is 2, state in each of the following cases whether the ratio will improve or decline or will have no change.
   (a) Payment of a current liability.
   (b) Purchase of fixed assets.
   (c) Cash collected from customers.
   (d) Bills receivable dishonoured.
   (e) Issue of new shares.
4. Which accounting ratio will be useful in indicating the following symptoms:
   (a) Low capacity utilisation.
   (b) Falling demand for the product in the market.
   (c) Inability to pay interest.
   (d) Borrowing for short-term and investing in long-term assets.
   (e) Large inventory accumulation in anticipation of price rise in future.
   (f) Inefficient collection of debtors.
   (g) Inability to pay dues to financial institutions.
   (h) Return of shareholders' funds being much higher than the overall return on investments.
   (i) Liquidity crisis.
   (j) Increase in average credit period to maintain sales in view of falling demand.

11.7 TURNOVER RATIOS

The turnover ratios or activity ratios indicate the efficiency with which the capital employed is rotated in the business. The overall profitability of the business depends on two factors: (*i*) the rate of return of capital employed; and (*ii*) the turnover, *i.e.*, the speed at which the capital employed in the business rotates. Higher the rate of rotation, the greater will be the profitability. Thus, overall profitability ratio can be classified into:

1. Net Profit Ratio
2. Turnover Ratio

As already explained the Net Profit Ratio is calculated as follows:

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

Turnover ratio is calculated as follows:

$$= \frac{\text{Sales}}{\text{Capital employed}}$$

Turnover ratio indicates the number of times the capital has been rotated in the process of doing business.

When these two ratios are put together, we get the overall profitability ratio.

Overall profitability ratio = Net Profit Ratio × Turnover Ratio

$$= 100 \times \frac{\text{Net Profit}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Capital employed}}$$

$$= \frac{\text{Net Profit}}{\text{Capital employed}} \times 100$$

Illustration 11.11. Determine which company is more profitable.

	A Ltd.	B Ltd.
Net Profit Ratio	5 per cent	8 per cent
Turnover Ratio	6 times	3 times

Solution:

In the above case if only net profit ratio is seen, Company *B* seems to be more profitable. But actually Company *A* is more profitable, because it has a higher turnover ratio which gives it a higher return on capital employed, *i.e.*, 30 per cent in comparison to 24 per cent in case of Company *B*.

In order to find out which part of capital is efficiently employed and which part not, different turnover ratios are calculated. These ratios are as follows:

1. **Fixed Assets Turnover Ratio.** This ratio indicates the extent to which the investments in fixed assets contributed towards sales. If compared with a previous period, it indicates whether the investment in fixed assets has been judicious or not. The ratio is calculated as follows:

$$\frac{\text{Net Sales}}{\text{Fixed Assets (net)}}$$

Illustration 11.12. The following details have been given to you for Messrs Reckless Ltd. for two years. You are required to find out the Fixed Assets Turnover Ratio and comment on it.

	1997	*1998*
Fixed Assets at written down value	` 1,50,000	` 3,00,000
Sales *less* Returns	6,00,000	8,00,000

Solution:

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

1997	*1998*
= 6,00,000 ÷ 1,50,000 = 4 times	8,00,000 ÷ 3,00,000 = 2.67 times

There has been a decline in the Fixed Assets Turnover Ratio though, absolute figures of sales have gone up. It means, increase in the investment in Fixed Assets has not brought about commensurate gain. However, the results for next two or three years must also be seen before commenting on judiciousness or otherwise of increase in investments in the fixed assets.

The fixed assets turnover ratio can further be divided into turnover of each item of fixed assets to find out the extent each fixed asset has been properly used. For example:

$$\text{Plant and Machinery to Turnover} = \frac{\text{Net Sales}}{\text{Plant and Machinery (Net)}}$$

$$\text{Land Buildings to Turnover} = \frac{\text{Net Sales}}{\text{Land and Buildings (Net)}}$$

Working Capital Turnover Ratio. This ratio indicates whether or not working capital has been effectively utilised in making sales. The ratio is calculated as follows:

$$\frac{\text{Net Sales}}{\text{Working Capital}}$$

Working capital turnover ratio may take different forms for different purposes. Some of them are being explained below:

(i) *Debtors' Turnover Ratio* (*Debtors' Velocity*). Debtors constitute an important constituent of current assets and therefore the quality of debtors to a great extent determines a firm's liquidity. Two ratios are used by financial analysts to judge the liquidity of a firm. They are (*i*) Debtors' turnover ratio, and (*ii*) Debt collection period ratio.

The debtors' turnover ratio is calculated as under:

$$\frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}$$

The term Accounts Receivable includes 'Trade Debtors' and 'Bills Receivable'.

Illustration 11.13. Calculate the Debtors' Turnover Ratio from the following figures:

Total Sales for the year 1998	` 1,00,000
Cash Sales for the year 1998	20,000
Debtors as on 1 January, 1998	10,000
Debtors as on 31 December, 1998	15,000
Bills Receivable as on 1 January, 1998	7,500
Bills Receivable as on 31 December, 1998	12,500

$$= \frac{\text{Credit Sales}}{\text{Average Accounts Receivable}} = \frac{\text{\` } 80{,}000}{\text{\` } 22{,}500^{*}} = 3.56 \text{ times}$$

*1/2 of (` 17,500 + ` 27,500).

In case details regarding opening and closing receivables and credit sales are not available the ratio may be calculated as follows:

$$\frac{\text{Total Sales}}{\text{Accounts Receivable}}$$

Significance. Sales to Accounts Receivable Ratio indicates the efficiency of the staff entrusted with collection of book debts. The higher the ratio, the better it is, since it would indicate that debts are being collected more promptly. For measuring the efficiency, it is necessary to set up a standard figure; a ratio lower that the standard will indicate inefficiency.

The ratio helps in Cash Budgeting since the flow of cash from customers can be worked out on the basis of sales.

(ii) *Debt Collection Period Ratio.* The ratio indicates the extent to which the debts have been collected in time. It gives the average debt collection period. The ratio is very helpful to the lenders because it explains to them whether their borrowers are collecting money within a reasonable time. An increase in the period will result in greater blockage of funds in debtors. The ratio may be calculated by any of the following methods:

(*a*) $\dfrac{\text{Months (or days) in a year}}{\text{Creditors' Turnover}}$

(*b*) $\dfrac{\text{Average Accounts Receivable} \times \text{Months (or days) in a year}}{\text{Credit Sales for the year}}$

(*c*) $\dfrac{\text{Accounts Receivable}}{\text{Average Monthly or Daily Credit Sales}}$

Illustration 11.14.

Credit Sales for the year	` 12,000	Bills Receivable	` 1,000
Debtors	1,000		

Calculate the Debtors' Turnover Ratio and Debt Collection Period.

Solution:

$$\text{Debtors' Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Accounts Receivable}} = \frac{12{,}000}{2{,}000} = 6 \text{ times.}$$

Debt Collection Period (or Average Age of Receivables)

$$= \frac{\text{Months in a year}}{\text{Debtors' Turnover}} = \frac{12}{6} = 2 \text{ months}$$

Or

$$= \frac{\text{Accounts Receivable} \times \text{Months in a year}}{\text{Credit Sales in the year}} = \frac{2{,}000 \times 12}{12{,}000} = 2 \text{ months}$$

Or

$$= \frac{\text{Accounts Receivable}}{\text{Monthly Credit Sales}} = \frac{2{,}000}{1{,}000} = 2 \text{ months}$$

In fact, the two ratios are interrelated. Debtor's turnover can be obtained by dividing the months (or days) in a year by the average collection period *(e.g.*, 12/2 = 6). Similarly, where the number of months (or days) in a year are divided by the debtors turnover, average debt collection period is obtained (*i.e.*, 12/6 = 2 months).

Significance. Debtors' collection period measures the quality of debtors since it measures the rapidity or slowness with which money is collected from them. A shorter collection period implies prompt payment by debtors. It reduces the chances of bad debts. A longer collection period implies too liberal and inefficient credit collection performance. However, in order to measure a firm's credit and collection efficiency, its average collection period should be compared with the average of the industry. It should be neither too liberal nor too restrictive. A restrictive policy will result in lower sales which will reduce profits.

It is difficult to provide a standard collection period of debtors. It depends upon the nature of the industry, seasonal character of the business and credit policies of the firm. In general, the amount of Receivables should not exceed 3–4 months' credit sales.

(iii) *Creditors' Turnover Ratio* (*Creditors' Velocity*). It is similar to Debtors' Turnover Ratio. It indicates the speed with which the payments for credit purchases are made to the creditors. The ratio can be computed as follows:

$$\frac{\text{Credit Purchases}}{\text{Average Accounts Payable}}$$

The term Accounts Payable includes 'Trade Creditors' and 'Bills Payable'.

In case the details regarding credit purchases, opening and closing accounts payable have not been given, the ratio may be calculated as follows:

$$\frac{\text{Total Purchases}}{\text{Accounts Payable}}$$

(iv) *Debt Payment Period Enjoyed Ratio* (*Average Age of Payables*). The ratio gives the average credit period enjoyed from the creditors. It can be computed by any one of the following methods:

(*a*) $\dfrac{\text{Months (or days) in a year}}{\text{Creditors' Turnover}}$

(*b*) $\dfrac{\text{Average Accounts Payable} \times \text{Months (or days) in a year}}{\text{Creditors' Turnover}}$

(*c*) $\dfrac{\text{Average Accounts Payable}}{\text{Average Monthly (or daily) Credit Purchases}}$

Illustration 11.15. From the following figures, calculate the Creditors' Turnover Ratio and the Average Age of Accounts Payable:

Credit Purchases during 1998	` 1,00,000	Bills Payable on 1 Jan., 1998	` 4,000
Creditors on 1 Jan., 1998	20,000	Bills Payable on 31 Dec., 1998	6,000
Creditors on 31 Dec., 1998	10,000		

Solution:

$$\text{Creditors' Turnover Ratio} = \frac{\text{Credit Purchase}}{\text{Average Accounts Payable}} = \frac{\text{` } 1,00,000}{\text{` } 20,000} = 5 \text{ times}$$

$$\text{Average Age of Accounts Payable (or credit period enjoyed)} = \frac{\text{Months in a year}}{\text{Creditor's Turnover}} = \frac{12}{5} = 2.4 \text{ months}$$

Or

$$\frac{\text{Average Accounts Payable} \times \text{Months in a year}}{\text{Credit Purchases in the year}} = \frac{20,000 \times 12}{1,00,000} = 2.4 \text{ months.}$$

Or

$$\frac{\text{Average Accounts Payable}}{\text{Average Monthly Credit Purchases}} = \frac{20,000}{8,333.33} = 2.4 \text{ months.}$$

Significance. Both the creditors turnover ratio and the debt payment period enjoyed ratio indicate about the promptness or otherwise in making payment of credit purchases. A higher 'creditors turnover ratio' or a 'lower credit period enjoyed ratio' signifies that the creditors are being paid promptly, thus enhancing the credit worthiness of the company. However, a very favourable ratio to this effect also shows that business is not taking full advantage of credit facilities which can be allowed by the creditors.

Stock Turnover Ratio. This ratio indicates whether investment in inventory is efficiently used or not. It, therefore, explains whether investment in inventories is within proper limits or not. The ratio is calculated as follows:

$$\frac{\text{Cost of Goods Sold during the year}}{\text{Average Inventory}}$$

Average inventory is calculated by taking stock levels of raw materials, work-in-process, finished goods at the end of each month, adding them up and dividing by twelve.

Inventory ratio can be calculated regarding each constituent of inventory. It may thus be calculated regarding raw materials, work-in-progress and finished goods:

(*a*) $\frac{\text{Cost of Goods Sold}}{\text{Average Stock of Finished Goods}}$

(*b*) $\frac{\text{Material Consumed}}{\text{Average Stock of Raw Materials}}$

(*c*) $\frac{\text{Cost of Completed Work}}{\text{Average Work-in-process}}$

The method discussed above is as a matter of fact the best basis for computing the Stock Turnover Ratio. However, in the absence of complete information, the Inventory Turnover Ratio may also be computed on the following basis:

$$\frac{\text{Net Sales}}{\text{Average Inventory at Selling Price}}$$

The average inventory may also be calculated on the basis of the average of inventory at the beginning and at the end of the accounting period.

$$\text{Average Inventory} = \frac{\text{Inventory at the beginning of the accounting period + Inventory at the end of the accounting period}}{2}$$

Illustration 11.16. Following is the Trading Account of Skylarks Ltd. Calculate the Stock Turnover Ratio:

Dr. TRADING ACCOUNT *Cr.*

Particulars	`	*Particulars*	`
To Opening Stock	40,000	By Sales	2,00,000
To Purchases	1,00,000	By Closing Stock	20,000
To Carriage	10,000		
To Gross Profit	70,000		
	2,20,000		2,20,000

Solution:

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Average Stock}} = \frac{\text{` } 1,30,000}{30,000} = 4.33 \text{ times.}$$

Significance of the ratio. As already stated, the inventory turnover ratio signifies the liquidity of the inventory. A high inventory turnover ratio indicates brisk sales. The ratio is, therefore, a measure to discover the possible trouble in the form of overstocking or overvaluation. The stock position is known as the graveyard of the balance sheet. If the sales are quick such a position would not arise unless the stocks consist of unsaleable items. A low inventory turnover ratio results in blocking of funds in inventory which may ultimately result in heavy losses due to inventory becoming obsolete or deteriorating in quality.

11.8 FINANCIAL RATIOS

Financial ratios indicate the financial position of the company. A company is deemed to be financially sound if it is in a position to carry on its business smoothly and meet all its obligations—both long-term as well as short-term without strain. Thus, its financial position has to be judged from two angles—long-term as well as short-term. It is a sound principle of finance that long-term requirements of funds should be met out of long-term funds and short-term requirements should be met out of short-term funds. For example, if fixed assets are purchased out of funds provided by bank overdraft, the company will come to grief because such assets cannot be sold away when payment will be demanded by the bank. We are giving below some of the important ratios which are calculated in order to judge the financial position of the company.

1. **Fixed Assets Ratio.** This ratio is expressed as follows:

$$\frac{\text{Fixed Assets}}{\text{Long-term Funds}}$$

The ratio should not be more than 1. If it is less than 1, it shows that a part of the working capital has been financed through long-term funds. This is desirable to some extent because a part of working capital termed as "core working capital" is more or less of a fixed nature. The ideal ratio is 0.67.

Fixed assets include "net fixed assets" (*i.e.*, original cost–depreciation to date) and trade investments including shares in subsidiaries. Long-term funds included share capital, reserves and long-term loans.

Illustration 11.17. From the following compute the Fixed Assets Ratio:

Particulars	`	*Particulars*	`
Share Capital	1,00,000	Furniture	25,000
Reserves	50,000	Trade Debtors	50,000
12 per cent Debentures	1,00,000	Cash Balance	30,000
Trade Creditors	50,000	Bills Payable	10,000
Plant and Machinery	1,00,000	Stock	40,000
Land and Buildings	1,00,000		

Solution:

$$\text{Fixed Assets Ratio} = \frac{\text{Fixed Assets}}{\text{Long-term Funds}} = \frac{2,25,000}{2,50,000} = 0.9$$

2. **Current Ratio.** This ratio is an indicator of the firm's commitment to meet its short-term liabilities. It is expressed as follows:

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

Current assets include cash and other assets convertible or meant to be converted into cash during the operating cycle of the business (which is of not more than a year). Current liabilities mean liabilities payable within a year's time either out of existing current assets or by creation of new current liabilities. A list of items included in current assets and current liabilities has already been given in the pro forma analysis balance sheet in the preceding pages.

Book debts outstanding for more than six months and loose tools should not be included in current assets. Prepaid expenses should be taken into current assets.

Illustration 11.18. From the following compute the 'Current Ratio':

Particulars	`	*Particulars*	`
Sundry Debtors	40,000	Sundry Creditors	20,000
Prepaid expenses	20,000	Debentures	1,00,000
Short-term investments	10,000	Inventories	20,000
Loose Tools	5,000	Outstanding Expenses	20,000
Bills Payable	10,000		

Solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\text{` } 90,000}{50,000} = 1.8$$

An ideal current ratio is 2. The ratio of 2 is considered as a safe margin of solvency due to the fact that if the current assets are reduced to half, *i.e.*, 1 instead of 2, then also the creditors will be able to get their payments in full. However, a business having seasonal trading activity may show a lower current ratio at certain period in the year. A very high current ratio is also not desirable since it means less efficient use of funds. This is because a high current ratio means excessive dependence on long-term sources of raising funds. Long-term liabilities are costlier than current liabilities and therefore, this will result in considerably lowering down the profitability of the concern.

It is to be noted that the mere fact that current ratio is quite high does not means that the company will be in a position to meet adequately its short-term liabilities. In fact the current ratio should be seen in relation to the components of the current assets and their liquidity. If a large portion of the current assets comprise obsolete stocks or debtors outstanding for a long time, company may fail if the current ratio is higher than 2.

The Current Ratio can also be manipulated very easily. This may be done either by postponing certain pressing payments or postponing purchase of inventories or making payment of certain current liabilities. Consider the following examples:

Example 1.

		`
Current Assets:	Sundry Debtors	40,000
	Inventories	60,000
	Cash in Hand	1,00,000
Current Liabilities:	Sundry Creditors	80,000
	Bills Payable	20,000

$$\text{Current Ratio} = \frac{2,00,000}{1,00,000} = 3.$$

In case the creditors are paid to the extent of ` 50,000 out of cash in hand, the current ratio will be as follows:

$$\text{Current Ratio} = \frac{1,50,000}{50,000} = 3.$$

Example 2. A business has current assets of ` 30,000 including stock of goods of ` 5,000. Its current liabilities are of ` 15,000. The current ratio is 2. However, if the business should have maintained a stock of ` 15,000, the current ratio would have been as follows:

$$\frac{30,000 + 10,000}{15,000 + 10,000^*} = \frac{40,000}{25,000} = 1.6$$

*Presuming that the goods are purchased on credit.

Significance. The current ratio is an index of the concern's financial stability since it shows the extent of the working capital which is the amount by which the current assets exceed the current liabilities. As stated earlier a higher current ratio would indicate inadequate employment of funds while a poor current ratio is a danger signal to the management. It shows that the business is trading beyond its resources.

3. **Liquidity Ratio.** This ratio is also termed as 'acid test ratio' or 'quick ratio'. This ratio is ascertained by comparing the liquid assets (*i.e.*, assets which are immediately convertible into cash without much loss) to current liabilities Prepaid expenses and stock are not taken as liquid assets. The ratio may be expressed as under:

$$\frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

On the basis of figures given in the Illustration 1.15 the Liquidity Ratio will be computed as under:

$$= \frac{\text{Liquid Assets}}{\text{Current Liabilities}} = \frac{\text{` } 90,000 - \text{` } 40,000}{\text{` } 50,000} = \frac{\text{` } 50,000}{\text{` } 50,000} = 1.$$

Some accountants prefer the term "Liquid Liabilities" for "Current Liabilities" for the purpose of ascertaining this ratio. Liquid liabilities mean liabilities which are payable within a short period. The bank overdraft (if it becomes a permanent mode of financing) and cash credit facilities will be excluded from current liabilities in such a case:

$$\frac{\text{Liquid Assets}}{\text{Liquid Liabilities}}$$

The ratio is also an indicator of short-term solvency of the company.

