ACCOUNTS & FINANCE

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ACCOUNTING AND FINANCE

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Chapter – 1

ACCOUNTING - CONCEPTS

Objectives :

After reading this unit we should be able to :

- Understand the history of accounting
- Understand the definition, objectives, functions and branches of Accounting.
- Know the users of accounting information and the accounting information system.
- Have an understanding on the advantages and limitations of accounting

Structure :

1.1 Introduction

1.2 History of Accounting

1.3 Book Keeping and Accounting

1.4 Functions of Accounting

1.5 Users of Accounting Information

1.6 Advantages of Accounting

1.7 Limitations of Accounting

1.8 Questions

1.9 Suggested Readings

1.1 INTRODUCTION

All individuals and institutions depend on one another to satisfy their needs. To serve this purpose, they engage in exchange, which materializes into financial transactions (i.e., transactions carried out in terms of money). Business entities buy and sell goods, borrow and invest money, pay salaries to employees and incur expenses on rent and electricity, purchase land and buildings, etc. To be able to mange finances efficiently, it becomes necessary to keep track of these cash inflows and outflows.

In the past, when transactions were limited and businesses were small, everybody relied on their memory. As businesses grew in size, the entrepreneurs had to rely on something more than their memory to keep track of their business transacted during the year. They had to keep a proper and systematic account of the amount invested, the amount gained or lost in a year, how much they owed and how much others owed to them. Thus, accounting came into being as an aid to the entrepreneur.

1.2 HISTORY OF ACOUNTING

The art of Book – keeping existed even in ancient days before the dawn of the Double Entry Book – keeping method.

Financial and numerical records are found in nearly even civilization with a commercial background. Records of commercial contracts were found in the realm of Babylon. Accounts for both farms and estates were kept in Greece and Rome.

The Greeks and Romans had well – developed record keeping systems, especially for government affairs. The Emperor Augusts is said to have instituted a Government budget in A. D. 5. Somewhat later, inspectors from the Central Government in Rome were sent out to examine the accounts of provincial Governors. During the Middle Ages, Accounting and most other elements of learning and trade languished. With the emergence of a Barter Economy, the financial transactions that are the lifeblood of accounting tended to disappear. Only the church and strong monarchs maintained the earlier systems of record keeping and control. The revival of Italian Commerce in the 13th and 14th centuries created a need for Book – keeping. The first Double Entry systems of Book – keeping evolved during this period. There are extant sets of Double Entry records prepared in Genoa in 1340. Luca De Barge Piccolo provided the earliest systematic description of the Double Entry procedure in 1494. This method is known as the Italian method. It was translated into English and published in London in 1543.

Avail’s treatise dealt with all the attributes of a Double Entry. It still serves as the basis for the far more complex accounting system of today. A further improvement in Book – keeping can be attributed to the industrial revolution.

1.3 BOOK – KEEPING AND ACCOUNTING

Book – keeping is the subject which is to be studies by the students of Commerce and by book – keepers and accountants. A study of this subject requires more practice and less of reading. A student of Accountancy should know the theoretical as well as the practical aspects of the subject.

First stage is called Book – Keeping and the second stage is Accounting.

1. **Book – keeping :** Book – Keeping involves the chronological recording of financial transactions in a set of books in a systematic manner.
2. **Accounting:** Accounting is concerned with the maintenance of accounts giving stress to the design of the system of records, the preparation reports based on the recorded data and the interpretation of the reports.

1.3.1 Distinction between Book – Keeping and Accounting

Point of difference	Book – Keeping	Accounting
1. Meaning	Book – keeping is the art of recording business transactions in the book of original entry and posting them into ledger.	Accounting is the recording, classifying and summarising, the business transactions which are in terms of money and interpreting the results thereof.
2. Responsible of a person	The person who does the task of Book – keeping is known as "Book – keeper".	The person who summarises and interprets the account is known as "Accountant".
3. Nature of work	Much of the work of a book – keepers is of a routine and clerical work.	The work of an accountant is comprehensive, analytical and skilful.
4. Scope	The scope of Book – keeping is limited to the entries of original records.	It scope is wide as it includes the work of Book – keeping.
5. Dependence	Its work is independent.	Its work depends on the work of

		Book – keeping
6. Sequence of work	Book – keeping comes first and accounting comes next.	Accountant's work starts where Book – keeping.
7. Working	In it the work of journalising, posting into ledger, totaling and balancing of accounts are done.	In it the work of checking the accuracy of the accounts.
8. Special knowledge and ability	It does not require to possess any technical special knowledge.	It requires to have a special knowledge of accounting and experience.
9. Time of recording transactions	In it transactions are recorded on the same day when they take place.	The work of accounting is done at the end of the trading period.

1.3.2 Meaning of Accounting:

Book – keeping is an art of keeping accounts in regular and systematic fashion. It is also termed as accountancy or accounting. Now-a-days the sphere of business has become very vast. Every trader wants to sell his commodities at a price higher than their cost and thus wants to earn profit. In business, all transactions are not necessarily made in cash but through credit also. So, it is said that 'Credit is the soul of business'. Every businessman has limited memory and as such he cannot remember all the transactions. To know the correct financial position of the enterprise, it becomes imperative for the businessman to record all the transactions in the book is called 'Book – keeping' or 'Accounting'.

1.3.3 Definition of Accounting:

Accounting may be defined as the science as well as the art of recording financial transactions under appropriate accounts.

According to Smith and Ashburne, "Accounting is a science of recording and classifying the business transactions and events, primarily of a financial character and the art of making significant summaries, analysis and interpretations of these transactions and events and communicating the results to persons who must make decisions or from judgements."

According to the American Institute of Certified Public Accountants, "Accounting is the art of recording, classifying and summarising in a significant manner and in terms of money transactions and evens which in part, at least of a financial character, and interpreting the result thereof.

Accounting can, therefore, be defined as:

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

1.3.4 Objectives of Accounting:

The objects of accounting are manifold. These are enumerated below:

(i) **To keep systematic record:** The main object of accounting is to keep the record of day to day transactions in a systematic manner. At first the transactions are recorded in the journal in chronological order and then from the journal transactions are posted to the Ledger and from the Ledger. Trial balance and final Accounts are prepared.

(ii) **To find out the true profit / loss:** Profit is the main provocation to keep the businessman and around the business. Hence, he is always interested to find out the true profit or loss during a given period.

(iii) **To know the financial position on a particular date:** One can know at a glance the financial position or soundness of a business on a particular date if accounts are maintained properly.

(iv) **To communicate the information to the interested parties:** The object of accounting is to provide information to the interested parties i.e., owner, manager, creditors, Government etc. at regular intervals through Financial statements.

(v) **To help in planning and controlling various business activities:** Accounting supplies information to the manager at right time which helps him to plan the further course of action and to control the business resources by comparing the actual results with that of the pre – determined standards.

(vi) **To meet Legal requirement:** Law compels the businessman to submit various statements such as sales tax return, income tax return, stock position etc. A business will be able to supply all those statements only if there is a proper accounting system.

1.3.5 Branches of Accounting:

To fulfil the various objectives, various branches of accounting have developed. The chief amongst these are the following:

(i) **Financial Accounting:** It is one of the branch of accounting, the object of which is to ascertain the profit or loss made during a period and to state the financial position (Balance Sheet) of the business at the end of the period.

(ii) **Cost Accounting:** It is one of the branch of accounting, the object of which is to ascertain the cost incurred for, carrying out the various activities and to enable management to exercise cost control.

(iii) **Management Accounting:** It is also one of the branch of accounting, the object of which is to supply necessary information at appropriate time to the management to enable it to take decisions and effect control.

1.4. FUNCTIONS OF ACCOUNTING

The main functions of accounting can be given as follows:

(i) It keeps a systematic and permanent record of all financial transactions of the business.

(ii) It keeps a record of income and expenses in such a manner so that net results of the business can be quickly known for any period.

(iii) It keeps a record of assets and liabilities in such a way that financial position of the business can be readily had at any point of time.

(iv) It protects the property of the business by designing such a system of accounting which may be helpful to achieve this purpose.

(v) It keeps a tract of all changes in the value of assets and liabilities.

(vi) It keeps a control on expenses in order to minimise the same.

(vii) It communicates the results of the business to the various categories of persons as owners, investors, creditors, employees, management, Government etc.

(viii) It provides information for meeting various legal requirement as income – tax returns, returns for sales tax etc.

(ix) It helps in making decisions concerning the acquisition use and preservation of scarce resources.

(x) It helps in devising remedial measures for the deviation of the actual performance from the planned performance.

1.5 USERS OF ACCOUNTING INFORMATION

Accounting provides information to groups of people who are directly or indirectly interested in the performance and the financial position of a business enterprise. The accounting information helps them to understand the present position of the enterprise to compare its present and past performance as well as its performance with similar enterprises. The main sources of information for external users are annual, half – yearly and quarterly reports.

The various users of accounting information are internal and external users. External users comprise of creditors, investors, government and consumers while the internal users consist of the employees and management. The purpose for which they need accounting information is discussed below.

1. **Creditors:** Creditors may be short – term or long – term lenders. They have to be paid at some agreed date in the future for providing goods and services on credit to the enterprise. The creditors are interested in the financial stability of a business before granting loans. This is because they have to assess whether the enterprise would be able to pay them back, and also the probability of a delay in payment.
2. **Investors:** Investors of an enterprise include the existing as well as future shareholders (owners). Since the shareholders are concerned with the dividends (income) that they would receive from their share in the enterprise, they are interested in knowing how well the company would perform in the future. The profit and loss account as well as the balance sheet contain all the accounting information that the investors need.
3. **Government:** The government's task of levying taxes and regulation of industries is facilitated if accounting information is presented in a uniform manner. The different departments of the government collect information on business activities such as levels of sales activity, profits, investment, dividend policy, and so on. This information is needed for framing various policies by the government.
4. **Consumers:** Consumers and the public at large are interested in the accounting information in order to appraise the efficiency of the enterprise. The public might also be interested in the social role that the enterprise plays in different sectors of the economy. For

example, they may want to know the level of industrial pollution from a particular type of activity carried on by the business enterprise.

5. **Management:** Accounting keeps the management informed of the various activities of an enterprise. It helps the managers to plan, control and evaluate the operations of the business. They also need such information for making various decisions. However, the type of accounting information needed by managers may vary with the size of the enterprise. For example, a manufacturing unit producing a number of products in small quantities may need accounting information about the profitability of each product. On the other hand, a large company operating through a number of branches would need information about the profitability of each of its branches.
6. **Employees:** Employees of a business enterprise are interested in better salaries, bonus and other benefits, which in turn depend on the earnings of an enterprise. Hence, they need accounting information to know how safe their interests are in that organization. For example, the employees of an enterprise would be interested in knowing whether the enterprise is likely to survive and also if it is capable of paying increased salaries and benefits.

1.5.1 Accounting as an information system:

In the earlier times, the accounting work was totally manual and the accounting department used to take a long time in processing transactions and producing accounting reports. The modern system of computers has eliminated the redundancy and reduced the number of people involved in the processing of accounting information. There is automatic processing of transactions from electronic vouchers to the ledger. The accounting information system is divided into the following sub – systems:

a. **Cash system:** This system is concerned with the actual receipt and payment of cash as well as electronic fund transfer. Electronic fund transfer is made possible by using credit cards or e – banking.
b. **Sales and accounts receivable system:** This system deals with maintaining the 'Sales' ledger for credit sales and the 'receivables' ledger. This generates reports about collections made from debtors and the amount due from them.

c. **Accounts payable system:** This system deals with the 'credit purchase' any 'payments' ledger. It generates reports about the performance of suppliers and payments due to creditors.

d. **Inventory system:** This system is concerned with the recording of various items purchased and issued specifying the details of price, quantity and date. It provides the inventory position of the organization.

e. **Payroll accounting system:** This system deals with payment of wages and salaries to employees. It provides information about basic pay, dearness allowance and deductions made from salary and wages on account of provident funds, loans, taxes, etc. It also provides information on wage bills, overtime payment and payment on account of leave encashment, etc.

f. **Fixed assets accounting system:** This system includes information about purchase and sale of fixed assets. It is generated in the form of reports about the cost of depreciation and book value of different assets.

g. **Costing system:** this system is concerned with the ascertainment of cost of goods manufactured. The necessary information for the ascertainment of cost of raw material, labour, etc. is obtained from other systems.

h. **Budget system:** This system is concerned with the preparation of budget for the financial year and comparison of the current budget with the actual performance.

1.6. ADVANTAGES OF ACCOUNTING

Following are the advantages of accounting:

1. **Facilitates preparation of final accounts:** Accounting helps in maintaining systematic records. This helps to establish the net result of a transaction during a period and state the financial position of a business at a particular date. All this enables the accountant to prepare the trading and profit and loss account for a particular accounting period.
2. **Used as evidence in courts:** There are certain claims that are made against the firm and for the firm, in relation to outsiders. These claims can be confirmed by producing the systematic records as evidence in courts.