A comparison of the current ratio to quick ratio shall indicate the inventory hold-ups. For example, if two units have the same current ratio but different liquidity ratios, it indicates over-stocking by the concern having low liquidity ratio as compared to the concern which has a higher liquidity ratio.

4. **Debt-equity Ratio.** The debt-equity ratio is determined to ascertain the soundness of the long-term financial policies of the company. It is also known as "External-internal" equity ratio. It may be calculated as follows:

$$\text{Debt-equity Ratio} = \frac{\text{External equities}}{\text{Internal equities}}$$

The term external equities refers to total outside liabilities and the term internal equities refers to shareholders' funds or the tangible net worth (as used in the proforma balance sheet given in the preceding pages). In case the ratio is 1 (*i.e.*, outsider's funds are equal to shareholders' funds), it is considered to be quite satisfactory.

(i) $\text{Debt-equity Ratio} = \dfrac{\text{Total Long-term debt}}{\text{Total Long-term funds}}$

(ii) $\text{Debt-equity Ratio} = \dfrac{\text{Shareholder's funds}}{\text{Total Long-term funds}}$

(iii) $\text{Debt-equity Ratio} = \dfrac{\text{Total Long-term debt}}{\text{Shareholder's funds}}$

Method (*iii*) is most popular.

Ratios (*i*) and (*ii*) give the proportion of long-term debt/shareholders' funds in total long-term funds (including borrowed as well as owned funds). While Ratio (*iii*) indicates the proportion between shareholders' funds (*i.e.*, tangible net worth), and the total long-term borrowed funds.

Ratios (*i*) and (*ii*) may be taken as ideal if they are 0.5 each while the ratio (*iii*) may be taken as ideal if it is 1. In other words, the investor may take debt-equity ratio as quite satisfactory if shareholders' funds are equal to borrowed funds. However, a lower ratio, say 2/3rds, borrowed funds and 1/3rd owned funds may also not be considered as unsatisfactory if the business needs heavy investment in fixed assets and has an assured return on its investment, *e.g.*, in case of public utility concerns.

It is to be noted that preference shares redeemable within a period of 12 years from the date of their issue should be taken as a part of debt.

Illustration 11.19. From the following figures calculate the Debt-Equity Ratio:

Particulars	`	*Particulars*	`
Preference Share capital	1,00,000	Unsecured Loans	50,000
Equity Share Capital	2,00,000	Creditors	40,000
Capital Reserves	50,000	Bills Payable	20,000
Profit and Loss A/c	50,000	Provision for Taxes	10,000
12 per cent Mortgage Debenture	1,00,000	Provision for Dividends	20,000

Solution:

The debt-equity ratio may be calculated according to any of the following methods depending on the purpose for which the information is required.

(i) $$\text{Debt-equity Ratio} = \frac{\text{External Equities}}{\text{Internal Equities}} = \frac{2{,}40{,}000}{4{,}00{,}000} = 0.6$$

(ii) $$\text{Debt-equity Ratio} = \frac{\text{Total Long-term Debt}^{*}}{\text{Total Long-term Liabilities}} = \frac{1{,}50{,}000}{5{,}50{,}000} = 0.27$$

(iii) $$\text{Debt-equity Ratio} = \frac{\text{Shareholders' Funds}}{\text{Total Long-term Funds}} = \frac{4{,}00{,}000}{5{,}50{,}000} = 0.73$$

(iv) $$\text{Debt-equity Ratio} = \frac{\text{Total Long-term Debt}}{\text{Shareholders Fund}} = \frac{1{,}50{,}000}{4{,}40{,}000} = 0.73$$

* Unsecured loan has been taken as a long-term loan.

Significance. The ratio indicates the proportion of owners' stake in the business. Excessive liabilities tend to cause insolvency. The ratio indicates the extent to which the firm depends upon outsiders for its existence. The ratio provides a margin of safety to the creditors. It tells the owners the extent to which they can gain the benefits of maintaining control with a limited investment.

5. **Proprietary Ratio.** It is a variant of debt-equity ratio. It establishes relationship between the proprietors' or shareholders' funds and the total tangible assets. It may be expressed as under:

$$\frac{\text{Shareholders' Funds}}{\text{Total Tangible Assets}}$$

Illustration 11.20. From the following calculate the proprietary ratio:

Liabilities	`	*Assets*	`
Preference Share Capital	1,00,000	Fixed assets	2,00,000
Equity Share Capital	2,00,000	Current assets	1,00,000
Reserves and Surplus	50,000	Goodwill	50,000
Debentures	1,00,000	Investments	1,50,000
Creditors	50,000		
	5,00,000		5,00,000

Solution:

$$\text{Proprietary Ratio} = \frac{\text{Shareholders' Funds}}{\text{Total Tangible Assets}} = \frac{`\ 3{,}00{,}000}{`\ 4{,}50{,}000} = 0.67 \text{ or } 67 \text{ per cent}$$

Significance. This ratio focuses the attention on the general financial strength of the business enterprise. The ratio is of particular importance to the creditors who can find out the proportion of shareholders' funds in the total assets employed in the business. A high proprietary ratio will indicate a relatively little danger to the creditors, etc., in the event of forced

reorganization or winding up of the company. A low proprietary ratio indicates greater risk to the creditors since in the event of losses a part of their money may be lost besides loss to the proprietors of the business. The higher the ratio, the better it is. A ratio below 50 per cent may be alarming for the creditors since they may have to lose heavily in the event of company's liquidation on account of heavy losses.

11.9 ADVANTAGES OF RATIO ANALYSIS

Following are some of the advantages of ratio analysis:

1. **Simplifies Financial Statements.** Ratio analysis simplifies the comprehension of financial statements. Ratios tell the whole story of changes in the financial condition of the business.

2. **Facilitates Inter-firm Comparison.** Ratio analysis provides data for inter-firm comparison. Ratios highlight the factors associated with successful and unsuccessful firms. They also reveal strong firms and weak firms, over-valued and under-valued firms.

3. **Makes Intra-firm Comparison Possible.** Ratio analysis also makes possible comparison of the performance of the different divisions of the firm. The ratios are helpful in deciding about their efficiency or otherwise in the past and likely performance in the future.

4. **Helps in Planning.** Ratio analysis helps in planning and forecasting. Over a period of time a firm or industry develops certain norms that may indicate future success or failure. If relationship changes in firm's data over different time periods, the ratios may provide clues on trends and future problems.

Thus, "ratios can assist management in its basic functions of forecasting, planning, coordination, control and communication."[1]

11.10 LIMITATIONS OF ACCOUNTING RATIOS

Accounting ratios are subject to certain limitations. They are given below:

1. **Comparative study required.** Ratios are useful in judging the efficiency of the business only when they are compared with the past results of the business or with the results of a similar business. However, such a comparison only provides a glimpse of the past performance and forecasts for future may not prove correct since several other factors like market conditions, management policies, etc., may affect the future operations.

2. **Based only on financial statements.** Ratios are based only on the information which has been recorded in the financial statements. As indicated in the preceding pages financial statements suffer from a number of limitations, the ratios derived therefrom, therefore, are also subject to those limitations. For example, non-financial charges though important for the business are not revealed by the financial statements. If the management of the company changes, it may have ultimately adverse effects on the future profitability of the company but this cannot be judged by having a glance at the financial statements of the company.

Similarly, the management has a choice about the accounting policies. Different accounting policies may be adopted by management of different companies regarding valuation of inventories, depreciation, research and development expenditure and treatment of deferred revenue expenditure, etc. The comparison of one firm with another on the basis of ratio analysis without taking into account the fact of companies having different accounting policies, will be misleading and meaningless. Moreover, the management of the firm itself may change its accounting policies from one period to another. It is, therefore, absolutely necessary that financial statements are themselves subjected to close scrutiny before an analysis is attempted on the basis of accounting ratios. The financial analyst must carefully examine the financial statements and make necessary adjustments in the financial statements on the basis of disclosure made regarding the accounting policies before undertaking financial analysis.

The growing realisation among accountants all over the world, that the accounting policies should be standardised, has resulted in establishment of International Accounting Standard Committee, which has issued a number of International Accounting Standards. In our country, the Institute of Chartered Accountants of India has established Accounting Standards Board of formulation of requisite accounting standards. The Accounting Standards Board has already issued twenty three accounting Standards including AS 1: Disclosure of Accounting Policies. The standard has become mandatory in respect of accounts for periods commencing on or after April 1, 1991.

3. **Ratios alone are not adequate.** Ratios are only indicators, they cannot be taken as final regarding good or bad financial position of the business. Other things have also to be seen. For example, a high current ratio does not necessarily mean that the concern has a good liquid position in case current assets mostly comprise of outdated stocks. It has been correctly observed, "No ratio may be regarded as good or bad *inter se*." It may be an indication that a firm is weak or

[1] Batty J. ''Management Accounting'' (1978), p. 413.

strong but it must never be taken as proof of either one. Ratios may be linked to rail-roads. They tell the analysist, "stop, look and listen."

4. **Window dressing.** The term window dressing means manipulation of accounts in a way so as to conceal vital facts and present the financial statements in away to show a better position than what it actually is. On account of such a situation, presence of particular ratio may not be a definite indicator of good or bad management. For example, a high stock turnover ratio is generally considered to be an indication of operational efficiency of the business. But this might have been achieved by unwarranted price reductions or failure to maintain proper stock of goods.

Similarly, the current ratio may be improved just before the Balance Sheet date by postponing replenishment of inventory. For example, if a company has got current assets of ` 4,000 while current liabilities of ` 2,000, the current ratio is 2, which is quite satisfactory. In case the company purchases goods of ` 2,000 on credit, the current assets would go up to ` 6,000 and current liabilities to ` 4,000. Thus reducing the current ratio to 1.5. The company may, therefore, postpone the purchases for the early next year so that its current ratio continues to remain at 2 on the Balance Sheet date. Similarly, in order to improve the current ratio, the company may pay off certain pressing current liabilities before the Balance Sheet date. For example, if in the above case the company pays current liabilities of ` 1,000, the current liabilities would stand reduced to ` 1,000, current assets would stand reduced to ` 3,000 but the current ratio would go up to 3.

5. **Problem of price level changes.** Financial analysis based on accounting ratios will give misleading results if the effects of changes in price level are not taken into account. For example, two companies set up in different years, having plant and machinery of different ages, cannot be compared, on the basis of traditional accounting statements. This is because the depreciation charged on plant and machinery in case of old company would be at a much lower figure as compared to the company which has been set up recently. The financial statements of the companies should, therefore, be adjusted keeping in view the price level changes if a meaningful comparison is to made through accounting ratios. The techniques of current purchasing power and current cost accounting are quite helpful in this respect.

6. **No fixed standards.** No fixed standards can be laid down for ideal ratios. For example, current ratio is generally considered to be ideal if current assets are twice the current liabilities. However, in case of those concerns which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities.

It may, therefore, be concluded that ratio analysis, if done mechanically, is not only misleading but also dangerous. It is indeed a double-edged sword which requires a great deal of understanding and sensitivity of the management process rather than mechanical financial skill. It has rightly been observed, "The ratio analysis is an aid to management in taking correct decisions, but as a mechanical substitute for thinking and judgment, it is worse than useless. The ratios, if discriminately calculated and wisely interpreted, can be a useful tool of financial analysis."[1]

The computation of different accounting ratios and the analysis of the financial statements on their basis can be very well understood with the help of the illustrations given in the following pages.

CHECK YOUR PROGRESS

5. Indicate the important accounting ratios that would be used by each of the following:
   (i) A long-term creditor interested in determining whether his claims is adequately secured;
   (ii) A Bank who has been approached by a company for short-term loan/overdraft; and
   (iii) A shareholder who is examining his portfolio and who is to decide whether he should hold or sell his shares in a company.

11.11 COMPUTATION OF RATIOS

Illustration 11.21. Following is the Profit and Loss Account and Balance Sheet of Jai Hind Ltd. Redraft them for the purpose of analysis and calculate the following ratios:

(*i*) Gross Profit Ratio; (*ii*) Overall Profitability Ratio; (*iii*) Current Ratio; (*iv*) Debt-equity Ratio; (*v*) Stock Turnover Ratio; (*vi*) Liquidity Ratio.

[1] Hunt, Williams and Donaldson, *Basic Business Finance* (1971), p. 116.

PROFIT AND LOSS ACCOUNT

Particulars	`	Particulars	`
Opening Stock of Finished Goods	1,00,000	Sales	10,00,000
Opening Stock of Raw Materials	50,000	Closing Stock of Raw Materials	1,50,000
Purchase of Raw Materials	3,00,000	Closing Stock of Finished Goods	1,00,000
Direct Wages	2,00,000	Profit on Sale of Shares	50,000
Manufacturing Expenses	1,00,000		
Administration Expenses	50,000		
Selling and Distribution Expenses	50,000		
Loss on Sale of Plant	55,000		
Interest on Debentures	10,000		
Net Profit	3,85,000		
	13,00,000		13,00,000

BALANCE SHEET

Liabilities	`	Assets	`
Share Capital:		Fixed Assets	2,50,000
Equity Share Capital	1,00,000	Stock of Raw Materials	1,50,000
Preference Share Capital	1,00,000	Stock of Finished Goods	1,00,000
Reserves	1,00,000	Sundry Debtors	1,00,000
Debentures	2,00,000	Bank balance	50,000
Sundry Creditors	1,00,000		
Bills Payable	50,000		
	6,50,000		6,50,000

Solution:

INCOME STATEMENT

Particulars		`
Sales		10,00,000
Less: Cost of Sales:		
Raw Materials consumed		
(Opening Stock + Purchases – Closing Stock)	2,00,000	
Direct sages	2,00,000	
Manufacturing Expenses	1,00,000	
Cost of Production	5,00,000	
Add: Opening Stock of Finished Goods	1,00,000	
	6,00,000	
Less: Closing Stock of Finished Goods	1,00,000	
Cost of goods sold		5,00,000
Gross Profit		5,00,000
Less: Operating Expenses:		
Administration Expenses	50,000	
Selling and Distribution Expenses	50,000	1,00,000
Net Operating Profit:		4,00,000
Add: Non-trading Income:		
Profit on Sale of Shares		50,000
		4,50,000
Less: Non-trading Expenses or Losses:		
Loss on sale of Plant		55,000
Income before Interest and Tax		3,95,000
Less: Interest on Debentures		10,000
Net Profit before Tax		3,85,000

BALANCE SHEET (OR POSITION STATEMENT)

Particulars	`
Bank Balance	50,000
Sundry Debtors	1,00,000
Liquid Assets:	1,50,000
Inventories:	
Stock of raw materials	1,50,000
Stock of finished goods	1,00,000
Current Assets:	4,00,000
Sundry Creditors	1,00,000
Bills Payable	50,000
Current Liabilities	1,50,000
Working Capital (` 4,00,000 – ` 1,50,000)	2,50,000
Add: Fixed Assets	2,50,000
Capital Employed	5,00,000
Less: Debentures	2,00,000
Shareholders' Net Worth	3,00,000
Less: Preference Share Capital	1,00,000
Equity Shareholders' Net Worth	2,00,000
Equity Shareholders' Net Worth is represented by: Equity Share Capital	1,00,000
Reserves	1,00,000
	2,00,000

Ratios:

(i) Gross Profit Ratio:

$$\frac{\text{Gross profit}}{\text{Sales}} \times 100 = \frac{5,00,000}{10,00,000} \times 100 = 50 \text{ per cent}$$

(ii) Overall Profitability Ratio:

$$\frac{\text{Operating profit}}{\text{Capital employed}} \times 100 = \frac{4,00,000}{5,00,000} \times 100 = 80 \text{ per cent}$$

(iii) Current Ratio:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{4,00,000}{5,00,000} = 2.67$$

(iv) Debt-Equity Ratio:

$$\frac{\text{External Equities}}{\text{Internal Equities}} = \frac{3,50,000}{3,00,000} = 1.17$$

Or

$$= \frac{\text{Total Long = term Debt}}{\text{Total Long = term Funds}} = \frac{2,00,000}{5,00,000} = 0.40$$

Or

$$= \frac{\text{Total Long-term Debt}}{\text{Total Long-term Funds}} = \frac{2,00,000}{3,00,000} = 0.67$$

(v) Stock Turnover Ratio:

(a) As regards average total inventory

$$= \frac{\text{Cost of goods sold}}{\text{Average inventory*}} = \frac{5,00,000}{2,00,000} = 2.5$$

(* of raw material as well as finished goods).

(b) As regards average inventory of raw materials:

$$= \frac{\text{Cost of goods sold}}{\text{Average inventory of finished goods}} = \frac{5,00,000}{1,00,000} = 5$$

(c) As regards average inventory of finished goods:

$$\frac{\text{Cost of goods sold}}{\text{Average inventory of finished goods}} = \frac{5,00,000}{1,00,000} = 5$$

(vi) Liquidity Ratio:

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

Illustration 11.22. The Balance Sheet of *Y* Ltd. stood as follows as on:

(` *in lakhs*)

Liabilities	*31.3.05*	*31.3.04*	*Particulars*	*31.3.05*	*31.3.04*
Capital	250	250	Fixed Assets	400	300
Reserves	116	100	*Less:* Depreciation	140	100
Loans	100	120		260	200
Creditors and Other			Investments	40	30
Current Liabilities	129	25	Stock	120	100
			Debtors	70	50
			Cash/Bank	20	20
			Other Current Assets	25	25
			Misc. Expenditure	60	70
	595	495		595	495

You are given the following information for the year 2004–05:

Sales	600
PBIT	150
Interest	24
Provision for tax	60
Proposed dividend	50

All the figures given above are rupees in lakhs.

From the above particulars calculate for the year 2004–05:

(a) Return on Capital Employed Ratio.
(b) Stock Turnover Ratio.
(c) Return on Net Worth Ratio.
(d) Current Ratio.
(e) Proprietary Ratio.

Solution:

(i) Return on Capital Employed

$$\frac{\text{PBIT}}{\text{Average Capital Employed}} \times 100 \quad i.e., \frac{150}{403} \times 100 = 37.22\%$$

(ii) Stock Turnover Ratio

$$\frac{\text{Sales}}{\text{Average Stock}} \quad i.e., \frac{600}{110} = 5.45 \text{ times}$$

(iii) Return on Net Worth

$$\frac{\text{PAT}}{\text{Average Net Worth}} \times 100 \quad i.e., \frac{235}{129} = 22.53\%$$

(iv) Current Ratio

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \quad i.e., \frac{235}{129} = 1.82 \text{ times}$$

(v) $\dfrac{\text{Proprietary Funds}}{\text{Total Assets} - \text{Misc. Expenditure}} = \dfrac{306}{595 - 60} = 0.57$

Working Notes:

(i) Average capital employed

	31.3.2005	31.3.2004
	(` in lakhs)	
Total Assets (excluding Misc. expenditure)	535	425
Less: Creditors and Other Current Liabilities	129	25
	406	400

Average: 466 + 470 ÷ 2 = ` 468 lakhs

(ii) Average Net Worth

Capital	250	250
Reserves	116	100
	366	350
Less: Misc. Expenses	60	70
	306	280

Average: 306 + 280 ÷ 2 = ` 293 lakhs

Proprietary Funds as on 31.3.05 mean Net worth as on that date, *i.e.*, ` 306 lakhs.

(iii) Average Stock (` *in Lakhs*)

(120 + 100)/2 = 110

(iv) Profit after Tax (PAT)

	(` *in lakhs*)
PBIT	150
Less: Interest	24
	126
Less: Tax	60
	66

(*v*) Current Assets as on 31.3.05

	(` *in lakhs*)
Stock	120
Debtors	70
Cash/Bank	20
Other Current Assets	25
	235

Computation of Items of Financial Statements

Illustration 11.23. With the help of the following ratios regarding Indu Films, draw the Balance Sheet of the Company for the year 2005:

Current Ratio	2.5
Liquidity Ratio	1.5
Net Working Capital	` 3,00,000
Stock Turnover Ratio (cost of sales/closing stock)	6 times
Gross Profit Ratio	20 per cent
Fixed Assets Turnover Ratio (on cost of sales)	2 times
Debt Collection Period	2 months
Fixed assets to Shareholders Net Worth	0.80
Reserve and Surplus to Capital	0.50

Solution:

BALANCE SHEET

as on......

Liabilities	`	*Assets*	`
Share Capital	5,00,000	Fixed Assets	6,00,000
Reserve and Surplus	2,50,000	Debtors	2,50,000
Long-term Borrowings		Stock	2,00,000
(balancing figure)	1,50,000	Bank	50,000
Current Liabilities	2,00,000		
	11,00,000		11,00,000

Working Notes:

If Current Liabilities	= 1
Current Assets= 2.5	
It means the difference or Working Capital	= 1.5
Working Capital is 1.5	= ` 3,00,000
Therefore, Current Assets	= ` 5,00,000
Current Liabilities	= ` 2,00,000
As Liquidity Ratio	= 1.5
And Current Liabilities	= ` 2,00,000
Therefore, the Liquid Assets (bank and debtors) (2,00,000 × 1.5)	= ` 3,00,000
Stock (5,00,000 – 3,00,000, *i.e.*, current assets - liquid assets)	= ` 2,00,000

Cost of Sales (as stock turnover ratio is 6) = ` 12,00,000

Sales (as G.P. ratio is 20 per cent,

$12,00,000 + \frac{20}{80} \times 12,00,000$ = ` 15,00,000

Fixed Assets are ` 12,00,000/2 since fixed assets turnover ratio is 2 = ` 6,00,000

Debtors are ` 15,00,000/6 since debt collection period is 2 months = ` 2,50,000

Shareholders' Net Worth $\left(\frac{6,00,00 \times 1}{0.80}\right)$ = ` 7,50,000

Out of Shareholders' Net Worth Reserves and Surplus = ` 2,50,000

Therefore, share capital = ` 5,00,000

Illustration 11.24. The following extracts of financial information relate to Curious Ltd.:

BALANCE SHEET

as on 31st December (` *in lakhs*)

Particulars	*2005*	*2004*
Share Capital	10	10
Reserve and Surplus	30	10
Loan Fund	60	70
	100	90
Fixed Assets (Net)	30	30
Current Assets:		
Stocks	30	20
Debtors	30	30
Cash and Bank balances	10	20
Other Current Assets	30	10
	100	80
Less: Current Liabilities	30	20
Net Working Capital	70	60
Total Assets	100	90
Sales (` in lakhs)	270	300

(a) Calculate, for the two years Debt Equity Ratio, Quick Ratio and Working Capital Turnover Ratio; and

(b) Find the sales volume that should have been generated in 2005 if the Company were to have maintained its Working Capital Turnover Ratio.

Solution:

(*a*) (*i*) Debt Equity Ratio

		2005	*2004*
$= \frac{\text{Debt}}{\text{Equity}} = \frac{\text{Loan Funds}}{\text{Share Capital + Reserves}}$	=	$\frac{60}{40}$	$\frac{70}{20}$

(ii) Quick Ratio

$= \frac{\text{Quick Assets}}{\text{Current Liabilities}}$	=	$\frac{30+10}{30}$	$\frac{30+20}{20}$
	=	1.33 : 1	2.5 : 1

(iii) Working Capital Turnover Ratio

$= \frac{\text{Sales}}{\text{Working Capital}}$	=	$\frac{270}{70}$	$\frac{300}{60}$
	=	3.86 times	5 times

(b) Sales volume to be maintained

$$5 = \frac{\text{Required Sales}}{70}$$

Sales required for 1995 = ` 350 lakhs.

Illustration 11.25. With the following ratios and further information given below, prepare a Trading and Profit and Loss Account and a Balance Sheet of Shri Narain:

(i)	Gross Profit Ratio	25 per cent	(*vi*)	Fixed Assets/Capital	5/4
(ii)	Net Profit/Sales	20 per cent	(*vii*)	Fixed Assets/Total Current Assets	5/7
(iii)	Stock-turnover Ratio	10	(*viii*)	Fixed Assets	` 10,00,000
(iv)	Net Profit/Capital	1/5	(*ix*)	Closing Stock	` 1,00,000
(v)	Capital to Total Liabilities	1/2			

Solution:

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ended...

Particulars	`	*Particulars*	`
To Opening Stock	20,000	By Sales	8,00,000
To Purchases (balancing figure)	6,80,000	By Closing Stock	1,00,000
To Gross Profit c/d	2,00,000		
	9,00,000		9,00,000
To Expenses	40,000	By Gross Profit b/d	2,00,000
To Net Profit	1,60,000		
	2,00,000		2,00,000

BALANCE SHEET

as on....

Liabilities		`	*Assets*	`
Capital:			Fixed Assets	10,00,000
Openings balance	6,40,000		Closing Stock	1,00,000
Add: Net Profit	1,60,000	8,00,000	Other Current Assets (balancing figure)	13,00,000
Liabilities		16,00,000		
		24,00,000		24,00,000

Working Notes:

1. Fixed Assets are ` 10,00,000
   Fixed Assets ÷ Capital = 5 ÷ 4
   ∴ Capital = 10,00,000 × 4 ÷ 5 = ` 8,00,000.
2. Capital is 1/2 of Total Liabilities
   ∴ Liabilities = 8,00,000 × 2 = ` 16,00,000.
3. Net Profit is 1/5 of Capital
   ∴ Net Profit = 8,00,000 × 1/5 = ` 1,60,000.
4. Net Profit is 20 per cent of Sales
   ∴ Sales = 1,60,000 × 100 ÷ 20 = ` 8,00,000
5. Gross Profit Ratio is 25 per cent of Sales
   ∴ Gross Profit = ` 2,00,000.
6. Stock Turnover Ratio (*i.e.*, Cost of Sales/Average Inventory) is 10
   Cost of Sales = Sales – Gross Profit
   = ` 8,00,000 – 2,00,000 = ` 6,00,000
   ∴ Average Inventory is ` 6,00,000
7. Closing Stock is ` 1,00,000.
   Average Inventory is ` 60,000.
   ∴ Opening Stock is ` 20,000
8. Fixed Assets are ` 10,00,000.
   Fixed Assets/Total Current Assets = 5 ÷ 7
   ∴ Total Current assets are 10,00,000 × 7/5 ` 14,00,000
   Stock is ` 1,00,000
   ∴ Other Current Assets are ` 13,00,000.

Illustration 11.26. From the following particulars prepare the Balance Sheet of Shri Mohan Ram & Co. Ltd.

Current Ratio	2
Working Capital	` 4,00,000
Capital Block to Current Assets	3:2

Fixed Assets to Turnover	1:3
Sales Cash/Credit	1:2
Stock Velocity	2 Months
Creditors Velocity	2 Months
Debtors Velocity	3 Months
Capital Block:	
Net profit 10% of Turnover	
Reserve 2.5% of Turnover	1:2
Debentures/Share Capital	
Gross Profit Ratio 25% (to Sales)	

Solution:

Since Current Ratio is 2, Current Assets must be twice of Current Liabilities. In case Current Liabilities are 'x', Current Assets will be $2x$.

$$2x - x = 4,00,000$$
$$x = 4,00,000$$

		`
Current Liabilities		4,00,000
Current Assets	8,00,000	
Capital Block		12,00,000

Since the total liabilities are ` 16,00,000 (*i.e.,* 12,00,000 + ` 4,00,000), the total assets will also be 16,00,000.

		`
Fixed Assets	(` 16,00,000 – ` 8,00,000)	8,00,000
Turnover	(8,00,000 × 3)	24,00,000
Credit Sales		16,00,000
Cash Sales		8,00,000
Debtors' velocity		3 months
Debtors are therefore	(16,00,000 × 3/12)	4,00,000
Gross Profits	(24,00,000 × 25/100)	6,00,000
Cost of Sales		18,00,000
Stock Turnover		2 Months
Stock is therefore	(18,00,000 × 2/12)	3,00,000
Creditors' Velocity		2 Months
Creditors are therefore	(18,00,000 × 2/12)	3,00,000
Cash balance	(8,00,000 – 7,00,000)	1,00,000
Reserves	(24,00,000 × 2.5/100)	60,000
Profit	(24,00,000 × 10/100)	2,40,000
Block or Fixed Capital		12,00,000
Reserves and Profit		3,00,000
Debentures and Share Capital		9,00,000
Share Capital		6,00,000
Debentures		3,00,000

The Balance Sheet can now be prepared as follows:

Shri Mohan Ram & Co. Ltd.

BALANCE SHEET

as on ....

Liabilities	`	*Assets*	`
Share Capital	6,00,000	Fixed Assets	8,00,000
Reserves	60,000	Current Assets:	
Profit and Loss A/c	2,40,000	Debtors	4,00,000
Debentures	3,00,000	Stock	3,00,000
Sundry Creditors	3,00,000	Cash	1,00,000
Other Current Liabilities	1,00,000		
	16,00,000		16,00,000

Critical Analysis of Financial Statements

Illustration 11.27. From the following you are required to comment upon the long-term as well as short-term solvency of the Company.

BALANCE SHEET
as on 31 December, 1998

Liabilities	`	*Assets*	`
Share Capital	1,00,000	Fixed Assets	6,00,000
Fixed Liabilities	2,50,000	Liquid Assets	3,00,000
Current Liabilities	2,50,000	Stock in Trade	1,00,000
	10,00,000		10,00,000

Solution:

Long-term Solvency Ratios:

$$\text{Debt-Equity Ratio} = \frac{\text{Total Long-term Debt}}{\text{Total Long-term Funds}} = \frac{2,50,000}{7,50,000} = 0.33$$

The proportion of the long-term debt in total long-term funds is only 33 per cent. It means shareholders' funds are 67 per cent of the total long-term funds. Even if borrowed funds would have been 50 per cent, the financial position of the company would have been considered as quite good. The company, therefore, has a sound financial position from this angle.

$$\text{Fixed Assets Ratio} = \frac{\text{Fixed Assets}}{\text{Long-term Funds}} = \frac{6,00,000}{7,50,000} = 0.8$$

Long-term requirements of funds should be met out of long-term funds. Judged from this angle the company has not only met the long-term financial requirements (*i.e.*, for Fixed Assets) out of long-term funds but it has also met a part of working capital requirements from long-term funds. The ideal ratio is 0.67. The present ratio is 0.8 and hence it is quite satisfactory.

Short-term Solvency Ratios:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{4,00,000}{2,50,000} = 1.6$$

The ideal ratio is from 1.5 to 2, the position is, therefore, quite satisfactory.

$$\text{Liquidity Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}} = \frac{3,00,000}{2,50,000} = 1.2$$

The ideal ratio is 1. The present ratio of 1.2 is, therefore, also satisfactory.

Illustration 11.28. The following are the summarised accounts of Unique Ltd. and Strange Ltd. for the two years 2004 and 2005:

(` in lakhs)

Particulars	*Unique Ltd.*		*Strange Ltd.*	
	2004	*2005*	*2004*	*2005*
Turnover	54.12	45.75	17.52	14.47
Manufacturing and Other Expenses	51.04	43.56	14.96	11.82
Depreciation	0.56	0.51	0.60	0.35
Profit before Tax	2.52	1.68	1.96	2.30
	54.12	45.75	17.52	14.47
Intangible Assets	1.65	1.69	—	—
Fixed Assets	8.36	9.41	3.51	2.75
Stock	11.24	12.19	1.77	2.26
Debtors	7.28	8.24	5.82	4.02
Bank	0.93	0.33	4.64	2.46
	29.46	31.86	15.74	11.49
Creditors	9.47	9.26	2.33	1.75
Taxation (*Less* advance tax)	0.56	0.68	0.87	0.58
Short-term Borrowings	4.24	8.00	4.64	2.16
Long-term Borrowings	2.54	2.10	0.10	—
Capital and Reserves	12.65	11.82	7.80	7.00
Total	29.46	31.86	15.74	11.49

You are required to:

(a) Indicate and calculate five ratios which in your opinion are relevant in determining the stability of the two companies as going concerns.

(b) Compare the ratios so determined for the two companies. Indicate what conclusions can be drawn therefrom?

Solution:

(a) For computation of five ratios is as tabulated on the next page

(b) The computations in the case of Unique Ltd. are showing deteriorating position whereas in Strange Ltd., they are showing a better position in 2005 as compared to 2004. Profitability of Unique Ltd. is very poor and is declining. Its liquidity is also poor and declining. The defensive interval of Strange Ltd. is much higher as compared to that of Unique Ltd. Thus, Unique Ltd. needs to improve its position.

Illustration 11.29. Shamsher Sterling Limited has been operating for two years. The most important facts as appearing from its accounts are as under:

Solution: (Illustration 11.28)

(a) The five ratios are calculated below:

COMPUTATION OF FIVE RATIOS RELEVANT FOR DETERMINING THE STABILITY OF COMPANIES

	Ratio	*Unique Limited*		*Strange Limited*	
		2005	*2004*	*2005*	*2004*
(*i*)	Net Worth / Total Outside Liabilities	10.13 / 20.04 = 0.51	11.00 / 16.81 = .65	7 / 4.49 = 1.6	= 0.98
(*ii*)*	Quick Assets / Daily Operating Cost (excluding depreciation)	19.45 / 14.27 8.57 8.21 / .140 43.56/365	8.21 / 51.04/365 54.12 / 29.46 2.52 / 29.46	6.48 / 11.82/365	
		8.57 / .119 = 72 days	= 59 days	6.48 / 0.032 = 203 days	= 262 days
(*iii*)	Current Assets / Current Liabilities	20.76 / 17.94 = 1.16	= 1.36	8.74 / 4.49 = 1.95	= 1.56
(*iv*)	Profit before Tax / Total Assets	1.68 / 31.86 = 0.053	= 0.086	2.30 / 11.49 = 0.200	= 0.125
(*v*)	Sales / Total Assets	45.75 / 31.86 = 1.44	= 1.84	14.47 / 11.49 = 0.126	= 1.11

* This can also be termed as Defensive Interval Ratio. For 1995 in case of Unique Ltd. the ratio has worked out to be 72 days, while for Strange Ltd. it has worked out to be 203 days. This means Unique Ltd. can operate on the basis of present liquid resources for 72 days without resorting to next year's revenue while Strange Ltd. can operate for 203 days. Strange Ltd. is thus in a better position.

BALANCE SHEET

Liabilities	*First Year* `	*Second Year* `	*Assets*	*First Year* `	*Second Year* `
Equity Shares		`	Goodwill	60,000	60,000
of ` 10 each	1,00,000	1,00,000	Fixed Assets (at cost)	1,40,000	1,60,000
Reserves	20,000	30,000	Stocks	30,000	60,000
Profit and Loss Balance	30,000	20,000	Sundry Debtors	30,000	60,000
Secured Loans	80,000	80,000	Advances	10,000	
Bank overdraft		20,000	Cash Balances	30,000	—
Sundry Creditors	50,000	70,000			—
Provision for Taxation	20,000	20,000			
	3,00,000	3,40,000		3,00,000	3,40,000

PROFIT AND LOSS APPROPRIATION ACCOUNT

Liabilities	*First Year* `	*Second Year* `	*Assets*	*First Year* `	*Second Year* `
Transfer to Reserves	20,000	10,000	Balance b/d		30,000
Manager's Commission	10,000	30,000	Profit for the year after taxation and before depreciation	70,000	50,000
Dividends	10,000	20,000			
Net Profit	30,000	20,000			
	70,000	80,000		70,000	80,000

You find that the total sales amounted to ` 6,00,000 in the first year and ` 5,00,000 in the second year.

Examine the above details and give a step-by-step analysis in a manner which indicates the overall efficiency of the business and its financial position.

Solution:

Shamsher Sterling Limited

ANALYSIS OF WORKING CAPITAL AND FINANCIAL POSITION

Overall Performance: The following ratios throw light on the comparative performance of the company over two years:

		First Year	*Second Year*
1.	Net Margin Ratio (Profit as given, *Less*: Commission to the manager)	10 per cent	4 per cent
2.	Capital Turnover Ratio $\frac{\text{Sales}}{\text{Capital employed}}$	3.53	2.94
3.	Return on capital employed	5.29 per cent	11.76 per cent

The following ratios have been found out on further analysis of capital turnover ratio:

(a)	Fixed Assets Turnover Ratio $\frac{\text{Sales}}{\text{Fixed Assets}}$	4.29	3.12
(b)	Stock Turnover $\frac{\text{Sales}}{\text{Closing Stock}}$	20.00	8.33
(c)	Debt Collection Period	18 days	44 days

An examination of the ratios given above makes it clear that the overall performance of the company is much poorer in the second year as compared to the first year. The analysis brings out the following facts:

(1) The operating ratio has increased from 90 per cent to 96 per cent. This has resulted in decline of the net profit ratio to 4 per cent from 10 per cent. One important reason of this decline is the rise in the commission paid to the Manager by 200 per cent. There seems to be no justification for such an increase. In case the commission paid to the Manager is not considered, while calculating net-margin, it has still declined to 10 per cent from 11.67 per cent on sales. This fall may be either due to:

(*i*) Lower selling prices (*ii*) Higher prices for materials, etc., (*iii*) Inefficiency of the management.

The last reason seems to be most probable, because normally the selling price of the articles can be adjusted to cover rise in the costs of the product.

(2) There has been an all-round decline in utilisation of the resources, as evidenced by capital turnover ratio. Even if it is assumed that there has been a fall in the fixed assets turnover ratios because the fixed assets were added

towards the end of the year and, therefore, they could not properly be utilised, there seems little justification for a very sharp fall in the stock turnover ratio. On the same basis, there is no justification for increase in the debt collection period. These two ratios are very disturbing and they immediately raise the question regarding the reliability of the two figures of stocks and sundry debtors. The fall in sales but increase in inventories and debt collection period are indicators that the unsaleable items have been included in the stocks and the sundry debtors include doubtful debts. If that is true, the profit figure in the second year seems to be unreliable. Actually, there may be a loss. The management should, therefore, investigate thoroughly to determine the truth.

(3) The sharp fall in the quantum of sales has raised one more adverse possibility. The company might be operating extremely close to the break-even point. This may ultimately result in losses to the company if the sales decrease still further. The management should, therefore, see that the sales are augmented and the costs are reduced by full utilisation of the present facilities and resources available at the disposal of the company.