3. **Facilitates comparison:** Accounting enables the comparison of a business during a particular year with those of earlier years, and with similar other businesses. It also helps in taking corrective measures to improve the performance of a business.
4. **Replaces memory:** It is not possible to remember all the transactions that take place during a period. They are, therefore, recorded promptly in the books so that information is available when required.
5. **Helpful to management:** Accounting provides information to the management, which can be useful for making rational decisions such as being able to identify reasons for the profits earned or losses suffered. This helps in taking necessary steps to increase profits further or to prevent losses. The recording of various assets enables the management to exercise proper control over them in terms of the position of bank balance, inventories, money owed by customers, etc.
6. **Helpful in tax settlement:** Properly maintained accounts provide necessary information to the tax authorities, which levy customs duty, excise duty, sales and income taxes on the business. The tax authorities could be convinced about the taxable income or actual sales, as the case may be, with the help of written records. Hence, it helps in settling the tax liability of the business since the accounts reveal the profits earned or losses suffered.

1.7 LIMITATIONS OF ACCOUNTING

In spite of various advantages, accounting has the following limitations:

1. **Ignores qualitative aspect:** In accounting, only those transactions and events are recorded that are financial in nature or expressed in terms of a monetary unit. Non – monetary items that may be significant are not recorded. Hence, accounting does not give information on qualitative matters such as usefulness or efficiency of a particular transaction.
2. **Ignores price level changes:** Accounting information is expressed in monetary terms and its is assumed that the value of money remains stable over time. However, this does not happen. The change in prices, in many cases, is not accounted for and hence the accounting information does not show the true financial results. For example, assets like land and building remain undervalued in such cases.

3. **Personal judgement:** Financial statements are influenced by the personal judgement of the accountant. The financial statements may no longer be objective due to this reason.
4. **Inexact information:** Financial statements may not reflect the realistic position of an enterprise as some of the information is based on estimates, which may not be accurate at all times. For instance, a company may value its stocks at a higher price than the actual market price.

1.8 QUESTIONS

A. Short Answer Questions

1. Define Accounting.
2. What are various branches of Accounting?
3. What are accounting concepts?
4. What are accounting conventions?
5. What are accounting standards?
6. Explain the significance of the following accounting concepts.
   (a) Dual Aspect Concept
   (b) Business entity concept
   (c) Going concern concept
   (d) Cost Concept
   (e) Accrual Concept.

B. Essay Questions

1. What is Book-keeping? Distinguish between Book-keeping and Accounting.
2. Explain the functions of Accounting.
3. Explain how accounting is useful to various users.
4. Explain the advantages and limitations of Accounting.
5. What do you mean by Accounting Principles? Explain the features of Accounting Principles.
6. What are the main Accounting Concepts? Narrate them briefly.
7. What are the Accounting Conventions? Explain them in brief
8. `Materiality is a Relative Term' Comment

9. `Business has Indefinite Life' Explain this in the light of Going Concern Concept.

1.9 SUGGESTED BOOKS

1. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
2. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
3. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
4. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
5. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter – 2

ACCOUNTING STANDARDS

Objectives :

After going through this lesson we may able to

- Understand the need for accounting standards
- Know the formation of International and Indian Accounting Standards
- Prepare the list of International and Indian Accounting Standards

Structure :

2.1 Need for Accounting

2.2 Purpose of Accounting Standards

2.3 Accounting Principles

2.4 Accounting Standards

2.5 Questions

2.6 Suggested Readings

2.1 NEED FOR ACCOUNTING STANDARDS :

Kohler defines accounting standard as ``A mode of conduct imposed on accountants by custom, law or professional body.'' The purpose of an accounting standard is to serve as a working basis for the institution of procedure, subject to internal and external constraints imposed on the accountants, so as to ensure uniformity in the preparation and presentation of financial statements.

Accounting concepts and conventions form the basis of accounting theory and practice. They determine the rules applicable to accounting procedures. They have no statutory force and are based on the consensus. As such, it accountants as a group wish to change any of the accounting assumptions based on conventions, they are free to do so. The freedom that accountants enjoy in framing their own rules of procedure and making their own assumptions, have led to a variety of accounting practices. Consequently, the financial results of different concerns cannot be compared and evaluated.

Further, the financial statements are intended to communicate financial information to various groups, called end-users to facilitate their decision making. But, the statements do not meet the specific requirements of external users. Although it is true that it is not the duty of the accountant to transmit such information as is relevant to the decision objectives of different groups, they expect the information to be reliable at least. If accounting information is reliable, they can evaluate and interpret the information for making decisions. Reliability of accounting information depends upon consistent and continued use of the same conventions and same rules over a period of years.

2.2 PURPOSE OF STANDARDS :

One of the most important criteria for the presentation of financial information though the financial statements is that which ensures an appropriate standard of comparison between different firms. Lack of uniformity with regard to the manner in which periodic profit is measured and financial position of the enterprise is represented is because of the different methods used by accountants, and different assumptions made by them.

The main purpose of standards is to ensure that financial information is treated in the financial statements according to specified standards, and the methods used by different enterprises for presenting information should permit appropriate comparisons to be made.

2.3 ACCOUNTING PRINCIPLES

The dictionary meaning of the term ‘Principle’ is a “fundamental truth implying uniformity of a acceptance everywhere.” However, when applied to accounting, it gives different meanings in different contexts. It is rarely used a fundamental accounting truth. Accounting principle is a guiding influence or an accepted rule of action or conduct. In other words accounting principles are those rules of action or conduct which are adopted by the accountants universally in recording accounting transactions. Different professional bodies like Australian Society of Accountants, The Institute of Chartered Accountants in Australia, The Institute of Chartered Accountants in England and Wales, The American Institute of Certified Public Accountants etc. have made recommendations on accounting principles in the recent years.

Accounting principles have been developed over the years from experience, reason, usage and necessity. They are judged on their general acceptability rather than universal acceptability to the users of financial statements. Hence, they are called as generally accepted accounting principles. Accounting principles can be broadly classified into two categories:

A. Accounting Concepts
B. Accounting Conventions.

2.3.1 Accounting Concepts:

Concepts refer to the assumptions upon which accounting is based. The widely accepted and used concepts are discussed below:

(i) **Money measurement concept:** According to this concept, accounting records only those facts and events which can be expressed in monetary terms. Accounting does not record the facts which can not be expressed in terms of money so non – monetary business transactions like efficiency of the worker, bad working conditions for the workers, lack of canteen facilities etc., are not recorded in the books of accounts.