Financial Position. The following ratios reveal the financial position of the company:

		First Year	*Second Year*
(i)	Debt Equity Ratio:		
	Debt/Debt + Equity	34.8 per cent	34.8 per cent
(ii)	Fixed assets including Goodwill/		
	Long-term funds	.87	.95
(iii)	Current Ratio		
	Current Assets/Current liabilities	1.43	1.09
(iv)	Stock/Working capital	1.00	6.00
(v)	Sundry debtors/Working capital	1.00	6.00

The company has a precarious financial position so far as short-term solvency is concerned. The decline in the current ratio gives a partial indication of the danger which faces the company. The company has no cash balances. The bank can call upon the company to adjust its overdrafts at any time. The inventories seems to contain unsaleable items. The debtors include doubtful debts. Thus, there seems to be a little chance of the company meeting adequately its short-term immediate liabilities. A small pressure from short-term creditors may put the whole work of the company in jeopardy. This shows that the decisions of the management regarding the following matters are not judicious:

(i) Increasing the commission to manager.
(ii) Purchasing fixed assets as the time when the sales are declining.
(iii) Paying dividend and that too at double the rate of the previous year.

Moreover, the company has paid dividend without providing for depreciation on fixed assets. This is clear violation of the provisions of Section 205 of the Companies Act. The company will be put to serious difficulties when the assets become useless after their useful life in case the company continues to follow the policy of not providing for depreciation, as it will be almost impossible for the company to replace these assets. The company has also not made any provision for repayment of loan. It should have created a sinking fund for this purpose. The amount of goodwill appearing in the balance sheet of the company is also valueless in view of the fact that the company has extremely low profits.

Management should, therefore, take immediate remedial measures regarding the following matters:

(i) Better sales performance.
(ii) Cost control and cost reduction.
(iii) Ascertainment of profits of the business according to strict accounting principles.
(iv) Better control over inventories and collection of book debts.
(v) No payment of dividend till the company raises enough cash resources to meet it requirements.

11.12 SUMMARY

- Accounting ratio is a mathematical relationship expressed between two inter-connected accounting figures. It may be expressed in “times” or “percentage”.
- Ratios are useful only when they are given in a comparative form. Moreover, ratios are only indicators. They cannot be taken as final regarding good or bad financial position of the business. Other things have also to be seen.
- No fixed standards can be laid down for ideal ratios. Moreover, a particular ratio may be calculated in more than one way without violating any basic principle of accounting. It is, therefore, advisable for a student to give the basis for computing a particular ratio.
- While making inter-firm (comparison of one firm with another) or intra-firm (comparison within the firm itself) comparison on the basis of accounting ratios, it must be seen that the different firms or departments, which are being compared, have the same accounting policies and adopt the same accounting procedures.

11.13 KEY TERMS

- **Accounting Ratio.** It is the relationship expressed in mathematical terms between two accounting figures related with each other.
- **Balance Sheet.** A statement of financial position of business at a specified moment of time.
- **Balance Sheet Ratios.** Ratios calculated on the basis of figures of balance sheet only.
- **Composite Ratios.** Ratios based on figures of profit and loss account as well as the balance sheet. They are also known as Inter-Statement Ratios.
- **Financial Analysis.** Critical evaluation of data given in the financial statements.
- **Financial Ratios.** Ratios disclosing the financial position or solvency of the firm. They are also known as Solvency Ratios.
- **Financial Statement.** An organized collection of data according to logical and consistent accounting procedures conveying an understanding of some financial aspects of a business firm.
- **Interpretation.** Explaining the meaning and significance of the financial data.
- **Profitability Ratios.** Ratios which reflect the final results of business operations.
- **Turnover Ratios.** Ratios measuring the efficiency with which the assets are employed by a firm. They are also known as Activity or Efficiency Ratios.

11.14 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*a*) False; (*b*) True; (*c*) False; (*d*) True; (*e*) False; (*f*) True; (*g*) True; (*h*) False
2. (*a*) Improve the ratio; (*b*) Improve the ratio; (*c*) Reduce the ratio; (*d*) No change in the ratio; and (*e*) No change in the ratio
3. (*a*) improve; (*b*) decline; (*c*) no change; (*d*) no change; (*e*) improve
4. (*a*) Fixed Assets Turnover Ratio; (*b*) Finished Goods Turnover Ratio; (*c*) Interest Coverage Ratio; (*d*) Fixed Assets Ratio; (*e*) Inventory Turnover Ratio; (*f*) Debtors Turnover Ratio; (*g*) Debt Service Coverage Ratio; (*h*) Debt-Equity Ratio, Return on Investment; (*i*) Current Ratio, Quick Ratio; (*j*) Debtors' Turnover Ratio, Debt Collection Period
5. (*i*) Debt Service Coverage Ratio; (*ii*) Current Ratio & Quick Ratio; (*iii*) Earning per Share

11.15 QUESTIONS AND EXERCISES

1. Discuss the concepts regarding financial statements and limitations of financial statements.

2. Explain the role of ratio analysis in the interpretation of financial statements. Examine the limitations of ratio analysis.

3. How do you analyse and interpret financial statements of a company for reporting on the soundness of its capital structure and solvency.

4. "Ratios like statistics have a set of principles and finality about them which at times may be misleading." Discuss with illustrations.

5. "Accounting Ratios are mere guides and complete reliance on them in decision-making in suicidal." Elucidate.

6. What is the need for financial analysis? How does the ratio analysis technique help in the financial analysis?

7. What do understand by analysis of Financial Statements? Describe the uses of such analysis?

8. What are ratios to be worked out to study the long-term solvency of a concern?

9. State the formulae to calculate the following accounting ratios:
   (i) Quick Ratio or Liquidity Ratio.
   (ii) Selling Expenses Ratio.
   (iii) Debt Equity Ratio.
   (iv) Debtors Ratio or Debt Collection Period.
   (v) Gross Profit Ratio.

10. Explain any two of the following:
   (i) Gross Profit Ratio.
   (ii) Stock Turnover Ratio.
   (iii) Proprietary Ratio.

11. The four basic group of financial ratios are liquidity, leverage, activity (efficiency) and profitability. Explain their nature and indicate its principal users.

12. State the limitations of financial ratios.

13. Write short notes on:
   (a) Proprietary Ratio.
   (b) Debt Coverage Ratio.

(c) P/E Ratio.
(d) Yield Ratio.
(e) Market Value/Book Value of Shares

11.16 PRACTICAL PROBLEMS

Computation of Ratios

1. From the following statements of *X* Ltd. for the year ending 31 March, 1997, you are required to rearrange the items for purposes of financial analysis and calculate the following ratios:
(i) Current Ratio, (*ii*) Quick Ratio, (*iii*) Operating Ratio, (*iv*) Stock Turnover Ratio, (*v*) Fixed Assets Turnover Ratio, (*vi*) Debtors' Turnover Ratio, and (*vii*) Net Profit to Capital employed.

BALANCE SHEET

Liabilities	`	*Assets*	`
Share Capital:		Land and Buildings	5,00,000
Issued and fully paid up	50,000	Plant and Machinery	2,00,000
Equity shares of ` 10 each	5,00,000	Stock	1,50,000
General Reserve	4,00,000	Sundry Debtors	2,50,000
Profit and Loss A/c	1,50,000	Cash and Bank balances	1,50,000
Sundry Creditors	2,00,000		
	12,50,000		12,50,000

PROFIT AND LOSS ACCOUNT
for the year ending 31 March, 1997

Particulars	`	*Particulars*	`
To Opening Stock	2,50,000	By Sales	18,00,000
To Purchases	10,50,000	By Closing Stock	1,50,000
To Gross Profit	6,50,000		
	19,50,000		19,50,000
To Selling and Distribution Expenses	1,00,000	By Gross Profit	6,50,000
To Administration Expenses	2,30,000	By Profit on sale of fixed assets	50,000
To Finance Expenses	20,000		
To Net Profit	3,50,000		
	7,00,000		7,00,000

[**Ans.** (*i*) 2.75, (*ii*) 2, (*iii*) 0.82, (*iv*) 5.75, (*v*) 18/7 = 2.6 or 11.5/7, (*vi*) 7.2, *i.e.*, 51 days, (*vii*) 30 per cent]

2. The following data has been abstracted from the annual accounts of a Company:

Share Capital	` *Lakhs*
20,000 Equity Shares of ` 10 each	200.00
General Reserve	156.00
Investment Allowance Reserve	50.00
Share Capital	` *Lakhs*
15% Long-term Loan	300.00
Profit before Tax	140.00
Provision for Tax	84.00
Proposed Dividends	10.00

Calculate from the above the following details:
(i) Return on Capital Employed, and
(ii) Return on Net Worth. [**Ans.** (*i*) 26.4%, (*ii*) 14%]

3. From the following, calculate the basic earnings per share:
Profit for the year ending 31.12.2001 after Interest
Tex and Preference Dividend ` 18,500
No. of Equity Shares as on 01.01.2001 18,800 of ` 10 each fully paid up
No. of Equity Shares issued on 31.10.2001 600 of ` 10 each, ` 5 paid
Partly paid shares are entitled to participate in the dividend to the extent of the amount paid.
(**Ans.** Weighted Average number of Shares — 1,850 and Basic Earnings per Share — ` 10)

4. From the following, calculate:
(a) Basic Earnings per Share; and

(b) Diluted Earnings per Share

Net profit for the year ending 31.12.2001 ` 10,00,000

No. of Equity Shares Outstanding on 31.12.2001 5,00,000

12% Convertible Debentures of ` 100/- each 1,00,000

Each debenture is convertible to 10 equity shares. The company is in 30% tax bracket.

[**Ans.** (*a*) ` 2 per share and (b) ` 1.27 per share]

5. From the following annual statements of Pioneer Ltd. calculate the following ratios: (*a*) Gross Profit Ratio, (*b*) Current Ratio; (c) Liquid Ratio; (*d*) Debt-equity Ratio; and (*e*) Return on Investment Ratio.

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ended 31st December, 2004

Particulars		`	*Particulars*	`
To Materials consumed:			By Sales	85,000
Opening Stock	9,050		By Profit on sale of investments	600
Purchases	54,525		By interest on investments	300
	63,575			
Closing Stock	14,000	49,575		
To Carriage Inwards		1,425		
To Office Expenses		15,000		
To Sales Expenses		3,000		
To Financial Expenses		1,500		
To Loss on Sale of Assets		400		
To Net Profit		15,000		
		85,900		85,900

BALANCE SHEET

as on 31st December, 2004

Liabilities		`	*Assets*		`
Share capital:			Fixed Assets:		
2,000 Equity Shares of ` 10			Buildings	15,000	
each-fully paid		20,000	Plant	8,000	23,000
Reserves		9,000	Current Assets:		
Profit and Loss A/c		6,000	Stock-in-trade	14,000	
Bank Overdraft		3,000	Debtors	7,000	
Sundry Creditors:			Bills Receivable	1,000	
for expenses	2,000		Bank Balances	3,000	
for other	8,000	10,000			25,000
		48,000			48,000

[**Ans.** (*a*) 40%, (*b*) 1.92, (*c*) 0.84, (*d*) (*i*) 13,000/35,000 = 0.271, (*ii*) 13,000/49,000 = 0.271, (*e*) 15,000/35,000 = 42.85%]

6. The following it the condensed form of balance sheets of *XYZ* Limited for the three years ended 31st December, 2002, 31st December, 2003 and 31st December, 2004.

(*Rupees in Lakhs*)

Particulars	*31.12.02*	*31.12.03*	*31.12.04*
Current Assets:			
Cash in hand and at Bank	5.00	10.00	20.00
Stock: Raw Materials	12.00	18.00	20.00
Finished Products and Process Stock	30.00	35.00	25.00
Stores and Spares	3.00	4.00	5.00
Debtors	40.00	50.00	50.00
Fixed assets	90.00	110.00	120.00
Total	180.00	227.00	240.00
Current Liabilities	20.00	32.00	30.00
Debentures Secured	60.00	60.00	60.00
Unsecured Loans-Banks	15.00	40.00	45.00
Reserves and Surplus	30.00	32.50	38.75
Profit and Loss A/c before providing for taxation and dividends	15.00	22.50	26.25
Equity Shares ` 100 each	20.00	20.00	20.00

10% Preference Shares ` 100 each	20.00	20.00	20.00
Total	180.00	227.00	240.00
Sales	300.00	360.00	400.00
Gross Profit	15%	18%	20%

The company earned the net profit before providing for income tax at 50 paise per rupee. Equity shareholders to get dividends 50% more than preference shareholders. Show the appropriation account and work out the following ratios after reworking balance sheet.

(1) Acid Test Ratio.
(2) Stock Turnover Ratio.
(3) Earning per share by capital employed.
(4) Ratio of Fixed Assets to shareholders' Funds.
(5) Return on Capital employed.

	2002	*2003*	*2004*
[Ans. (1)	1.38	1.24	1.45
(2)	6.07	6.21	6.53
(3)	0.04	0.04	0.35
(4)	1.24	1.40	1.38
(5)	0.10	0.14	0.15]

7. Mr. T. Munim is made an offer by the promoters of Svargiya Enterprises Limited to invest in the project of the company by purchasing a substantial portion of the share capital. He is promised good returns by way of dividends and capital appreciation. Mr. Munim desires that you compute the following ratios for financial analysis.

Workings should form part of your answer.

(i) Return on Investment Ratio,
(ii) Net Profit Ratio,
(iii) Stock Turnover Ratio,
(iv) Current Ratio, and
(v) Debt Equity Ratio.

The figures given to him are as under:	(` *'000s*)
Sales	16,000
Raw materials consumed	7,800
Consumables	800
Direct Labour	750
Other Direct Expenses	480
Administrative Expenses	1,200
Selling Expenses	260
Interest	1,440
Fixed Assets	14,000
Income Tax	50%
Depreciation	700
Share Capital	5,000
Reserves and Surplus	1,500
Secured Term Loans	12,000
Unsecured Term Loans	1,500
Trade Creditors	3,350
Investments	400
Receivables	3,700
Inventories	6,000
Cash in Hand and at Bank	100
Provisions	650
Other Current Liabilities	200

[**Ans.** ROI 20.05%; Net Profit Ratio —25.06%; Stock Turnover Ratio —1.04; Current Ratio —2.33; Debt-Equity Ratio —2.08]

Computation of Items of Financial Statements

8. From the following information, you are required to prepare a Balance Sheet:

1. Current Ratio—1.75
2. Liquid Ratio—1.25

3. Stock Turnover Ratio (Cost of Sales/Closing Stock)—9
4. Gross Profit Ratio—25 per cent
5. Debt Collection Period—$1\frac{1}{2}$ months
6. Reserves and Surplus to Capital—2
7. Turnover to Fixed Assets—1.2
8. Capital Gearing Ratio—0.6
9. Fixed Assets to Net Worth—1.25
10. Sale for the year ` 12,00,000

		`		`
[**Ans.**	Share Capital	5,00,000	Stock	1,00,000
	Long-term Liabilities	3,00,000	Debtors	1,50,000
	Reserve and Surplus	1,00,000	Cash and Bank balance	1,00,000
	Current Liabilities	2,00,000	Balance Sheet Total	11,00,000]
	Fixed Assets	7,50,000		

9. You are given the following information pertaining to the financial statement of *AYZ* Ltd., as on 31 December, 1997. On the basis of the information supplied, you are required to prepare the Trading and Profit and Loss A/c for the year ended and a Balance Sheet as on that date.

	`		`
Net Current Assets	2,00,000	Ratio of Gross Profit on Turnover	25 per cent
Issued Share Capital	6,00,000	Net Profit to Issued Shares Capital	20 per cent
Current Ratio	1.8	Stock Turnover Ratio (cost of goods sold/closing stock)	5 times
Quick Ratio (Ratio of debtors and bank balance to current liabilities)	1.35	Average Age of Outstandings for the years	$36\frac{1}{2}$ days
Fixed Assets to Shareholders' Equity	80 per cent		

On 31 December, 1998, the current assets consisted only of Stock, Debtors and Bank Balance, Liabilities consisted of Share Capital and Current Liabilities and Assets consisted of Fixed Assets and Current Assets.

		`		`
[**Ans.**	Gross Profit	1,87,500	Stock	12,500
	Net Profit	1,20,000	Bank balance	2,62,500
	Current Assets	4,50,000	Fixed Assets	8,00,000
	Current Liabilities	2,50,000	Balance Sheet total	12,50,000]
	Debtors	75,000		

10. Based on the following information of the financial ratios prepare Balance Sheet of Star Enterprises Ltd., as on December 31, 2005. Explain your working and assumptions:

Current Ratio	25
Liquidity Ratio	1.5
Net Working Capital	` 6,00,000
Stock Turnover Ratio	5
Ratio of Gross Profit to Sales	20%
Turnover Ratio to Net Fixed Assets	2
Average Debt Collection Period	2.4 months
Fixed assets to Net Worth	0.80
Long-term debt to Capital and Reserve	7/25

[**Ans.** Fixed Assets — ` 10,00,000; Current Assets — ` 10,00,000; Share Capital and Reserves—` 12,50,000; Long-term Deposits—` 3,50,000; Current Liabilities—` 4,00,000]

11. From the following information, prepare a summarised balance sheet as on 31st March, 1997:

		`
(i)	Working Capital	
(ii)	Reserves and Surplus	1,20,000
(iii)	Bank Overdraft	80,000

(iv)	Assets (fixed)-Proprietary Ratio	20,000
(v)	Current Ratio	0.75
(vi)	Liquidity Ratio	2.5

1.5

[**Ans.** Current Liabilities ` 80,000; Current Assets ` 2,00,000, Fixed Assets ` 3,60,000; Stock ` 1,10,000; Balance Sheet Total ` 5,60,000]

12. Following are the ratios relating to the trading activities of an Organisation:

Debtors' Velocity	3 Months
Stock Velocity	6 Months
Creditors' Velocity	2 Months
Gross Profit Ratio	20%

Gross profit for the year ended 31st December, 2006 was ` 5,00,000. Stock at the end of 1996 was ` 20,000 more than what it was at the beginning of the year. Bills Payable and Receivable were ` 36,667 and ` 60,000 respectively.

You are to ascertain the figures of:

(a) Sales;

(b) Sundry Debtors;

(c) Sundry Creditors; and

(d) Stock.

[**Ans.** (*a*) ` 25,00,000; (*b*) 5,65,000; (*c*) ` 3,00,000; and (*d*) ` 10,10,000]

13. From the following information, relating to a limited company, prepare a Statement of Proprietors' Funds:

(*i*) Current Ratio	2
(*ii*) Liquid Ratio	1.5
(*iii*) Fixed Assets/Proprietary Funds	3/4
(*iv*) Working Capital	` 75,000
(*v*) Reserves and Surplus	50,000
(*vi*) Bank Overdraft	10,000

There were no long-term loans or fictitious assets.All working must form part of your answer.

[**Ans.** Proprietors' Funds: Sources ` 3,00,000; Applications: (*a*) Fixed Assets ` 2,25,000, (*b*) Working Capital ` 75,000]

14. From the following information relating to Wise Limited, you are required to prepare its summarised Balance Sheet:

(a)	Current Ratio	2.5
(b)	Acid Test Ratio	1.5
(c)	Gross Profit/Sales Ratio	0.2
(d)	Net Working Capital/Net Worth Ratio	0.3
(e)	Sales/Net Fixed Assets Ratio	2.0
(f)	Sales/Net Worth Ratio	1.5
(g)	Sales/Debtors Ratio	6.0
(h)	Reserves/Capital Ratio	1.0
(i)	Net Worth/Long-term Loan Ratio	20.0
(j)	Stock Velocity	2 Months
(k)	Paid up Share Capital	` 10 lakhs

[**Ans.** In ` Lakhs: Fixed Assets ` l5, Stock 4, Debtors ` 5, Other Current Assets Re 1, Reserves ` 10, Long-term Loans Re 1and Current liabilities ` 4]

15. Complete the following annual financial statements on the basis of ratios given below:

PROFIT AND LOSS ACCOUNT

Dr. *for the year ended 30th June, 2000* *Cr*

Particulars	`	*Particulars*	`
To Cost of goods sold	6,00,000	By Sales	20,00,000
To Operating Expenses	—		—
To Earnings before Interest and Tax	—		—
To Debenture Interest	10,000	By Earnings before Interest Tax	
To Income Tax	—		
To Net Profit			

BALANCE SHEET

as on 30th June, 2000

Liabilities	`	*Assets*	`
Net Worth:		Fixed Assets	—
Share capital	—	Current Assets:	—
Reserve and Surplus	—	Cash	—
10% Debentures	—	Stock	—
Sundry Creditors	60,000		35,000

(i)	Net Profit to Sales	5%
(ii)	Current Ratio	1.5
(iii)	Return on Net Worth	20%
(iv)	Inventory Turnover (based on cost of goods sold)	15 times
(v)	Share capital to reserves	4 : 1
(vi)	Rate of Income tax	50%

[**Ans.** Operating Expenses ` 11,90,000; EBIT ` 2,10,000; Income Tax ` 1,00,000; Net Profit after Tax ` 1,00,000; Fixed Assets ` 5,70,000; Current Assets ` 90,000; Net Worth ` 5,00,000; Debentures ` 1,00,000]

Analysis of Financial Statements

16. Following is the Profit and Loss A/c and Balance Sheet of *A* Limited for the year ended 31 December, 1998 and Balance Sheet as on that date. Calculate the different ratios and comment on the financial position of the company.

Particulars		`
Net Sales		3,00,000
Less: Cost of goods sold		2,58,000
Gross Profit		42,000
Operating Expenses:		
Selling	2,200	
General and Administration	4,000	
Rent of Office	2,800	9,000
Gross Operating Profit		33,000
Depreciation		10,000
		23,000
Other Income:		
Interest on Government Securities		1,500
Gross Income		24,500
Other Expenses:		
Interest on Bank Overdraft	300	
Interest on Debentures	4,200	4,500
Net Income before Tax		20,000
Tax @ 50 per cent on Net Income		10,000
Net Income after Tax		10,000

BALANCE SHEET
as on 31 December, 1998

Liabilities	`	*Assets*		`
Net Worth:		Fixed Assets		
Sundry Creditors	6,000	Cash		5,000
Bills Payable	10,000	Investments (Government securities)		15,000
Outstanding Expenses	1,000	Sundry Debtors		20,000
Provision for Taxation	13,000	Stock		30,000
Total Current Liabilities	30,000	Total Current Assets		70,000
6% Mortgage Debentures	70,000	Fixed Assets	1,80,000	
7% Preference Shares	10,000	*Less*: Provision for		
Equity Shares	50,000	depreciation	50,000	1,30,000
Reserve and Surplus	40,000			
Total Claims on Assets	2,00,000			2,00,000

[**Ans.** Gross Profit Ratio 14 per cent, Net Profit Ratio (after considering interest on bank overdraft): 7.56 per cent, ROI 13.53 per cent, Stock Turnover Ratio 8.6, Debt Collection Period 24 days, Fixed Assets Turnover 2.3, Fixed Assets Ratio .76, Debt-equity ratio 70/1000 = 0.7, Current ratio 2.3]

17. The following items appear in the accounts at 31 December, 2006 of Operations Ltd.:

Particulars	`
Cash	48,600
Land and Buildings at Cost	8,00,000
Deposits and Payments in Advance	62,000
Stock	2,72,800
Trade Creditors	4,05,750
General Reserve	1,00,000
Debtors	5,23,000
Bills Receivable	22,600
Plant and Machinery at cost less depreciation	5,44,000
Debentures—repayable 2000 (secured)	2,50,000
Bank Overdraft	52,000
Ordinary Stock, ` 10 units	10,00,000
Profit and Loss A/c balance	2,17,000
Proposed ordinary stock Dividend for 1996, net	86,250
Trade Investments	20,000
Advance payment of Tax	1,00,000
Provision for Taxation	2,64,000
Bills Payable	18,000
Net sales for the year 1996	21,82,400
Net Profit for the year 1996 before taxation and dividends	3,27,830

Note:

The values of all fixed assets reflect current price levels and adequate depreciation has been provided.

You are required:

(i) to arrange the above items in the form of a financial statement to show the following accounting ratios, which should be stated: (*a*) return on capital employed; (*b*) stock: fixed assets; (*c*) current assets: current liabilities; *(d)* sales: debtors and bills receivable;

(ii) to indicate briefly the significance of these ratios and how they may be used to compare the efficiency of the business with others in the same industry.

[**Ans.** Ratios (*a*) ROI on shareholders' funds in 24.9 per cent, (*b*) 1 : 4.93, (*c*) 1.25 : 1, (*d*) 4 : 1]

[**Hint.** Working Capital ` 2,03,000; Shareholders' Equity ` 13,17,000]

18. India International Limited has been in existence for two years. The following particulars are extracted from its published accounts:

BALANCE SHEET

at year end

Liabilities	*First Year* `	*Second Year* `	*Assets*	*First Year* `	*Second Year* `
Equity Capital	1,00,000	1,00,000	Fixed Assets	2,08,000	1,98,000
Reserve	10,000	20,000	Stock	30,000	60,000
Profit & Loss A/c	14,000	2,000	Book Debts	40,000	80,000
Loan	1,10,000	80,000	Cash at Bank	30,000	2,000
Bank Overdraft	—	20,000			
Creditors	30,000	90,000			
Provision for Taxation	34,000	13,000			
Proposed Dividend	10,000	15,000			
	3,08,000	3,40,000		3,08,000	3,40,000

PROFIT AND LOSS ACCOUNT

Particulars	`	`	*Particulars*	`	`
Interest on Loan	2,400	4,800	Balance b/d		14,000
Directors' Remuneration	10,000	30,000	Profit for the year	80,400	60,800
Provision for Taxation	34,000	13,000			
Dividend		15,000			
Transfer to Reserve	10,000	10,000			
Balance c/d	14,000	2,000			
Total	80,400	74,800		80,400	74,800

Sales amounted to ` 6,00,000 in the first year and ` 5,00,000 in the second year. Examine in detail from the point of (*i*) Profitability, (*ii*) Solvency and (*iii*) Sales. Make such other computations as seem expedient to you and write on overall internal analysis of this company.

[**Ans.**	*1st Year*	*2nd Year*
Net Profit Ratio	11.73%	6.16%
ROI (based on Capital at end)	30.08%	15.25%
Current Ratio	1.35	1.03
Stock Turnover	20	8.33
Debtors Turnover	15	6.25]

11.17 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.

UNIT 12 CASH FLOW STATEMENT

Structure

12.0 Introduction
12.1 Unit Objectives
12.2 Meaning of Cash Flow Statement
12.3 Preparation of Cash Flow Statement
12.4 Sources of Cash
12.5 Difference between Cash Flow Analysis and Funds Flow Analysis
12.6 Utility of Cash Flow Analysis
12.7 Limitations of Cash Flow Analysis
12.8 AS 3 (Revised): Cash Flow Statements
12.9 Summary
12.10 Key Terms
12.11 Answers to 'Check Your Progress'
12.12 Questions and Exercises
12.13 Practical Problems
12.14 Further Reading

12.0 INTRODUCTION

Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows. The economic decisions that are taken by the users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and uncertainty of their generation. In view of the importance of cash flows in decision making, an enterprise should prepare a cash flow statement giving both inflows and outflows of cash during a particular period. A cash flow statement, when used in conjunction with other financial statements, provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure and its ability to affect the amount and timings of the cash flows in order to adapt to changing circumstances. The present unit deals with all these aspects in detail.

12.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Explain the meaning of cash flow statement
- Understand the concept of funds in cash flow analysis
- Identify the sources and applications of cash
- Differentiate between cash flow analysis and funds flow analysis
- Explain the utility and limitations of cash flow analysis
- Prepare cash flow statement

12.2 MEANING OF CASH FLOW STATEMENT

A Cash Flow Statement is a statement depicting change in cash position from one period to another. For example, if the cash balance of a business is shown by its Balance Sheet on 31 December, 1997 at ` 20,000 while the cash balance as per its Balance Sheet on 31 December, 1998 is 30,000, there has been an inflow of cash of ` 10,000 in the year 1998 as compared to the year 1997. The cash flow statement explains the reasons for such inflows or outflows of cash, as the case may be. It also helps management in making plans for the immediate future. A Projected Cash Flow Statement or a Cash Budget will help the management in ascertaining how much cash will be available to meet obligations to trade creditors, to pay bank loans and to pay dividend to the shareholders. A proper planning of the cash resources will enable the management to have cash available whenever needed and put it to some profitable or productive use in case there is surplus cash available.

The term “Cash” here stands for cash and bank balances. It has already been explained in the previous unit that the term “Funds”, in a narrower sense, is also used to denote cash. In such a case, the term “Funds” will exclude from its purview all other current assets and currents liabilities and the term “Funds Flow Statement” and “Cash Flow Statement” will have synonymous meanings. However, for the purpose of this study, we are calling this part of study as Cash Flow Analysis and not Funds Flow Analysis.

12.3 PREPARATION OF CASH FLOW STATEMENT

The Cash Flow Statement can be prepared on the same pattern on which a Funds Flow Statement is prepared. The change in the cash position from one period to another is computed by taking in account “Sources” and “Applications” of cash.

12.4 SOURCES OF CASH

Sources of Cash can be internal as well as external:

Internal Sources. Cash from operations is the main internal source. The Net Profit shown by the Profit and Loss Account will have to be adjusted for non-cash items for finding out cash from operations. Some of these items are as follows:

(i) *Depreciation.* Depreciation does not result in outflow of cash and, therefore, net profit will have to be increased by the amount of depreciation or development rebate charged, in order to find out the real cash generated from operations.

(ii) *Amortization of intangible assets.* Goodwill, preliminary expenses, etc., when written off against profits, reduce the net profits without affecting the cash balance. The amounts written off should, therefore, be added back to profits to find out the cash from operations.

(iii) *Loss on sale of fixed assets.* It does not result in outflow of cash and, therefore, should be added back to profits.

(iv) *Gain from sale of fixed assets.* Since sale of fixed assets is taken as a separate source of cash, it should be deducted from net profits.

(v) *Creation of reserves.* If profit for the year has been arrived at after charging transfers to reserves, such transfers should be added back to profits. In case operations show a net loss, such net loss after making adjustments for non-cash items will be shown as an application of cash.

Thus, cash from operations is computed on the pattern of computation of ‘Funds’ from operations, as explained in the earlier chapter. However, to find out real cash from operations, adjustments will have to be made for ‘changes’ in current assets and current liabilities arising on account of operations, *viz.,* trade debtors, trade creditors, bills receivable, bills payable, etc.

For the sake of convenience, computation of cash from operations can be studied by taking two different situations: (1) when all transactions are cash transactions, and (2) when all transactions are not cash transactions.

When All Transactions are Cash Transactions. The computation of cash from operations will be very simple in this case. The net profit as shown by the Profit and Loss Account will be taken as the amount of cash from operations as shown in the following example:

Example

PROFIT AND LOSS ACCOUNT

for the year ended 31 December, 1998

Particulars	`	*Particulars*	`
To Purchases	15,000	By Sales	50,000
To Wages	10,000		
To Rent	500		
To Stationery	2,500		
To Net profit	22,000		
	50,000		50,000

In the example given above, if all transactions are cash transactions, *i.e.*, all purchases have been paid for in cash and all sales have been realized in cash, the cash from operations will be ` 22,000, *i.e.*, the net profit as shown by the Profit and Loss Account. Thus, in case of all transactions being cash transactions, the equation for computing cash from operations can be put as follows:

Cash from Operations = Net Profit

When all transactions are not cash transactions. In the example given above, we have computed cash from operations on the basis that all transactions are cash transactions. It does not really happen in actual practice. The business sells goods on credit. It purchases goods on credit. Certain expenses are always outstanding and some of the incomes are not immediately realized. Under such circumstances, the net profit made by a firm cannot generate equivalent amount of cash. The computation of cash from operations in such a situation can be done conveniently if it is done in two stages:

(i) Computation of funds (*i.e.*, working capital) from operations as explained in the preceding chapter; and

(ii) Adjustments in the funds so calculated for changes in the current assets (excluding cash) and current liabilities.

We are giving below an illustration for computing 'Funds' from operations. However, since there are no credit transactions, hence the amount of 'Funds' from operations is as a matter of cash from operations as shown in the illustration.

Illustration 12.1.

TRADING AND PROFIT AND LOSS ACCOUNT

for the year ended 31 March, 1998

Particulars	`	*Particulars*		`
To Purchases	20,000	By Sales		30,000
To Wages	5,000			
To Gross Profit c/d	5,000			
	30,000			30,000
To Salaries	1,000	By Gross Profit b/d		5,000
To Rent	1,000	By Profit on sale of building:		
To Depreciation on Plant	1,000	Book value	` 10,000	
To Loss on sale of Furniture	500	Sold for	15,000	5,000
To Goodwill written off	1,000			
To Net Profit	5,500			
	10,000			10,000

Calculate the Cash from Operations.

Solution:

CASH FROM OPERATIONS

Net Profit as per P & L A/c		` 5,500
Add: Non-cash items (*i.e.*, items which do not result in outflow of cash):		
Depreciation	` 1,000	
Loss on sale of furniture	500	
Goodwill written off	1,000	2,500
		8,000
Less: Non-cash items (items which do not result inflow of cash):		
Profit on sale of building		5,000
(` 15,000 will be taken as a source of cash)		
Cash from Operations		3,000

Adjustments for Changes in Current Assets and Current Liabilities

In the illustration given above, the cash from operations has been computed on the same pattern on which funds from operations are computed. As a matter of fact, the funds from operations is equivalent to cash from operations in this case. This is because of the presumption that all are cash transactions and all goods have been sold. However, there may be credit purchases, credit sales, outstanding and prepaid expenses, etc. In such a case, adjustments will have to be made for each of these items in order to find out cash from operations. This has been explained in the following pages:

(i) *Effects of Credit Sales.* In business, there are both cash sales and credit sales. In case, the total sales are ` 30,000 out of which the credit sales are ` 10,000, it means sales have contributed only the extent of ` 20,000 in providing cash from operations. Thus, while computing cash from operations, it will

be necessary that suitable adjustments for outstanding debtors are also made. Consider the following example:

Example 1

Net Profit for the year	` 20,000
Total Sales	40,000
Debtors Outstanding at the end of the accounting year	10,000

The above figures show that out of total sales of ` 40,000 which must have been considered from computing net profit, ` 10,000 has still to be realized in cash from debtors. Therefore, cash from operations should be computed as follows:

	Net Profit for the year	` 20,000
Less:	Debtors Outstanding at the end of the accounting year	10,000
	Cash from Operations	10,000

In case, there were outstanding debtors in the beginning of the accounting year amounting to ` 15,000, it can safely be presumed that they must have been realized during the course of the year. The amount of cash from operations will therefore be computed as follows:

Net Profit for the year	` 20,000
Less: Debtors Outstanding at the end of the accounting year	10,000
	10,000
Add: Debtors Outstanding at the end of the accounting year	15,000
Cash from operations	25,000

Thus, cash from operations can be calculated on the basis of the following equation if there are debtors outstanding at the end as in the beginning of the accounting year:

Cash from Operations = + Debtors Outstanding at the beginning of the accounting year.
− Debtors Outstanding at the end of the accounting year.

Or

Cash from Operations = Net Profit + Decrease in Debtors. *Or* − Increase in Debtors

For example, in the above case, cash from operations can be computed as follows:

` 20,000 + ` 5,000 = ` 25,000

(ii) *Effects of Credit Purchases.* Whatever have been stated regarding credit sales is also applicable to credit purchases. The only difference will be that decrease in creditors from one period to another will result in decrease of cash from operations because it means more cash payments have been made to the creditors which will result in outflow of cash. On the other hand, increase in creditors from one period to another will result in increase of cash from operations because less payment has been made to the creditors for goods supplied which will result in increase of cash balance at the disposal of the business.

Example 2

Purchases for the year (including credit purchases of ` 10,000)	` 30,000
Sales for the year	40,000
Expenses	5,000

The amount of Net Profit comes to:

Sales			40,000
Less:	Purchases	` 30,000	
	Expenses	5,000	35,000
Net Profit			5,000

Though the net profit is ` 5,000, the cash operations will be ` 15,000 (` 5,000 + ` 10,000 for credit purchases). This is because though Purchases of ` 30,000 have been considered for calculating the Net Profit, the actual cash which has been paid for purchases is only ` 20,000. Thus, cash from operations stands increased by ` 10,000, the amount of creditors outstanding at the end of the year.