(ii) **Business entity concept:** According to this concept the accountant should assume that business is a person and its owner is another person. He should consider the business separate from its owner. If such distinction is not maintained the private affairs of the owner will be mixed with the affairs of the business and true profit or loss of the business can not be determined. Though in the eyes of law sole – trading and partnership business has no legal entity and only the company type of business has legal entity, the accountant should assume all types of business separate from its owner while doing accounting work.

(iii) **Cost concept:** This concept says that the value of assets should be recorded at the price at which they are acquired. The market value of the assets is not taken into consideration. The market price of assets may fluctuate from time to time. This is not considered while assets are recorded in the financial statements. However, in the Balance Sheet assets are recorded at cost price less usual depreciation. This concept is not applicable to record the value of closing stock in the Balance Sheet. The cost price or market price of closing stock whichever is less is taken into consideration.

(iv) **Going concern concept:** This concept is connected with the cost concept. Unless the going concern concept is taken into mind the cost concept bears little meaning. According to this concept the accountant should assume that the business will continue for ever and there is no end to it. Keeping this assumption in mind he will record the transactions in the books of account. The central idea of going concern concept is that as the business will not be liquidated in near future the account should not bother to know the sale – value of assets. The real worth of the assets can be known only when the business will be sold. For this reason all the assets except closing stock are recorded at their cost price and not at the market price. As closing stock of a year is to be sold in the next year its market price in taken into consideration.

(v) **Dual aspect concept:** A business collects funds from the proprietor and also know outside parties. It invest those funds by purchasing various assets such as land, building, machinery etc. Thus, the fund it collects must be equal to its investment.

This can be put in the form of a formula:

Owned fund + Borrowed fund = Total investment

Or

Capital + Liabilities = Assets

This concept says that at anytime capital plus liabilities must be equal to the total assets of the firm.

(vi) **Accrual concept or matching concept:** According to this concept the profit or loss of a business is found out lay matching the expenses and losses of the business during a period with the incomes and gains earned in that period. Here expenses means expenses incurred and paid in cash + expenses incurred but due. Similarly income means incomes earned and received + incomes earned but accrued.

(vii) **Accounting period concept:** The period at the end of which the profitability of business is determined, called ‘Accounting Period’. Generally twelve months is taken to measure the profit or loss of a business. This twelve months may be a calendar years, or a financial year or any year like Ramnabmi to Ramnabami, Kalipuja to kalipuja etc.

Twelve months is taken to measure the profitability of a business as any twelve months cover all the seasons of a year. Further, for income tax purposes it is necessary to know the annual business income of the assessee.

(viii) Verifiable objective concept: This concept says that only those transactions are recorded in the books of account, which have documentary evidences. Without documentary proof a transaction cannot be placed in the books of account. The examples of such documentary evidences are, invoices, salary register, wage bill, mustard roll, vouchers etc. On the basis of these documents the books of accounts is audited by auditors.

2.3.2 Accounting Conventions:

Conventions mean customs or traditions which are useful as a guide to the preparation and presentation of accounts. This include:

(a) Convention of conservatism.
(b) Convention of materiality.
(c) Convention of consistency.
(d) Convention of disclosure.

(a) Convention of conservatism: This is the policy of playing safe. It takes into consideration all prospective losses but leaves all prospective profits. Valuation of stock is done at market price or cost price whichever is less. Making the provision for doubtful debts and discount on or debtors in anticipation of actual bad debts and discount is an example of this conversion. The main aim of published accounts is to convey and to conceal the information.

(b) Convention of materiality: This convention says that while recording transactions, a distinction should be made between material and immaterial matters. Insignificant and minor items may be merged with some other items, For example there is no point in having separate accounts for all expenses (e.g., various items of stationery) of a business, small expenses of like nature may be combined under one general heading.

(c) Convention of consistency: The usefulness of accounting data increases manifold when it is comparable – within the business over a number of years, and outside the business with other organisations carrying on a similar business. This requires that accounting practices and methods should remain consistent over time.

(d) Convention of disclosure: Accounting records are meant for use. They must be prepared honestly, and scrupulously and no material which should be disclosed, most be withheld, otherwise, they will be incomplete and unreliable and there will be a creditability gap, full disclosure of all material facts has become particularly important in case of joint stock company in which there is separation between management and ownership. The companies Act, 1956 has taken sufficient precautions in this regard. This is in keeping with the latest trend of treating financial statements as a means of conveying and not canceling information.

2.4 ACCOUNTING STANDARDS

Accountancy is considered to be the language of business. There are certain norms in accounting that have to be observed by the accountants. These norms become accounting standards when a professional body makes them mandatory for recording and reporting purposes.

According to Kohler, accounting standards can be defined as : 'Accounting standards are codes of conduct imposed by customs, law or professional bodies for the benefit of public accountants and accountants generally'.

Accounting standards provide a structured framework for the preparation of financial statements. They help in standardizing the diverse accounting practices followed for many aspects of accounting.

In view of the growth of international trade and multinational corporations, the need for standardization at the international level was felt. With a view to harmonizing varying accounting policies and practices, an International Accounting Standards Committee (IASC) was formed and entrusted with the responsibility of formulating international standards. Since 1973, IASC has issued twenty – seven international accounting standards to date. Another professional body, the International Federation of Accountants of India' (a professional accountancy body of India) established an Accounting Standards Board (ASB). Its main function was to formulate accounting standards to be issued under the authority or council of the institute. ASB gives adequate representation to all interested parties, and consists of the members of council and representatives of Banks, Company Law Board, Central Board of Direct Taxes and Controller and Auditor General of India. The main function of ASB is to formulate accounting standards. It gives due consideration to the international accounting standards issued by IASC, and tries to integrate the conditions and practices in India. It also reviews the accounting standards at periodic intervals.

2.4.1 Objectives:

Accounting standards play an important role in the field of accounting. Accounting reports prepared in accordance with the accounting standards are more reliable, uniform and consistent. The objectives of accounting standards are listed as follows.

1. **To provide direction:** Accounting standards are required to enable correct decision making for maintaining accounting records. In addition, standards provide guidance for action.
2. **To provide uniformity:** Another objective of accounting standards is to provide universality to accounting procedures.
3. **To improve comparability and understandability:** Accounting standards increase comparability, creditability and understandability of financial statements.

2.4.2 International Accounting Standards (IAS) :

Keeping in view the importance of uniform accounting standards, policies and procedures 16 accounting bodies from nine nations formed the International Accounting Standard Committee (IASC) on June 29, 1973 with its headquarters at London. Since 1983, IASC 's members have included all the professional accounting bodies that are members of the International Federation of Accountant (IFAC). As of January, 1996 there where 118 member bodies in 85 countries. Both the Institute of chartered Accountants of India (ICAI) and the Institute of Cost and Works Accountants of India (ICWAI) are the members of IASC.