Example 3

Sales		` 40,000
Purchases		30,000
Expenses		5,000
Creditors Outstanding in the beginning of the accounting year		10,000
Creditors Outstanding at the end of the accounting year		15,000

The Cash from Operations will be computed as follows:

Sales		40,000
Less: Purchases	` 30,000	
Expenses	5,000	35,000
Net Profit		5,000
Add: Creditors Outstanding at the end of the accounting year		15,000
		20,000
Less: Creditors Outstanding at the beginning of the accounting year		10,000
Cash from operations		10,000

Alternatively, cash from operations can be computed as follows:

Net Profit for the year	` 5,000
Add: Increase in Creditors (` 15,000 – ` 10,000)	5,000
Cash from Operations	10,000

Thus, the effect of credit purchases can be shown with the help of the following equation in computing cash from operations:

	+ Increase in
Cash from Operations =	
	– Decreases in

(iii) *Effect of Opening and Closing Stocks.* The amount of opening stock is charged to the debit side of the Profit and Loss Account. It thus reduces the net profit without reducing the cash from operations. Similarly, the amount of closing stock is put on the credit side of the Profit and Loss Account. It thus increases the amount of net Profit without increasing the cash from operations. This will be clear withthe help of the following example:

Example 4

Opening Stock	` 5,000
Purchases	20,000
Sales	35,000
Closing Stock	10,000
Expenses	5,000

The amount of net profit can be computed as follows:

PROFIT AND LOSS ACCOUNT

Particulars	`	*Particulars*	`
Opening Stock	5,000	Sales	35,000
Purchases	20,000	Closing Stock	10,000
Expenses	5,000		
Net Profit	15,000		
	45,000		45,000

The net profit for the year is ` 15,000. The cash from operations will be computed as follows:

Net Profit for the year	` 15,000
Add: Opening Stock	5,000
	20,000
Less: Closing Stock	10,000
Cash from Operations	10,000

Alternatively, the amount of cash from operations can be computed as follows:

Net Profit for the year	` 15,000
Less: Outflow of cash on account of increase in stock	5,000
Cash from Operations	10,000

The effect of change in stock on cash from operations can now be put up as follows:

	+ Decrease
Cash from Operations =	
	– Increase

(iv) *Effect of Outstanding Expenses, Incomes Received in Advance, etc.* The effect of these items on cash from operations is similar to the effect of creditors. This means any increase in these items will result in increase in cash from operations while any decrease means decrease in cash from operations. This is because net profit from operations is computed after charging to it all expenses whether paid or outstanding. In case certain expenses have not been paid, this will result in decrease of net profit without a corresponding decrease in cash from operations. Similarly, income received in advance is not taken into account while calculating profit from operations, since it relates to the next year. It, therefore, means cash from operations will be higher than the actual net profit as shown by the Profit and Loss Account. Consider the following example:

Example 5

Gross Profit	` 30,000
Expenses paid	` 10,000
Interest received	` 2,000

` 2,000 are outstanding on account of expenses while ` 500 has been received as interest for the next year. The net profit will be computed as follows:

PROFIT AND LOSS ACCOUNT

Particulars	`		*Particulars*		`
To Expenses paid	10,000		By Gross Profit		30,000
Add. Outstanding	2,000	12,000	By Interest received	2,000	
To Net Profit		19,500	*Less:* Interest received		
			in advance	500	1,500
		31,500			31,500

The cash from operations will now be computed as follows:

	`
Net Profit for the year	19,500
Add: Expenses Outstanding at the end of the year	2,000
Interest received in advance	500
Cash from Operations	22,000

Example 6

Net Profit for the year 2003	10,000
Expenses Outstanding as on 1 January, 2003	2,000
Expenses Outstanding as on 31 December, 2003	3,000
Interest received in Advance 1 January, 2003	1,000
Interest received in Advance 21 December, 2003	2,000

The cash from operations will be computed as follows:

Net Profit for the year		10,000
Add: Expenses Outstanding on 31 December, 2003		3,000
Income received in Advance on 31 December, 2003		2,000
		15,000
Less: Expenses Outstanding on 1 January, 2003	` 2,000	
Interest received in Advance on 1 January, 2003	1,000	3,000
Cash from Operations		12,000

Alternatively, cash operations can be computed as follows:

Net Profit for the year	` 10,000
Add: Increase in Outstanding Expenses	1,000
Add: Increase in interest received in Advance	1,000
Cash from Operations	12,000

$$\text{Cash from Operations} = \text{Net Profit} \begin{cases} + \text{ Increase in Outstanding Expenses} \\ + \text{ Increase in Income received in Advance} \\ - \text{ Decrease in Outstanding Expenses} \\ - \text{ Decrease in Income received in Advance} \end{cases}$$

Thus, the income received in advance and outstanding expenses on cash operations can be shown as follows:

(v) *Effect of Prepaid Expenses and Outstanding Income.* The effect of prepaid expenses and outstanding income of cash from operations is similar to the effect of debtors. While computing net profit from operations, the expenses only for the accounting year are charged to the Profit and Loss Account. Expenses paid in advance are not charged to the Profit and Loss Account. Thus, prepayment of expenses does not decrease net profit for the year but it decreases cash from operations. Similarly, income earned during a year is credited to the Profit and Loss Account whether it has been received or not. Thus, income, which has not been received but which has become due, increase the net profit for the year without increasing cash from operations. This will be clear with the help of the following example:

Example 7

Gross Profit	` 30,000
Expenses paid	10,000
Interest received	2,000

The expenses paid include ` 1,000 paid for the next year. While interest of ` 500 has become due during the year, but it has not been received so far. The net profit for the year will be computed as follow:

PROFIT AND LOSS ACCOUNT

Particulars	`		*Particulars*		`
To Expenses paid	10,000		By Gross Profit		30,000
Less: Prepaid Exp.	1,000	9,000	By Interest received	2,000	
To Net Profit		23,500	*Add*: Interest due	500	2,500
		32,500			32,500

Now, the cash from operations will be computed as follows:

Net Profit for the year		` 23,500
Less: Prepaid Expenses	1,000	
Less: Outstanding Interest	500	15,00
		22,000

Example 8

Net Profit for the year 2003	20,000
Prepaid expenses 1 January, 2003	2,000
Outstanding (accrued) Income 1 January, 2003	1,000
Prepaid Expenses 31 December, 2003	3,000
Outstanding Income 31 December, 2003	2,000

Cash from Operations will be computed as follows:

Net Profit for the year		` 20,000
Less: Prepaid Expenses on 31 Dec., 2003	3,000	
Outstanding Income on 31 Dec., 2003	2,000	5,000
		15,000
Add: Prepaid Expenses on 1 Jan., 2003	2,000	
Income Outstanding on 1 Jan., 2003	1,000	3,000
		18,000

Alternatively, Cash from Operations can be computed as follow:

Net Profit for the year		` 20,000
Less: Increase in Prepaid Expenses	` 1,000	
Increase in Outstanding Income	1,000	2,000
		18,000

Thus the effect of prepaid expenses and accrued income on cash from operations can be shown in the form of following equation:

+ Decrease in Prepaid Expenses
+ Decrease in Accrued Income
Cash from Operations = Net Profit – Increase in Prepaid Expenses
– Income in Accrued Income

The overall effect of stock, debtors, creditors, outstanding expenses, income received in advance, prepaid expenses and accrued can be shown in the form of the following formula:

+ Decrease in Debtors
+ Decrease in Stock
+ Decrease in Prepaid Expenses
+ Decrease in Accrued Income
+ Increase in Creditors
Cash from Operations = Net Profit + Increase in Outstanding Expenses
– Increase in Debtors
– Increase in Stock
– Increase in Prepaid Expenses
– Increase in Accrued Income
– Decrease in Creditors
– Decrease in Outstanding Expenses

The above formula may be summarised in the form of following general rules:

Increase in a Current Asset
Decrease in a Current Liability
results in
Decrease in Cash

AND

Decrease in a Current Asset
Increase in a Current Liability
results in
Increase in Cash

Illustration 12.2 Continuing the figures given as Illustration 12.1 calculate the cash from operations with the following additional information:

	Balance as on	
	31 March, 2004	*31 March, 2005*
	`	`
(*i*) Stocks	10,000	12,000
(*ii*) Debtors	15,000	20,000
(*iii*) Creditors	5,000	7,500
(*iv*) Bills Receivable	5,000	8,000
(*v*) Outstanding Expenses	3,000	5,000
(*vi*) Bills Payable	4,000	2,000
(*vii*) Prepaid Expenses	1,000	500

Solution:

The computation of cash from operations can be done conveniently if it is done as explained before in two stages:

(i) Computation of ‘Funds’ from operations, taking the meaning of ‘Funds’ as working capital.
(ii) Adjustment in the amount of ‘Funds’ so computed on the basis of “current assets” and “current liabilities”.

The funds from operations amount ` 3,000 (as computed in Illustration 12.1).

However, adjustments will have to be made in this amount for current assets and current liabilities in order to compute cash from operations. This has to be done by taking each item of current assets and current liabilities independently as explained below:

(i) The investment in stock has increased by ` 2,000 as compared to the previous year. This means cash must gone out to the extent of ` 2,000. It will, therefore, decrease the cash balance.
(ii) Debtors have gone up from ` 15,000 on March, 2004 to ` 20,000 on 31 March, 2005. There is an increase of ` 5,000. It shows that sales to the of ` 5,000 have not been realized in cash. Hence, cash from operations will be reduced by ` 5,000.
(iii) Creditors have gone up by ` 2,500. Thus, purchases to the extent of this amount have not been paid in cash. It is, therefore, a ‘source’ of cash.
(iv) Bills Receivable have increased by ` 3,000. Thus, sales to the extent of ` 3,000 have not been paid in cash. Hence cash, on account of operations will be reduced by ` 3,000.

(v) Bills Payable have come down by ` 2,000. It shows more payments of cash. The cash from operations will stand reduced by ` 2,000.

(vi) Outstanding Expenses have increased by ` 2,000. Thus, expenses to this extent have not been paid resulting in increase of cash from operations by this amount.

(vii) Prepaid Expenses have come down by ` 500. This shows less of payment and hence cash operations will increase by ` 500.

Cash from operations now can be computed as follows:

	Increase (+)	*Decrease* (–)	
Cash from Operations as per P. & L. A/c (Illustration 12.1)			` 3,000
Increase in Stock		2,000	
Increase in Debtors		5,000	
Increase in Creditors		2,500	
Increase in Bills Receivable		3,000	
Decrease in Bills Payable		2,000	
Increase in Outstanding Expenses	2,000		
Decrease in Prepaid Expenses	500		
	5,000	12,000	(7,000)
(Inflow) of cash on account of operations			(4,000)

External Sources. The external sources of cash are:

(i) *Issue of New Shares.* In case shares have been issued for cash, the net cash received (*i.e.*, after deducting expenses on issue of shares or discount on issue of shares) will be taken as a source of cash.

(ii) *Raising Long-term Loans.* Long-term loans such as issue of debentures, loans from Industrial Finance Corporations, State Financial Corporation, IDBI, etc., are sources of cash. They should be shown separately.

(iii) *Purchase of Plant and Machinery on deferred payments.* In case plant and machinery has been purchased on a deferred payment system, it should be shown as a separate source of cash to the extent of deferred credit. However, the cost of machinery purchased will be shown as an application of cash.

(iv) *Short-term Borrowings—cash credit from banks.* Short-term borrowing, etc., from banks increase cash available and they have to be shown separately under this head.

(v) *Sale of Fixed Assets, Investments, etc.* It results in generation of cash and therefore, is, a source of cash.

Decrease in various current assets and increase in various current liabilities (discussed before) may be taken as external sources of cash, if they are not adjusted while computing cash from operations.

Applications of Cash

Applications of cash may take any of the following forms:

(i) *Purchase of Fixed Assets.* Cash may be utilised for additional fixed assets or renewals or replacement of existing fixed assets.

(ii) *Payment of Long-term Loans.* The payment of long-term loans such as loans from financial institutions or debentures results in decrease in cash. It is, therefore, an application of cash.

(iii) *Decrease in Deferred Payment Liabilities.* Payments for plant and machinery purchased on deferred payment basis has to be made as per the agreement. It is, therefore, an application of cash.

(iv) *Loss on account of Operations.* Loss suffered on account of business operations will result in outflow of cash.

(v) *Payment of Tax.* Payment of tax will result in decrease of cash and hence it is an application of cash.

(vi) *Payment of Dividend.* This decreases the cash available for business and hence it is an application of cash.

(vii) *Decrease in Unsecured Loans, Deposits, etc.* The decrease in these liabilities denotes they have been paid off to that extent. It results, therefore, in outflow of cash.

Increase in various current assets or decrease in various current liabilities may be shown as applications of cash, if changes, in these items have not been adjusted while finding out cash from operations.

Format of A Cash Flow Statement*

A cash flow statement can be prepared in the following form:

CASH FLOW STATEMENT

for the year ending on....

Balance as on 1 January, ...		
Cash Balance	....	
Bank Balance	....	....
Add: Sources of Cash:	____	
Issue of Shares		....
Raising of Long-term loans		
Sale of Fixed Assets		....
Short-term Borrowings		
Cash from Operations:		
Profit as per Profit and Loss A/c	....	
Add/Less: Adjustment for Non-cash Items	....	
Add: Increase in Current Liabilities	....	
Decrease in Current Assets	....	
Less: Increase in current assets	....	
Decrease in current liabilities	....	....
Total Cash available (1)	____	____
Less: Applications of Cash:	....	....
Redemption of Redeemable Preference Shares		
Redemption of Long-term Loans	....	
Purchase of Fixed Assets	....	
Decrease in Deferred Payment Liabilities	....	
Cash Outflow on Account of Operations	....	
Tax paid	....	
Dividend paid	....	
Decrease in unsecured Loans, Deposits, etc.	....	
Total Applications (2)	____	
Closing Balance*		....
Cash balance		....
Bank balance		....

* It should tally with the balance as shown by (1)–(2).

12.5 DIFFERENCE BETWEEN CASH FLOW ANALYSIS AND FUNDS FLOW ANALYSIS

Following are the points of difference between a Cash Flow Analysis and a Funds Flow Analysis:

1. A Cash Flow Analysis is concerned only with the change in cash position while a Fund Flow Analysis is concerned with change in working capital position, between two balance sheet dates. Cash is only one of the constituents of working capital besides several other constituents such as inventories, accounts receivable, prepaid expenses.
2. A Cash Flow Statement is merely a record of cash receipts and disbursements. Of course, it is valuable in its own way but it fails to bring to light many important changes involving the disposition of resources. While studying the short-term solvency of a business one is interested not only in cash balance but also in the assets which can be easily converted into cash.
3. Cash flow analysis is more useful to the management as a tool of financial analysis in short-periods as compared to funds flow analysis. It has rightly been said that shorter the period covered by the analysis, greater is the importance of cash flow analysis. For example, if it is to be found out whether the business can meet its obligations maturing after 10 years from now, a good estimate can be made about the firm's capacity to meet its long-term obligations if changes in working capital position on account of operations are observed. However, if the firm's capacity to meet a liability maturing after one month is to be seen, the realistic approach would be to consider the projected change in the cash position rather than an expected change in the working capital position.

* The format given above has undergone a change as per AS-3 discussed later in the book.

4. Cash is part of working capital and, therefore, an improvement in cash position results in improvement in the funds position but the reverse is not true. In other words "inflow of cash" results in "inflow of funds" but inflow of funds may not necessarily result in "inflow of cash". Thus, sound funds position does not necessarily means sound cash position but a sound cash position generally means sound funds position.
5. Another distinction between a cash flow analysis and a funds flow analysis can be made on the basis of the techniques of their preparation. An increase in a current liability or decrease in a current asset results in decrease in working capital and *vice versa.* While an increase in a current liability or decrease in a current asset (other than cash) will result in increase in cash and *vice versa.*

Some people, as stated before, use term 'funds' in a very narrow sense of 'cash' only. In such an event the two terms 'Funds' and 'Cash' will have synonymous meanings.

12.6 UTILITY OF CASH FLOW ANALYSIS

A Cash Flow Statement is useful for short-term planning. A business enterprise needs sufficient cash to meet its various obligations in the near future such as payment for purchase of fixed assets, payment of debts maturing in the near future, expenses of the business, etc. A historical analysis of the different sources and applications of cash will enable the management to make reliable cash flow projections for the immediate future. In may then plan out for investment of surplus or meeting the deficit, if any. Thus, a cash flow analysis is an important financial tool for the management. Its chief advantages are as follows:

1. **Helps in efficient cash management.** Cash flow analysis helps in evaluating financial policies and cash position. Cash is the basis for all operations and hence a projected cash flow statement will enable the management to plan and coordinate the financial operations properly. The management can know how much cash is needed, from which source it will be derived, how much can be generated internally and how much could be obtained from outside.

2. **Helps in internal financial management.** Cash flow analysis provides information about funds which will be available from operations. This will help the management in determining policies regarding internal financial management, *e.g.*, possibility of repayment of long-term debts, dividend policies, planning replacement of plant and machinery, etc.

3. **Discloses the movements of cash.** Cash flow statement discloses the complete story of cash movement. The increase in or decrease of cash and the reasons therefore can be known. It discloses the reasons for low cash balance in spite of heavy operating profits or for heavy cash balance in spite of low profits. However, comparison of original forecast with the actual results highlights the trends of movements of cash which may otherwise go undetected.

4. **Discloses success or failure of cash planning.** The extent of success or failure of cash planning can be known by comparing the projected cash flow statement with the actual cash flow statement and necessary remedial measures can be taken.

12.7 LIMITATIONS OF CASH FLOW ANALYSIS

Cash flow analysis is a useful tool of financial analysis. However, it has its own limitations. These limitations are as under:

1. Cash flow statement cannot be equated with the Income Statement. An Income Statement takes into account both cash as well as non-cash items and, therefore, net cash does not necessarily mean net income of the business.
2. The cash balance as disclosed by the cash flow statement may not represent the real liquid position of the business since it can be easily influenced by postponing purchases and other payments.
3. Cash flow statement cannot replace the Income Statement or the Funds Flow Statement. Each of them has a separate function to perform.

In spite of these limitations it can be said that cash flow statement is a useful supplementary instrument. It discloses the volume as well as the speed at which the cash flows in the different segments of the business. This helps the management in knowing the amount of capital tied up in a particular segment of the business. The technique of cash flow analysis, when used in conjunction with ratio analysis, serves as a barometer in measuring the profitability and financial position of the business.

The concept and technique of preparing a Cash Flow Statement will be clear with the help of illustrations given in the following pages.

Cash from Operations

Illustration 12.3. From the following balances you are required to calculate cash from operations:

		31 December	
		2003	2004
		₹	₹
Debtors		50,000	47,000
Bills Receivable	10,000	12,500	
Creditors		20,000	25,000
Bills Payable		8,000	6,000
Outstanding Expenses		1,000	1,200
Prepaid Expenses		800	700
Accrued Income		600	750
Income received in advance		300	250
Profit made during the year		—	1,30,000

Solution:

CASH FROM OPERATIONS

Particulars		₹
Profit made during the year		1,30,000
Add: Decrease in Debtors	3,000	
Increase in Creditors	5,000	
Increase in Outstanding Expenses	200	
Decrease in Prepaid Expenses	100	8,300
		1,38,300
Less: Increase in Bills Receivable	2,500	
Decrease in Bills Payable	2,000	
Increase in Accrued Income	150	
Decrease in Income received in Advance	50	4,700
Cash from Operations		1,33,600

Illustration 12.4. Statement of financial position of Mr. Arun is given below:

Liabilities	*1 Jan.,2003* ₹	*31 Dec.,2003* ₹	*Assets*	*1 Jan., 2003* ₹	*31 Dec.,2003* ₹
Accounts Payable	29,000	25,000	Cash	40,000	30,000
Capital	7,39,000	6,15,000	Debtors	20,000	17,000
			Stock	8,000	13,000
			Building	1,00,000	80,000
			Other Fixed Assets	6,00,000	5,00,000
	7,68,000	6,40,000		7,68,000	6,40,000

Additional Information

(a) There were no drawings.

(b) There were no purchases or sales of either building or other fixed assets. Prepare a Statement of Cash Flow.

Solution:

CASH FLOW STATEMENT

Cash Balance as on 1 January, 2003			` 40,000
Net Loss as per Profit and Loss A/c:			
Capital at the end of 2003		6,15,000	
Less: Capital at the beginning of 2003		7,39,000	
		(1,24,000)	
Add: Non-cash Charges:			
Depreciation on Buildings	20,000		
Depreciation on other Fixed Assets	1,00,000	1,20,000	
Funds from Operations		(4,000)	
Add: Decrease in Current Assets:			
Debtors		3,000	
		(1,000)	
Less: Increase in Current Assets or Decrease in Current Liabilities:			
Increase in Stocks	5,000		
Decrease in Accounts Payable	4,000	(9,000)	
Cash Outflow on account of operations			(10,000)
Cash Balance as on 31 December, 2003			30,000

12.8 AS 3 (REVISED): CASH FLOW STATEMENTS[1]

The following are the salient features of the Revised Accounting Standard (AS) 3, Cash Flow Statements, issued by the Council of the Institute of Chartered Accountants of India in March 1997. This Standard supersedes AS 3, Changes in Financial Position, issued in June, 1981.