The responsibility of IASC is to improve the quality and soundness of financial reporting in member countries all over the world. Its other responsibility is to keep the member bodies informed of the latest developments and standards by issuing exposure drafts from time to time. Looking to the objectives and aims of IASC, accountancy bodies from different countries have joined IASC to enable them to have up to date information on international accounting matters and to take guidance from these in laying down their own standards.

Objectives of IASC :

(a) Formulate and publish accounting standards to be observed in the presentation of financial statements and to promote their world wide acceptance and observance; and

(b) Work for the improvement and harmonisation of regulations accounting standards and procedures relating to the presentation of financial statements.

Standards framed by Committee so far :

The committee has so far laid down standards regarding the following matters.

IAS – 1	Disclosure of accounting policies
IAS – 2	Valuation and presentation of inventories
IAS - 3	consolidated financial statements
IAS – 4	Depreciation Accounting
IAS – 5	Information to be disclosed in financial statements
IAS – 6	Accounting responses to changing prices
IAS – 7	Statement of changes in financial position
IAS – 8	Unusual and prior period items and changes in accounting policies.
IAS – 9	Accounting for research and developmental activities
IAS –10	Contingencies and events occurring after balance sheet date
IAS – 11	Accounting for construction contracts
IAS – 12	Accounting for taxes on income
IAS – 13	Presentation of current assets and current liabilities
IAS – 14	Reporting of financial information by segments
IAS – 15	Information reflecting the effects of changing prices
IAS – 16	Accounting for property, plant and equipment
IAS – 17	Accounting for lease
IAS – 18	Revenue recognition
IAS – 19	Accounting for retirement benefits in the financial statements of Employees
IAS – 20	Accounting for government grants and disclosure of government assistance

IAS – 21	Accounting for effects of changes in foreign exchange rates
IAS – 22	Accounting for business combinations
IAS – 23	Capitalisation of borrowing costs
IAS – 24	Related party disclosures
IAS – 25	Accounting for investments
IAS – 26	Accounting and reporting of retirement benefit plans
IAS – 27	Consolidated financial statements and accounting for investment in subsidiaries
IAS – 28	Accounting for investment in associates
IAS – 29	Financial reporting in hyper – inflationary economies
IAS – 30	Disclosure in the financial statement of banks and similar financial institution
IAS – 31	Financial reporting of interest in joint ventures
IAS – 32	Financial instruments : disclosure and presentation
IAS – 33	Earnings per share
IAS – 34	Interim financial reporting
IAS – 35	Discontinuing operations
IAS – 36	Impairment of assets
IAS – 37	Provisions, contingent liabilities and contingent assets
IAS – 38	Intangible assets
IAS – 39	Financial instruments; recognition and measurement
IAS – 40	Investment property

2.4.3 Accounting Standards Board :

Accounting Standards Board (ASB) has been set up in India by the Council of the Institute of Chartered Accountants of India with a view to form Indian Accounting Standards. The Council was set up in April, 1977. While formulating the standards, the board attempts to harmonise the diverse accounting policies and practices in India and also takes into account the applicable laws, customs, usages and business environment in the country. While formulating the Accounting standards, ASB will give due consideration to Standards issued by

IASC (International Accounting Standard Committee) and try to integrate them to the extent possible in the light of the conditions and practices prevailing in India.

To issue accounting standards authority lies with the Council, 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. ASB will issue guidance notes on Accounting Standards and give classification on issue arising therefrom ASB will also review the Accounting Standards at periodical intervals.

So far, the Accounting Standards Board (ASB) has issued the following 18 accounting standards.

No.	Title	Applicability on or after
AS – 1	Disclosure of Accounting Policies	1-4-1991
AS – 2	Valuation of inventories	1-4-1999
AS – 3	Changes in Financial Position	Recommendatory
AS – 4	Contingencies and Events occurring after the Balance Sheet date	1-4-1995
AS – 5	Prior period and Extraordinary Items and Changes in Accounting Policies	1-4-1996
AS – 6	Depreciation Accounting	1-4-1995
As – 7	Accounting for Construction Contracts	1-4-1991
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	Accounting for the Effects of changes in Foreign Exchange Rates	1-4-1995
AS – 12	Accounting for Government Grants	1-4-1994
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 – 16	Borrowing Costs	1-4-2000
AS – 17	Segment Reporting	1-4-2001
AS – 18	Related Party Disclosures	1-4-2001

2.5 QUESTIONS :

A. Short Answer Questions

1. What is purpose of Accounting Standards?
2. What do you mean by Accounting Standards?
3. Bring out the coverage of AS-6 regarding Depreciation Accounting

B. Essay Questions :

1. Explain the need for Accounting Standards
2. Explain in brief the accounting standards issued by ICAI
3. State the accounting standards common internationally and in Indian context
4. Explain briefly the provisions of ``Disclosure of Accounting Policies.'' (AS-I)
5. What are the main features of the cash flow statement? Explain with special reference to AS-3 (revised)
6. What are the provisions regarding ``contingencies and events occurring after the balance sheet date' as set out by AS-4?

2.6 SUGGESTED BOOKS

1. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
2. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
3. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
4. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
5. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter – 3

Double Entry System

Objectives :

After studying this unit we should be able to :

- Know the meaning of Double Entry system of book keeping
- Understand the advantages of double entry system
- Distinguish between Double Entry System and Single Entry System
- Understand accounting equation and Classification of Accounts

Structure

3.1 Introduction

3.2 Double Entry System

3.3 Accounting Equation

3.4 Accounting Transaction

3.5 What is an Account?

3.6 Rules of Debit, Credit

3.7 Accounting process

3.8 Accounting Cycle

3.9 Questions

3.10 Suggested Readings

3.1 INTRODUCTION:

Double entry system is a rational system of accounting. All business organisations and Tax Authorities are compelling the business people to prepare accounts on the basis of double entry system. This system is based on the principle of dual aspect in Accounting. It implies that a business transactions is entered doubly (or) twice.

3.2 CONCEPT: DOUBLE ENTRY SYSTEM:

Already it has been said that every business transaction has two aspects. They are: the debit aspect and the credit aspect. It says further that there must be one giving some benefit and there must be another receiving the benefit, in every transaction. It means that there cannot be any receiving of benefit when there is no any giving of benefit. So, receiving aspect is called, “debit aspect” whereas, the giving aspect is called “Credit aspect”. Hence, the system under which both debit and credit aspects of the same transaction are recorded is known as double entry system.

3.2.1 Important concepts made brief:

(1) Assets: These are valuable resources for utilisation in business.

(2) Fixed Assets: These are long term resources. Example: Lands, buildings, plant and Machinery etc.

(3) Liquid Assets: These are short term circulating current, floating resources which are convertible into cash immediately. Example: Cash, Bills, Debtors etc.

(4) Fictitious Assets: These are also resources of business having no physical form and real value. Example: Loss on issue of shares, preliminary expenses etc.

(5) Intangible Assets: These are also assets having no physical existence. Example: Goodwill, Patents, Trademarks etc.

(6) Wasting Assets: These are assets, which are exhausted while they are used. Example: Mines

(7) Capital: It is that part of business wealth, which is used for further production.

(8) Fixed Capital: The amount spent for acquiring fixed assets is fixed capital.

(9) Working Capital: It is that part of total capital, which is used for the day – to – day operation of the company.

(10) Liabilities: These are obligations of business to be met in future.

(11) Fixed Liabilities: These are long term obligations to be met. Example: Capital, Loans, Debentures etc.

(12) Current Liabilities: These are short-term obligations to be met within less than year. Example: Creditors, Bills payable etc.

(13) Contingent Liabilities: These are obligations to be when there are risks and uncertainties in future. Example: Bad debts.

(14) Account: It is a summarised statement of transactions of a person, thing, expense, income etc.

(15) Proprietor: He is owner of business, known by different names as: partner in case of partnership firms, and shareholder in case of Joint Stock Companies.

(16) Drawings: There are cash (or) goods used by proprietors from business.

(17) Solvent: Solvent is one who is able to meet the financial obligations when they are due.

(18) Insolvent: This is opposite of solvent. He is not able to meet debts on due date.

(19) Debtors: He is receiver of the benefit.

(20) Creditors: He is given of the benefit.

(21) Equity: A claim, which can be enforced against the assets of a firm, is called equity. This can be of two types as:

(1) Owner's Equity (or) capital.

(2) Creditors Equity.

(22) Revenue: It means something realised (or) receivable in business, from sale of goods.

(23) Expense: This is payment for the purchase of goods.

(24) Cash Discount: It is an incentive from company to encourage the prompt payment of dues payable to the company.

(25) Trade Discount: It is an incentive in the farm of some deduction from gross (or) catalogue price allowed to traders to buy on large scale from the company.

(26) Voucher: It is documentary evidence in support of a business transaction.

(27) Reserve: It is an amount set aside from profit so as to meet some contingencies in future.

(28) Accounting period: It is a period of 12 months for which, accounts are usually kept. This can be a financial year commencing form 1^{st} April and ending on 31^{st} March (or) a calendar year commencing from 1^{st} January to 31^{st} December.

(29) Gross profit: it is the difference between selling price and cost price of goods before deducting selling expenses.

(30) Net profit: It is remaining profit in gross profit after setting aside all expenses from gross profit.

(31) Profit and loss account: It is important financial statements prepared in the account period so as to know about the profit (or) loss in business.

(32) Balance Sheet: This is another important financial statement prepared along with profit (or) loss statement, in order to reveal the financial position of the business on a particular date.

3.3. ACCOUNTING EQUATION:

The whole of financial accounting (i.e., recording of transactions) is based on the 'Accounting Equation'. This can be stated to be that for a business to run it needs resources. These resources have to be supplied to the business by someone. The resources possessed by the business are known as 'Assets'. To begin with, these resources are supplied by the owner of the business. The total amount supplied by the owner of the business is known as 'Capital or Owner's equity'. If the proprietor is the only one who supplies resources, i.e., assets, the following equation would hold true:

CAPITAL = ASSETS

Normally however some of the assets of the business are provided by someone other than owner. The indebtedness of the business for these resource is known as 'Liabilities'. Thus because of legal distinction between the claims of creditors (outside liabilities) and those of owners (ownership liabilities or owner's equity or capital), the equation can now be expressed as:

CAPITAL + LIABILITIES = ASSETS

The two sides of the equation are always equal. On right – hand side are the resources are known as 'Liabilities'. On Left – hand side are the sources from which these resources were obtained. This equation is also known as 'Basic Accounting Equation' or 'Balance Sheet Equation'.

Loss affects both the side of the accounting equation. It reduces the capital in one side of the accounting equation. In the other side of the equation it reduces the asset i.e., cash.

The two sides of the equation are always equal. On the right – hand side are the resources possessed by the business. On the left – hand side are the sources from which these resources were obtained. So, the two sides will always be equal, no matter how many transactions are entered into. The actual assets, capital and liabilities may change, but the equality of assets (Property and rights in property) with that of liabilities (amounts owing to outsiders) and capital (amount owning to the proprietor) will always hold true under all circumstances.

3.3.1 Advantages of Accounting Equation:

The advantages of Accounting Equation are:

(i) Accounting equation shows the sources of funds and its application. Sources are two fold – own fund (comes from the owner), and borrowed funds (borrowing from banks and other financial institution, creditors). The funds so collected are invested on various assets such as land, building, Plant etc.

(ii) It shows owner's equity, Liabilities, and Assets. So, if two things are given the other can be found out by applying the equation.

(iii) Accounting equation reveals the success or failure of a business. If owner's equity decreases it implies failure. In the reverse case there is success.

(iv) It shows the impact of each transaction on owner's equity, Liability and Asset.

(v) Accounting equation, if presented in detail – item wise, helps to calculate various ratios such as Capital to total assets, owner's equity to total assets, Liabilities to total assets, current assets to fixed assets etc. These ratios help a lot in taking important decisions affecting a business.

The Accounting equation deals with increases and decreases in assets, liabilities, and capital. The increases and decreases in capital take place through:

1. Income and benefits which result in capital, and
2. Expenses and losses which result in decrease in capital.

To show the effect of incomes and benefits, and expenses and losses on capital, the Accounting Equation may be expanded as follows:

Assets = Liabilities + (Capital + Income – Expenses)

This above equation is called an 'Expanded Accounting Equation' or 'Financial or Operating Equation'.

3.4. ACCOUNTING TRANSACTIONS:

There are any business activities involving transfer of money (or) money 's worth. **Example** : Purchases, Sales, Receipt (or) payment of cash, Supply of a service etc.

These transactions may be cash (or) credit transactions.

Example:

(1) Sold goods to Ramesh for cash Rs.2,000/-

(2) Purchased goods from Gopal on credit Rs.1,000/-

In these two cases, the 1st one is a cash transaction while the 2nd one is a credit transaction.