The standard has been mandatory for all enterprises from accounting period commencing or after 1.4.2001.

1. Objectives

Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and needs of the enterprise to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timings and certainty of their generation.

The Statement deals with the provisions of information about the historical changes in cash and cash equivalents of an enterprise by means of a cash flow statement which classifies cash flows during the period from operating, investing and financing activities.

2. Scope

(1) An enterprise should prepare a cash flow statement and should present it for each period for which financial statements are presented.

(2) Users of an enterprise's financial statements are interested in how the enterprise generates and uses cash and cash equivalents. This is the case regardless of the nature of the enterprise's activities and irrespective of whether cash can be viewed as the product of the enterprise, as may be the case with a financial enterprise. Enterprises need cash for essentially the same reasons, however different their principal revenue-producing activities might be. They need cash to conduct their operations, to pay their obligations, and to provide returns to their investors.

3. Benefits of Cash Flow Information

(1) A cash flow statement, when used in conjunction with the other financial statements, provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure (including its liquidity and solvency), and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises.

[1] *The Chartered Accountant*, March, 1997, p. 68.

(2) It also enhances the comparability of the reporting of operating performance by different enterprise because it eliminates the effects of using different accounting treatments for the same transactions and events.
(3) Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of changing prices.

4. Definitions

The following terms are used in this Statement with the meanings specified:
(1) *Cash* comprises cash on hand and demand deposits with banks.
(2) *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.
(3) *Cash flows* are inflows and outflows of cash and cash equivalents.
(4) *Operating activities* are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities.
(5) *Investing activities* are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.
(6) *Financing activities* are activities that result in changes in the size and composition of the owner's capital (including preference share capital in the case of a company) and borrowings of the enterprise.

5. Presentation of A Cash Flow Statement

The cash flow statement should report cash flows during the period classified by operating investing and financing activities.

(1) **Operating activities.** Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss. Examples of cash flows from operating activities are:
(a) cash receipts from the sale of goods and the rendering of services;
(b) cash receipts from royalties, fees, commissions, and other revenue;
(c) cash payments to suppliers for goods and services;
(d) cash payments to and on behalf of employees;
(e) Cash receipts and cash payments of an insurance enterprise for premiums and claims, annuities and other policy benefits;
(f) cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and
(g) cash receipts and payments relating to futures contracts, forward contracts, option contracts and swap contracts when the contracts are held for dealing or trading purposes.

(2) **Investing activities.** Examples of cash flows arising from investing activities are:

(a) cash payments to acquire fixed assets (including intangibles). These payments include those relating to capitalised research and development costs and self-constructed fixed assets;
(b) cash receipts from disposal of fixed assets (including intangibles);
(c) cash payments to acquire shares, warrants, or debt instruments of other enterprises and interests in joint ventures (other than payments for those instruments considered to be cash equivalents and those held for dealing or trading purposes);
(d) cash receipts from disposal of shares, warrants, or debt instruments of other enterprises and interests in joint ventures (other than receipts from those instruments considered to be cash equivalents and those held for dealing or trading purposes);
(e) cash advances and loans made to third parties (other than advances and loans made by financial enterprise);
(*f*) cash receipts from the repayment of advances and loans made to third parties (other that than advances and loans of a financial enterprise);
(g) cash payments for futures contracts, forward contracts, option contracts, and swap contract except when the contracts are held for dealing or trading purposes, or the payments and classified as financing activities; and

(h) cash receipts from futures contracts, forward contracts, option contracts, and swap contracts except when the contracts are held for dealing or trading purposes, or the receipts are classified as financing activities.

(3) **Financing activities.** Examples of cash flows arising from financing activities are:

(a) cash proceeds from issuing shares or other similar instruments;

(b) cash proceeds from issuing debentures, loans, notes, bonds, and other short-or long-term borrowings; and

(c) cash repayments of amounts borrowed.

Reporting Cash Flows from Investing and Financing Activities

An enterprise should report separately major classes of gross cash receipts and gross cash payments arising from investing and financing activities, except to the extent that cash flows described in paragraph 6 are reported on a net basis.

6. Reporting Cash Flows on A Net Basis

(1) Cash flows arising from the following operating, investing or financing activities may reported on a net basis:

(a) cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the enterprise.

Examples of cash receipts and payments referred above are as follows:

(a) the acceptance and repayment of demand deposits by a bank;

(b) funds help for customers by an investment enterprise; and

(c) rents collected on behalf of, and paid over to, the owners of properties.

(d) cash receipts and payments for items in which the turnover is quick, the amounts large, and the maturities are short.

Examples of cash receipts and payments referred above are advances made for, and the repayments of:

(a) Principal amounts relating to credit card customers;

(b) the purchase and sale of investments; and

(c) other short-term borrowings, for example, those which have a maturity period of three months or less.

(2) Cash flows arising from each of the following activities of a financial enterprise may be reported on a net basis:

(a) cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date;

(b) the placement of deposits with and withdrawal of deposits from other financial enterprises; and

(c) cash advances and loans made to customers and the repayment of those advances and loans.

7. Disclosure

(1) **Components of cash and cash equivalents**. An enterprise should disclose the components of cash and cash equivalents and should present a reconciliation of the amounts in its cash flow statement with the equivalent items reported in the balance sheet.

(2) **Other disclosures**. An enterprise should disclose, together with a commentary by management, the amount of significant cash and cash equivalent balances held by the enterprise that are not available for use by it.

Note. As a result of AS: 3 (Revised) discussed above, the presentation of a Cash Flow Statement has undergone a change. In the following pages, illustration involving presentation of Cash Flow Statement cash by the Traditional Approach and Modern Approach as per AS: 3 (Revised) are given.

The students should prepare cash flow statement as per AS : 3 (Revised). We have given traditional approach only for making the subject more intelligible.

Cash Flow Statements

Illustration 12.5. Balance Sheet of *A* and *B* on 1 January, 2003 and 31 December, 2003 were as follows:

BALANCE SHEET

Liabilities	*1 Jan.,2003* `	*31 Dec.,2003* `	*Assets*	*1 Jan., 2003* `	*31 Dec.,2003* `
Creditors	40,000	44,000	Cash	10,000	7,000
Mrs. *A*'s Loan	25,000	—	Debtors	30,000	50,000
Loans from Bank	40,000	50,000	Stock	35,000	25,000
Capital	1,25,000	1,53,000	Machinery	80,000	55,000
			Land	40,000	50,000
			Building	35,000	60,000
	2,30,000	2,47,000		2,30,000	2,47,000

During the year a machine costing ` 10,000 (accumulated depreciation ` 3,000) was sold for ` 5,000. The provisions depreciation against Machinery as on 1 January, 2003 was ` 25,000 and on 31 December, 2003 was ` 40,000. Net profit for the year 2003 amount to ` 45,000. You are required to prepare Cash Flow Statement.

Solution:

(i) Traditional Approach

CASH FLOW STATEMENT

Particulars		`
Cash Balance as on 1 January, 2003		10,000
Add: Sources:		
Cash from Operations	59,000	
Loan from Bank	10,000	
Sale of Machinery	5,000	74,000
		84,000
Less: Applications:		
Purchase of Land	10,000	
Purchase of Building	25,000	
Mrs. *A*'s Loan repaid	25,000	
Drawings	17,000	77,000
Cash balance as on 31 Dec., 2003		7,000

Working Notes

Cash from Operations		`
Profit made during the year		45,000
Add: Depreciation on Machinery	18,000	
Loss on sale of Machinery	2,000	
Decrease in Stock	10,000	
Increase in Creditors	4,000	34,000
		79,000
Less: Increase in Debtors		20,000
Cash from Operations		59,000

MACHINERY ACCOUNT (AT COST)

Particulars	`	*Particulars*	`
To Balance b/d	1,05,000	By Bank	5,000
		By Loss on sale of Machinery	2,000
		By Provision for Depreciation	3,000
		By Balance c/d	95,000
	1,05,000		1,05,000

PROVISION FOR DEPRECIATION

Particulars	`	*Particulars*	`
To Machinery A/c	3,000	By Balance b/d	25,000
To Balance c/d	40,000	By P. and L. A/c (deprn. charged—balancing figure)	18,000
	43,000		43,000

(ii) Modern Approach

CASH FLOW STATEMENT

Net Cash Flows from Operating Activities		` 59,000
Cash flows from Investing Activities:		
Sale of Machinery	5,000	
Purchase of Land	(10,000)	
Purchase of Building	(25,000)	
Net Cash flows from Investing Activities		(30,000)
Cash flows from Financing Activities:		
Loan from Bank	10,000	
Mrs. *A*'s Loan repaid	(25,000)	
Drawings	(17,000)	
Net Cash Flow from Financial Activities		32,000
Net Increase (Decrease) in cash and cash equivalents		3,000
Cash and Cash Equivalents on Jan. 1, 2003		10,000
Cash and Cash Equivalents on Dec. 31, 2003		7,000

Illustrations 12.6. The following are the summarised Balance Sheet of a company as on December, 2002 and 2003:

Liabilities	*2002* `	*2003* `	*Assets*	*2002* `	*2003* `
Share Capital	2,00,000	2,50,000	Land and Buildings	2,00,000	1,90,000
General Reserve	50,000	60,000	Machinery	1,50,000	1,69,000
Profit and Loss	30,500	30,600	Stock	1,00,000	74,000
Bank Loan (Long-term)	70,000	—	Sundry Debtors	80,000	64,200
Sundry Creditors	1,50,000	1,35,200	Cash	500	600
Provision for Taxation	30,000	35,000	Bank	—	8,000
			Goodwill	—	5,000
	5,30,500	5,10,800		5,30,500	5,10,800

Additional Information

During the year ended 31 December, 2003:

1. Dividend of ` 23,000 was paid.
2. Assets of another company were purchased for a consideration of ` 50,000 payable in shares.

The following assets were purchased: Stock ` 20,000: Machinery ` 25,000.

3. Machinery was further purchased for ` 8,000.
4. Depreciation written off machinery ` 12,000.
5. Income tax provided during the year ` 33,000.
6. Loss on sale of machinery ` 200 was written off to General Reserve.

You are required to prepare a cash flow statement.

Solution:

(i) Traditional Approach

CASH FLOW STATEMENT

for the year ending 31 December, 2003

Particulars		`
Cash Balance as on 1 Jan., 2003		500
Add: Sources of Cash:		
Sale of Machinery		1,800
Cash from Operations		
Funds from Operations	88,300	
Add: Decrease in Stock	46,000	
Decrease in Debtors	15,800	
	1,50,100	
Less: Decrease in Creditors	14,800	1,35,300
		1,37,600

Less: Applications of Cash:		
Payment of Dividend	23,000	
Purchase of Machinery	8,000	
Tax paid (See Note 4)	28,000	
Mortgage Loan repaid	70,000	1,29,000
Closing Cash and Bank Balances		8,600
(Cash in hand ` 600 + Cash at Bank ` 8,000)		

Working Notes

1. ADJUSTED PROFIT LOSS ACCOUNT

Particulars	`	*Particulars*	`
To Dividend	23,000	By Balance b/d	30,500
To Depreciation on Building	10,000	By Funds from Operations	
To Provision for Tax	33,000	(balancing figure)	88,300
To Transfer to General Reserve	10,200		
To Deprn. on Machinery	12,000		
To Balance c/d	30,600		
	1,18,800		1,18,800

2. MACHINERY ACCOUNT

Particulars	`	*Particulars*	`
To Balance b/d	1,50,000	By Depreciation	12,000
To Share Capital	25,000	By General Reserve	200
To Bank	8,000	By Bank	1,800
		By Balance c/d	1,69,000
	1,83,000		1,83,000

3. GENERAL RESERVE

Particulars	`	*Particulars*	`
To Machinery A/c	200	By Balance b/d	50,000
To Balance c/d	60,000	By P & L b/d	10,200
			60,200
	60,200		

4. PROVISION FOR TAXATION

Particulars	`	*Particulars*	`
To Bank	28,000	By Balance b/d	30,000
To Balance c/d	35,000	By P. & L. A/c	33,000
	63,000		63,000

5. DECREASE IN STOCK

	`
Stock as on December, 1992	1,00,000
Less: Stock as on December, 1993	54,000
(after deducting stock purchased by issuing share)	
Increase in Cash	46,000

(ii) Modern Approach as per AS: 3 (Revised)

CASH FLOW STATEMENT

for the ending 31 December, 2003

Particulars		`
Cash Flows Operating Activities:		
Funds from operations	88,300	
Adjustments for:		
Decrease in Stock	46,000	
Decrease in Debtors	15,800	
Decrease in Creditors	(14,800)	
Tax paid	28,000	
Net Cash from Operating Activities		1,07,300

Cash Flows Investing Activities:		
Sale of Machinery	1,800	
Purchase of Machinery	(8,000)	
Net Cash used for Investing Activities		(6,200)
Cash Flows from Financing Activities		
Payment of Dividend	(23,000)	
Mortgage Loan repaid	(70,000)	
Net Cash used in Financing Activities		(93,000)
Net Increase in Cash and Cash Equivalents		8,100
Cash and Cash Equivalents as on 1st Dec., 1993		500
Cash and Cash Equivalents 31st Dec., 1993 (Cash ` 600 + Bank ` 8,000)		8,600

CHECK YOUR PROGRESS

1. True or False
   - (a) A Cash flow statement reveals the effects of transactions involving movement of cash.
   - (b) The term 'Funds' mean 'Current Assets' in Case of a Cash Flow Analysis.
   - (c) A 'Cash Flow Statement' can very well be equated with an "Income Statement".
   - (d) A company should keep large balances of cash in hand so it can meet all contingencies.
   - (e) Increase in provision for doubtful debts should be added back in order to find cash from operations.
   - (f) Funds flow statements and cash flow statement are one and the same.

Illustration 12.7 The Balance Sheet of *XYZ* Limited are as follows:

BALANCE SHEET (*Figures in 2004 thousand* `)

Liabilities	*2004* `	*2005* `	*Assets*	*2004* `	*2005* `
Equity	800	900	Fixed assets	600	800
General Reserve	300	400	Additions	200	100
P.& L. A/c	200	300		800	900
Provision for Taxation	300	400	Depreciation	300	350
Overdraft	300	464		500	550
Sundry Creditors	1,200	1,000	Investments	200	—
Proposed Dividend	80	90	Stock	1,400	1,230
			Debtors	1,080	1,774
	3,180	3,554		3,180	3,554

PROFIT AND LOSS ACCOUNT
for the year ending...

Particular	*2004* `	*2005* `	*Assets*	*2004* `	*2005* `
To Taxation	250	450	By Trading Profit	430	660
To Proposed Dividend	80	90	By Profit on sale of Investment	—	30
To Transfer to General Reserve	100	100	By Income Tax excess provided in the previous year	—	50
To Balance c/f	200	300	By Balance from last year	200	200
	630	940		630	940

Additional Information

(1) For the year ending 31 December, 2005, purchases were ` 60 lakhs and sales were ` 70 lakhs.
(2) Trading profit for the year ended 31 December, 2005 was arrived at after charging depreciation ` 50,000 and directors remuneration ` 1,20,000.

Prepare the Cash Flow Statement.

Solution:

(*i*) **Traditional Approach**

CASH FLOW STATEMENT

for the year ending 31 December, 2005 (` *in thousands*)

Overdraft as on 1 January, 2005		(300)
Add: Sources:		
Increase in Share Capital	100	
Investments sold (200 + 30)	230	330
Total Sources:		30
Less: Applications:		
Fixed Assets purchased	100	
Dividend paid	80	
Tax paid	300	
Cash Outflow on account of operations (Note *ii*)	14	(494)
Bank Overdraft as on 31 December, 2004		464

Working Notes:

(i) ADJUSTED PROFIT AND LOSS ACCOUNT

Particulars	`	*Particulars*	`
To Provision for Tax	450	By Balanced b/d	200
To Proposed Dividend	90	By Provision for Tax (excess)	50
To Depreciation	50	By profit on sale of Investments	30
To Transfer to General Reserves	100	By Funds from Operations (bal. fig.)	710
To Balance c/d	300		
	990		990

(ii) CASH FROM OPERATIONS

Particulars		`
Funds from Operations		710
Add: Decrease in Stock		170
		880
Less: Increase in Debtors	694	
Decrease in Creditors	200	894
Cash Flow on account of Operations		14

(iii) PROVISION FOR TAXATION

Particulars	`	*Particulars*	`
To P. & L. A/c (Excess Provision)	50	By Balanced b/d	300
To Bank	300	By P. & L. A/c	450
To Balance c/d	400		
	750		750

Cash outflow on account of Operation could have also been found out as follows:

			`
	Trading Profit		660
Add:	Depreciation		50
	Funds from Operations		710
Add:	Decrease in Stock		170
			880
Less:	Increase in Debtors	694	
	Decrease in Creditors	200	894
	Cash Outflow on account of operation		14

(ii) Modern Approach as per AS 3 (Revised)

CASH FLOW STATEMENT

for the year ending 31st Dec., 2005 (` in '000)

Cash Flows from Operations:		
Funds from Operations		710
Adjustments for:		
Decrease in Stock		170
Increase in Debtors		(694)
Decrease in Creditors		(200)
Tax paid		(300)
Net Cash used for Operating Activities		(314)
Cash flows from Investing Activities:		
Fixed Assets purchased	(100)	
Investment sold	230	
Net Cash from Investing Activities		130
Cash Flows from Financing Activities:		
Proceeds from Issuance of Share Capital	100	
Dividends	(80)	
Net Cash from Financing Activities		20
Net Increase (Decrease) in Cash and Cash Equivalents		(164)
Cash and Cash Equivalents as on 1st Jan., 2005		(300)
Cash and Cash Equivalents as on 31st Dec., 2005		(464)

CHECK YOUR PROGRESS

2. Choose the correct answer:
   (i) Cash from operation is equal to:
      (a) Net profit plus increase in outstanding expense,
      (b) Net profit plus increase in debtors,
      (c) Net profit plus increase in stock.
   (ii) Increase in the amounts of debtors results in:
      (a) Decrease in cash,
      (b) Increase in cash,
      (c) No change in cash.
   (iii) Increase in the amount of bills payable results in:
      (a) Increase in cash,
      (b) Decrease in cash,
      (c) No change in cash.
3. State the effect of the following transactions, considered individually, on funds (working capital concept) and funds (cash concept):
   (a) Purchase of goods for cash.
   (b) Purchase of building against a long-term loan payable.
   (c) Bonus paid in the form of fully paid shares.

Cash Flow and Funds Flow Statements

Illustration 12.8. The financial of M/s *A* and *B* on 1st Jan. and 31st Dec., 2004 was as follows:

Liabilities	*1 Jan.* `	*31 Dec.* `	*Assets*	*1 Jan.* `	*31 Dec.* `
Current Liabilities for Goods	36,000	40,000	Cash	4,000	3,600
Mrs. A's Loan	—	20,000	Debtors	35,000	38,000
Loan from Bank	30,000	25,000	Stock	25,000	22,000
Hire-purchase Vendor	—	20,000	Land	20,000	30,000
Capital	1,48,000	1,54,000	Building	50,000	55,000
			Machinery	80,000	86,000
			Delivery Van	—	25,000
	2,14,000	2,59,600		2,14,000	2,59,600

The delivery van was purchased in December, 2004 on hire-purchase basis; a payment of ` 5,000 was made immediately and the balance of the amount is to be paid in 20 monthly instalments of ` 1,000 each together with interest @ 12 per cent p.a. During the year the partners withdrew ` 26,000 for domestic expenditure. The provision for depreciation against machinery on 31 December, 2003 was ` 27,000 and on 31 December, 2004 ` 36,000. You are required to prepare the Cash Flow Statement. Show also the Funds Flow Statement.