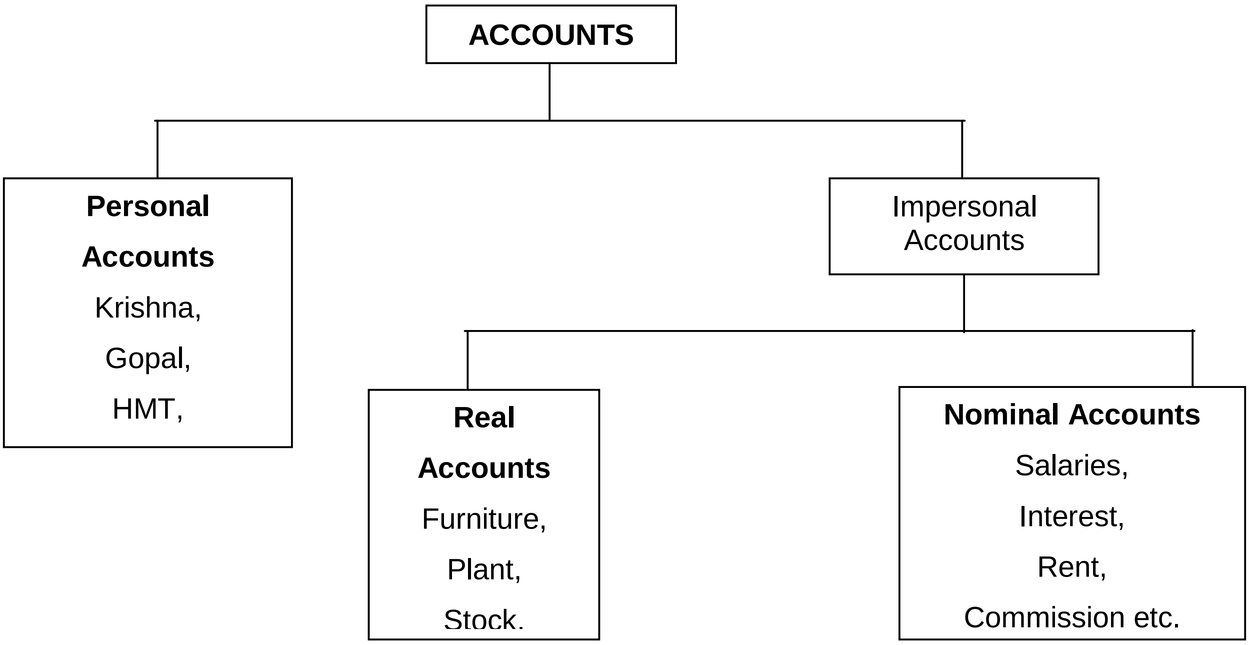
3.5 WHAT IS AN ACCOUNT?

It is a summarised record of all transactions pertaining to a person, a good, a service, revenue (or) expense. It is "T" shaped, dividing the accounting into two equal halves where the left half is "Debit side" while, the right side is "credit side". The following is an example.

Date	Particulars	Folio	Amount Rs.	Date	Particulars	Folio	Amount Rs.

3.5.1 Types of Accounts:

Broadly, business transactions can be divided into three important categories viz., personal, Real and Nominal. Thus, there are three types of accounts. The following chart will make it clear.



Personal accounts:

All business transactions with persons, firms, companies, etc. and accounts thereof are called personal accounts. [See chart for examples]

Real Accounts:

Transactions related to real properties and assets and their accounts are known as Real accounts. [See chart for examples].

Nominal Accounts:

Accounts relating to expenses, losses, incomes, gains etc. are termed as nominal accounts. [See chart for examples]

3.6 RULES OF DEBIT / CREDIT:

Since dual aspect is there in all business transactions, there are two accounts in every transaction. Rules of debit / credit vary from one type of account to another type of account.

Personal Accounts:

(a) Debit the Receiver

(b) Credit the giver.

Real Accounts:

(a) Debit what comes in.

(b) Credit what goes out.

Nominal Accounts:

(a) Debit all expenses / losses

(b) Credit all incomes / gains

Example 1: Paid cash to Rajiv Rs.5,000

In this case the two accounts affected are Rajiv account and Cash account. Rajiv account is a personal account and cash account is a real account. Rajiv has received the benefit (cash Rs.5,000) from the business and, therefore, his account has to be debited as per the first part of the rule for personal accounts ``debit the receiver.'' As cash has gone out, Cash account will be credited according to the second part of the rule for real accounts ``credit what goes out.''

Example 2: Received Cash from Sunil Rs.1,000

In this case Cash account and Sunil's account are the two accounts affected. Cash Account is a real account and Sunil 's account is a personal account. As cash has come in, cash account will have to be debited according to the first part of the rule for real accounts ``debit what comes in.'' Sunil has given the benefit (Cash Rs.1,000) to the business and, therefore, his account will have to be credited as per the second part of the rule for personal accounts ``credit the giver.''

Example 3: Purchase of Machinery for Rs.2,00,000.

This is a cash transaction. Both the accounts viz., Machinery account and cash account are real accounts. The real account is debited when things come in and credited, when things go out. Here, machinery comes in and cash goes out. So, machinery account is debited and cash account is credited.

Example 4: Paid Wages Rs.1,000

In this case the accounts affected are Wages account and Cash account. Wages account is a nominal account and cash account is a real account. As per the first part of the rule for nominal account is ``debit all expenses and losses.'' Wages account will have to be debited as it is an expense to the business. As cash has gone out, Cash account will have to be credited according to the second part of the rule for real accounts ``credit what goes out. ''

Examples 5: Received Rs.400 as Discount.

In this case, Cash account and Discount account are the two accounts affected. Cash account is a real account and Discount account is a nominal account. As cash has come in, cash account will have to be debited according to the first part of the rule for real accounts ``debit what comes in. '' As per second part of the rule for nominal accounts, ``credit all incomes and gains,,'' discount account will be credited as it is an income to the business.

Illu 1: Analysis the following transaction and find out the two accounts involved. How do you treat them and why?

2007	
Jan 1	**Ganesh started his business with cash.**
Jan 3	**Borrowed from rao**
Jan 5	**Purchased Machinery**
Jan 5	**Purchased furniture from Raj on credit.**
Jan 8	**purchased goods for cash.**
Jan12	**Purchased goods from Vijay on credit**
Jan 15	**Sold goods for cash**
Jan 18	**sold goods to Gupta on credit**
Jan 20	**Received cash from Gupta**
Jan 22	**Paid cash to Vijay**
Jan 23	**Deposited into Bank**
Jan 25	**Withdrew cash for personal use.**
Jan 30	**Withdrew from bank for office use**
Jan 31	**Paid Salary**
Jan 31	**Paid rent by cheque.**

Solution:

Before answering the question you have to be familiar with the following.