Solution:

(i) Traditional Approach

M/s A & B

CASH FLOW STATEMENT

for the year ending 31 Dec., 2004

Particulars	`
Cash Balance on 1st Jan.	4,000
Sources:	
From Operations (see note 2)	45,600
Loan from Mrs. *A*	20,000
Total Sources	69,600
Applications:	
Payment of Bank Loan	5,000
Payment for Delivery Van	5,000
Machinery Acquired	15,000
Buildings Acquired	5,000
Land Acquired	10,000
Withdrawals by Partners	26,000
	66,000
Cash Balance on 31 December	3,600

FUNDS FLOW STATEMENT

for the year ending 31st December, 2004

Particulars	`	*Particulars*	`
Funds from Operations	41,000	Repayment of Bank Loan	5,000
Loan from Mrs. *A*	20,000	Payment for Delivery Van	5,000
Decrease in Working Capital	17,000	Payable in a year for Delivery Van	12,000
		Machinery acquired	15,000
		Land acquired	10,000
		Buildings acquired	5,000
		Partners' drawings	26,000
	78,000		78,000

Working Notes

1. **Funds from Operations**

		`
	Capital as on 31 December, 2004	1,54,000
Add:	Drawings during the year	26,000
		1,80,000
Less:	Capital as on 1 January, 2004	1,48,000
	Profit for the year	32,000
Add:	Depreciation for the year (` 36,000 – ` 27,000)	9,000
		41,000

2. **Cash from Operations**

	Funds From Operations		41,000
Add:	Decrease in Stock	3,000	
	Increase in Creditors	4,600	7,600
Less:	Increase in Debtors		48,600
	Cash from Operations		3,000
			45,600

3. MACHINERY ACCOUNT

Particulars	`	Particulars	`
To Balance b/d	80,000	By Depreciation for the year	9,000
To Bank (acquired during the year)	15,000	By Balance c/d	86,000
	95,000		95,000

(ii) Modern Approach as per AS 3 (Revised)

CASH FLOW STATEMENT

for the year ending 31st Dec., 2004

Particulars		`
Cash Flows from Operating Activities:		
Net Cash Flow from Operations		45,600
Cash Flow from Investing Activities:		
Purchase of Machinery	(15,000)	
Purchase of Building	(5,000)	
Purchase of Land	(10,000)	
Payment of Delivery Van	(5,000)	
Net Cash used in Investing Activities		(35,000)
Cash Flows from Financing Activities:		
Loan from Mrs. *A*	20,000	
Payment of Bank Loan	(5,000)	
Drawings by Partners	(26,000)	
Net Cash used in Financing Activities		(11,000)
Net Increase (Decrease) in Cash and Cash Equivalents		(400)
Cash and Cash Equivalents as on 1st Jan., 2004		4,000
Cash and Cash Equivalents as on 31st Dec., 2004		3,600

12.9 SUMMARY

- Cash flow statement describes the inflows (sources) and outflows (uses) of cash and cash equivalents during a specified period of time.
- AS 3 (Revised) classifies the cash flows in a period in the following three categories: (a) cash flows from operating activities; (b) cash flows from investing activities; and (c) (deducting) cash flows from financing activities.
- Net increase (decrease) in cash and cash equivalents is arrived at by adding (deducting) the cash inflows (outflows) during a particular period. The cash and cash equivalents at the beginning of the accounting period is added to the amount computed as above to ascertain the amount of cash or cash equivalents at the end of the accounting period.

12.10 KEY TERMS

- **Cash:** The term stands for cash and demand deposits with bank.
- **Cash Equivalents:** The term includes short-term highly liquid investments that are readily convertible into known amount of cash which is subject to insignificant risk or change in values.
- **Cash Flow Analysis:** A technique involving analysis of the causes of flows of cash from one period to another.
- **Cash Flow Statement:** A statement depicting the change in cash position from one period to another.

12.11 ANSWERS TO 'CHECK YOUR PROGRESS'

1. (*a*) True, (*b*) False, (*c*) False, (*d*) False, (*e*) True, (*f*) False
2. (*i*) (*a*), (*ii*) (*a*), (*iii*) (*a*)
3. When funds denotes working capital, none of the items will affect working capital. When funds denotes 'Cash' items (*a*) will result in decrease of cash while items (*b*) and (*c*) will have no effect on cash

12.12 QUESTIONS AND EXERCISES

1. Explain the meaning of a Cash Flow Statement. Discuss its utility.
2. Explain the technique of preparing a Cash Flow Statement with imaginary figures.
3. Distinguish between Funds Flow Statement and Cash Flow Statement.
4. What is a Cash Flow Statement?

12.13 PRACTICAL PROBLEMS

Cash from Operations

1. Compute cash from operations from the following figures:

(i) Profit for the year 2003 is a sum of ` 10,000 after providing for depreciation of ` 2,000.

(ii) The current assets for the business for the year ending 31 Dec., 2002 and 2003 are as follows:

Particulars	*31 Dec., 2002* `	*31 Dec., 2003* `
Sundry debtors	10,000	12,000
Provision for doubtful debts	1,000	1,200
Bills receivable	4,000	3,000
Bills payable	5,000	6,000
Sundry creditors	8,000	9,000
Inventories	5,000	8,000
Short-term investments	10,000	12,000
Outstanding expenses	1,000	1,500
Prepaid expenses	2,000	1,000
Accrued income	3,000	4,000
Income received in advance	2,000	1,000

[**Ans.** Cash from Operations ` 7,700]

2. From the following Profit and Loss Account, you are required to compute cash from operations:

PROFIT AND LOSS ACCOUNT

for the ending 31 December, 2004

Particulars	`	*Particulars*	`
To Salaries	5,000	By Gross Profit	25,000
To Rent	1,000	By Profit on sale of Land	5,000
To Depreciation	2,000	By Income tax Refund	3,000
To Loss on sale of plant	1,000		
To Goodwill written off	4,000		
To Proposed Dividends	5,000		
To Provision for Taxation	5,000		
To Net Profit	10,000		
	33,000		33,000

[**Ans.** Cash from Operations ` 19,000]

Simple Cash Flow Statement

3. The following are the summarised Balance Sheet M/s Rahul Brother Private Ltd. March, 2004 and 2005.

Liabilities	*2004* `	*2005* `	*Assets*	*2004* `	*2005* `
12% Redeemable			Fixed Assets	4,100	4,000
Preference Shares	—	1,000	*Less:* Depreciation	1,100	1,500
Equity Shares	4,000	4,000		3,000	2,500
	4,000	5,000	Debtors	2,000	2,400
General Reserve	200	200	Stock	3,000	3,500
Profit and Loss A/c	100	120	Prepaid Expenses	30	50
Debentures	600	700	Cash	120	350
Creditors	1,200	1,100			
Provision for Taxation	300	420			
Proposed Dividend	500	580			
Bank Overdraft	1,250	680			
	8,150	8,800		8,150	8,800

You are required to prepare a Statement of Cash Flow.

[**Ans.** Cash from Operations ` 400, Sources ` 1,600, Applications ` 800]

Comprehensive Cash Flow Statement

4. Wearwell Ltd. supplies you the following Balance Sheets on 31 December:

Liabilities	*2004* `	*2005* `	*Assets*	*2004* `	*2005* `
Share capital	70,000	74,000	Bank balance	9,000	7,800
Bonds	12,000	6,000	Receivable	14,900	17,700
Accounts payable	10,360	11,840	Inventories	49,200	42,700
Provision for doubtful debts	700	800	Land	20,000	30,000
			Goodwill	10,000	5,000
Reserves & surplus	10,040	10,560			
	1,03,100	1,03,200		1,03,100	1,03,200

Following additional information has also been supplied to you:

(i) Dividends amounting to ` 3,500 were paid during the year 1994.

(ii) Land was purchased for ` 10,000.

(iii) ` 5,000 were written off on Goodwill during the year.

(iv) Bonds of ` 6,000 were paid during the course of the year. You are required to prepare a Cash Flow Statement.

[**Ans.** Cash from Operations ` 14,300, Sources ` 18,300, Applications 19,500]

5. Tiny Tot Limited furnish you the following Balance Sheets for the years ending on 31 December, 2004 and 2005. You are required to prepare a Cash Flow Statement for year ended 31 December, 2005.

Liabilities	*2004* `	*2005* `	*Assets*	*2004* `	*2005* `
Equity Share Capital	10,000	10,000	Goodwill	1,200	1,200
General Reserve	1,400	1,800	Land	4,000	3,600
Profit and Loss A/c	1,600	1,300	Building	3,700	3,600
Sundry Creditors	800	540	Investments	1,000	1,100
Outstanding Exps.	120	80	Inventories	3,000	2,340
Prov. for Taxation	1,600	1,800	Receivables	2,000	2,220
Prov. for Bad Debts	40	60	Bank balance	660	1,520
	15,560	15,580		15,560	15,580

Following additional information has also been supplied to you:

(i) A piece of land has been sold for ` 400.

(ii) Depreciation amounting to ` 700 has been changed on building.

(iii) Provision for taxation has been made for ` 1,900 during the year.

[**Ans.** Cash from Operations ` 2,860, Sources ` 3,260, Application ` 2,400]

6. The Balance Sheets of *T* Ltd. as on 31 December, 2005 and 31 December, 2006 are as follows:

Liabilities	*2005* `	*2006* `	*Assets*	*2005* `	*2006* `
Share Capital	300.00	300.00	Freehold Property (at cost)	225.00	240.00
Reserves	255.00	240.00	Plant and Machinery (at cost less depreciation)	135.00	165.00
16 per cent Debentures (unsecured)	75.00	75.00	Investments in Shares of companies under the same management (unquoted)	150.00	150.00
Mortgage on Freehold Property	27.00	14.25			
Creditors	45.00	45.00			
Proposed Div. (subject to ded. of tax)	22.00	23.25	Investments in Shares of other companies (quoted) (Market Value 1996 ` 120 lakhs, 1995 ` 150 lakhs	112.50	112.50
Provision for Taxation	21.00	37.50			
Secured Overdraft (by a floating charge on assets)	15.00	82.50			
			Stock	52.50	75.00
			Debtors	45.00	75.00
			Bank	10.50	—
	730.50	817.50		730.50	817.50

The following additional information for the year 2006 is relevant:

	`
(1) Credit Sales	675 lakhs
(2) Credit Purchases	520 lakhs
(3) Overheads	83.75 lakhs
(4) Depreciation on Plant and Machinery	17.50 lakhs
(5) Dividend for 1995 was paid in full	
(6) Amount paid towards taxation for the year 1995	21.50 lakhs

In view of credit squeeze, the company has been asked by the Bank to reduce the overdraft substantially within six months, if possible by 50 per cent.

You are required to prepare a cash flow statement and briefly comment on the financial position of the company and suggest remedial measures to overcome the financial crisis.[**Ans.** Cash from Operations ` 41.25 lakhs. Applications ` 119.25 lakhs.

Operations is the only source. Company has a safe financial position as far as long-term financial solvency is concerned, it is rather unduly conservative. Current ratio is extremely poor. ROI before interest and tax is 22.62 per cent which is quite satisfactory. The company can improve its current ratio by disposing of a part of quoted shares in other companies or converting a part of bank overdraft in a term loan]

7. The Mismanagement Ltd. always finds that it is hard pressed for funds. In spite of borrowing funds at high rate from banks they are not able to make payments to suppliers in time.

The financial position of the company as reflected from the balance sheet for the last two years is as under:

BALANCE SHEET

	2003		2004	
	`	`	`	`
Share Capital (` 10 fully paid)	10.00		10.00	
Profit and Loss A/c	1.65		0.45	
Bank Overdraft	1.55		5.95	
Sundry Creditors	1.00		6.00	
	14.20		22.40	
Land and Buildings	3.00			5.00
Plant and Machinery	5.00		6.00	
Less: Depreciation	1.20	3.80	1.80	4.20
Motor Cars	1.00		1.30	
Less: Depreciation	0.40	0.60	0.60	0.70
Stock		2.20		7.20
Sundry Debtors		4.60		5.30
		14.20		22.40

The following further information has been given:

(a) Dividend was paid during the year ended 31 December, 2004 at the rate of 10 per cent.

(b) The company had sold motor van during the year 2004 for ` 8,000. This was purchased for ` 10,000 and its depreciated value in the books as on 1 January, 2004 was ` 5000.

You are required to prepare a Cash Flow Statement.

8. A company finds on 1 January, 2005 that it is short of funds with which to implement its programme of expansion. On 1 January, 2004, it had a credit balance of ` 1,80,000. From the following information, prepare a statement for board of directors, to show how the overdraft of ` 68,750 as at 31 December, 2004 has arisen:

Figures as per Balance Sheets as at 31 December of each year are as follows:

	2003	2004
	`	`
Fixed Assets	7,50,000	11,20,000
Stock and Stores	1,90,000	3,30,000
Debtors	3,80,000	3,35,000
Bank balance (Cr.)	1,80,000 (Overdraft)	68,750
Trade Creditors	2,70,000	3,50,000
Share Capital (in shares of ` 10 each)	2,50,000	3,00,000
Bills Receivable	87,500	95,000

The Profit for year ended 31 December, 2004, before charging depreciation and taxation amounted to ` 2,40,000. The 5,000 shares were issued on 1 January, 2004, at a premium of ` 5 per share. ` 1,37,500 were paid in March, 2004, by way of

income tax. Dividend was paid as follow: 2003 (final)—on the capital on 31 December, 2003 at 10 per cent *less* tax at 25 per cent. 2004 (interim)—5 per cent free of tax.

[**Ans.** Cash from Operations ` 2,17,500; Sources ` 2,92,500; Applications ` 5,41,250]

[**Hint.** Final dividend paid is ` 18,750 (*i.e.*, ` 25,000 *less* Tax of ` 6,250); Income tax payable to the Government on account of dividend is ` 11,250 *i.e.*, 6,250 + ` 5,000 on interim dividend free of tax); assume tax paid of ` 1,37,500 includes this tax also]

9. The directors of Maheswari Brothers Private Ltd., are alarmed at the deterioration of the financial position of their company. They find that the overdraft is at the limit allowed by the bank and that they have not sufficient funds to pay their creditors on the due dates. They are at a loss to understand why, when their accounts show satisfactory profits, they should be short of funds.

You are given the Balance Sheet of the Company as on 31 March, 2005 and 2006.

You are required to prepare a statement which will show what has happened to the money which has come into the business during the year.

BALANCE SHEET

	31 March, 2005 `		*31 March, 2006* `	
Share Capital:				
Shares of ` 10 each fully paid		5,00,000		5,00,000
Reserve and Surplus		30,000		40,000
Bank Overdraft		80,000		3,00,000
Sundry Creditors		1,00,000		3,00,000
		7,10,000		11,40,000
Land and Buildings		1,50,000		2,50,000
Plant and Machinery	2,50,000		3,00,000	
Less: Depreciation	60,000	1,90,000	90,000	2,10,000
Motor Vehicles	58,000		62,000	
Less: Depreciation	28,000	30,000	42,000	20,000
Stock		1,10,000		3,60,000
Sundry Creditors		2,30,000		3,00,000
		7,10,000		11,40,000

During the year a dividend of 10 per cent was distributed to the shareholders.

On 1 April, 2005 a motor car whose original cost was ` 10,000 and depreciated to a book value of ` 6,000 was sold for ` 8,000.

[**Ans.** Cash Outflow on account of Operations ` 14,000; Sources ` 8,000; Applications ` 2,28,000]

Funds Flow and Cash Flow Statements

10. From the following particulars, prepare Cash Flow and Funds Flow Statements of Mr. Kumar.

BALANCE SHEET

Liabilities	*31.12.02* `	*31.12.03* `	*Assets*	*31.12.02* `	*31.12.03* `
Loan	—	25,000	Cash	5,000	4,000
Current Liabilities	35,000	40,000	Debtors	40,000	45,000
Bank O.D.	40,000	30,000	Stock	30,000	25,000
Capital	1,50,000	1,54,000	Land	30,000	40,000
			Building	50,000	55,000
			Machinery	70,000	80,000
	2,25,000	2,49,000		2,25,000	2,49,000

During the year, Mr. Kumar brought an additional capital of ` 10,000 and his drawings during the year were ` 31,000. Provision for depreciation on machinery—opening balance ` 30,000, closing balance ` 40,000. No depreciation need be provided on other assets.

[**Ans.** Total Sources of Cash ` 40,000; Total Application of Cash ` 66,000; Cash from Operations ` 40,000; Total Sources of Funds 70,000; Total Applications of Funds ` 66,000; Increase in working Capital ` 40,000; Funds from Operations ` 35,000]

11. The following are the Balance Sheets of a Company as on 31 December, 2002 and 31 December, 2003:

Liabilities	*2002* `	*2003* `	*Assets*	*2002* `	*2003* `
Equity Share Capital	7,00,000	8,00,000	Fixed Assets	5,00,000	6,00,000
General Reserve	4,50,000	6,00,000	Additions	1,00,000	80,000
Profit and Loss A/c	1,73,000	2,33,000		6,00,000	6,80,000
Current Liabilities:			Depreciation	2,00,000	3,20,000
Trade Creditors	7,00,000	9,00,000		4,00,000	3,60,000
Bank Overdraft	11,50,000	14,00,000	Investments	1,20,000	
Creditors for Exps.	80,000	92,000	Current Assets:		
Prov. for Taxation	1,97,000	3,70,000	Debtors	13,00,000	21,85,000
Proposed Dividends	1,50,000	1,50,000	Stock at cost	17,80,000	20,00,000
	36,00,000	45,45,000		36,00,000	45,45,000

The profit for the year 2003 as per Profit and Loss Account after providing for depreciation amounted to ` 7,00,000 which was further adjusted as follows:

	`	`
P. & L. Balance b/f		1,73,000
Profit after Depreciation		7,00,000
Add: Profit on sale of Investments		20,000
		8,93,000
Less: Provision for Taxation	3,60,000	
Transfer to Reserve	1,50,000	
Proposed Dividend	1,50,000	6,60,000
Balance c/f		2,33,000

You are informed that

(i) The sales and purchases of the year 2003 amounted to ` 80,00,000 and ` 65,00,000 respectively.

(ii) In arriving at the profit from the sales referred to already, the cost of sales and administration and selling expenses were deducted.

You are required to prepare:

(a) a Funds Flow Statement showing details of changes in Working Capital.

(b) a Cash Flow Statement.

[**Ans.** Funds from Operations ` 8,20,000; Total Sources of Funds ` 10,60,000;
Total Applications of Funds ` 4,17,000;
Cash Outflow on account of Operations ` 73,000;
Sources of Cash ` 2,40,000; Applications of Cash ` 4,90,000]

12.14 FURTHER READING

Maheshwari, S.N. and S.K. Maheshwari, *An Introduction to Accountancy*.

Maheshwari, S.N. and S.K. Maheshwari, *A Text Book for Accounting for Management*.