1. Ascertain what accounts are involved in a transaction.
2. Ascertain what is the nature of the accounts involved.
3. Ascertain which rule of debit and credit is applicable for each of the accounts involved.
4. Ascertain which account is to be debited and which is to be credited.
5. Record the date of transaction in the 'Date column'.

Analysis of Transaction

Date	Accounts involved	Nature of Accounts	How affected	Whether to be Debited or Credited
2007				
Jan 1	Cash a/c	Real	Cash is coming in	Debit
	Capital a/c	Personal	Ganesh is the giver	Credit
Jan 3	Cash a/c	Real	Cash is coming in	Debit
	Loan from Rao a/c	Personal	Rao is the giver	Credit
Jan 5	Machinery a/c	Real	Machinery is coming in	Debit
	Cash a/c	Real	Cash is going out	Credit
Jan 8	Purchases a/c	Nominal	Purchase is an expense	Debit
	Cash a/c	Real	Cash is going out	Credit
Jan 12	Purchases a/c	Nominal	Purchase is an expense	Debit
	Vijay's a/c	Personal	Vijay is the giver	Credit
Jan 15	Cash a/c	Real	Cash is coming in	Debit
	Sales a/c	Nominal	Sales is a revenue	Credit
Jan 18	Gupta a/c	Personal	Gupta is the receiver	Debit
	Sales a/c	Nominal	Sales is a revenue	Credit
Jan 20	Cash a/c	Real	Cash is coming in	Debit
	Gupta a/c	Personal	Gupta is the giver	Credit
Jan 22	Vijay a/c	Personal	Vijay is the receiver	Debit
	Cash a/c	Real	Cash is going out	Credit
Jan 23	Bank a/c	Personal	Bank is the receiver	Debit

	Cash a/c	Real	Cash is going out	Credit
Jan 25	Drawings a/c Cash a/c	Personal Real	Ganesh is the receiver Cash is going out	Debit Credit
Jan 30	Cash a/c Bank a/c	Real Personal	Cash is coming in Bank is the giver	Debit Credit
Jan 31	Salary a/c Cash a/c	Nominal Real	Salary is an expenses Cash is going out	Debit Credit
Jan 31	Rent a/c Bank a/c	Nominal Personal	Rent is an expense Bank is the giver	Debit Credit

3.7 ACCOUNTING PROCESS :

In order to accomplish its main objective of communicating information to the users, accounting performs the following functions.

(a) Recording: It is concerned with the recording of financial transactions in an orderly manner, soon after their occurrence in the proper books of account.

(b) Classifying: It is concerned with the systematic analysis of the recorded data so as to accumulate the transactions of similar type at one place. This function is performed by maintaining the ledger in which different accounts are opened to which related transactions are posted.

(c) Summarising: It is concerned with the preparation and presentation of the classified data in a manner useful to the users. This function involves the preparation of financial statements such as Income Statement, Balance Sheet, Statement of Changes in Financial Position. Statement of Cash Flow, Statement of Value Added.

(d) Interpreting: Now a days, the aforesaid three functions are performed by electronic data processing devices and the accountant has to concentrate mainly on the interpretation aspects of accounting. The accountants should interpret the statements in a manner useful to the users, so as to enable the users to make reasoned decisions out of alternative courses of action. The accountant should explain not only what has happened but also (a) Why it happened, and (b) what is likely to happen under specified conditions.

3.8 ACCOUNTING CYCLE:

An accounting cycle is a complete sequence beginning with the recording of the transactions and ending with the preparation of the final accounts.

1. **Journal:** Record the transactions and events in the Journal.
2. **Ledger Posting:** Transfer the transactions (recorded in the journal), in the respective accounts opened in the Ledger.
3. **Balancing the accounts:** Ascertain the difference between the total of debit amount column and the total of credit amount column of a ledger account.
4. **Trial Balance:** Prepare a list showing the balances of each and every account to verify whether the sum of the debit balances is equal to the sum of the credit balances.
5. **Trading, Profit and Loss Account:** Prepare Trading and profit & Loss Account to ascertain the profit or loss for the accounting period.
6. **Balance Sheet:** Prepare the Balance Sheet to ascertain the financial position as the end of a accounting period.

3.9 QUESTIONS

A. Short Answer Questions

1. What is Double Entry of System of Accounting?
2. What is Single Entry System?
3. What is Accounting Equation?
4. What are personal accounts?
5. What are real accounts?
6. What are nominal accounts?
7. What is Accounting cycle?

B. Eassay Questions

1. What is Double Entry system? Distinguish between Double Entry and Single Entry System.
2. How do you classify accounts? Explain the rules of debit and credit.
3. Define Double Entry System of book-keeping? What are its advantages?
4. Mention the rules for recording business transactions under accounting equation approach

5. Give an example of business transactions affecting only : (a) Assets (b) Liabilities (c) Capital
6. ``Accounting equation holds goods under all circumstances.'' Elaborate giving at least five examples.
7. What is the effect of revenue earned and expenses incurred on the accounting equation?
8. Explain the accounting process.

3.10 SUGGESTED BOOKS

1. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
2. Asish K. Bhattacharyya, **Financial Accounting,** Prentice Hall of India, New Delhi, 2005
3. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
4. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advanced Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
5. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
6. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter – 4

Journal – Ledger

Objectives :

After studying this unit we may be able to :

- Understand the meaning of Journal, Ledger and Trial balance
- Pass Journal entries and post them into ledger.
- Prepare the Trial balance

Structure :

4.1 Introduction

4.2 Journal

4.3 Ledger

4.4 Trial balance

4.5 Questions

4.6 Exercises

4.7 Suggested Readings

4.1 INTRODUCTION:

The first important function in accounting is to record all business transactions in the books of original entry viz., Journal and Ledgers. In this lesson an attempt is made to discuss about journal, method of writing journal and posting into ledger along with Trial Balance preparation.

4.2 JOURNAL

The word Journal is stated to have been borrowed from a Latin word – Journ, which means – a day. So, it is a daybook, where in, all day – to – day business transactions are recorded in a chronological order. Journal is considered to be a book of original entry, first entry (or) prime entry. All transactions are to be recorded first in Journal before they are recorded in ledgers. The Journal is a complete and chronological record of business transactions. The stager and process of recording business events in Journal is known as journalising while the entries made in the Journal one known as Journal entries.

Proforma of Journal

Date	Particulars (with narration)		L. F.	Debit Rs.	Credit Rs.
2007					
June 1	Cash a/c	Dr.		12,000	
	To Sales a/c				12,000
	(Being goods sold for cash)				

- **Date:** The first column deals with the date of business transaction.
- **Particulars:** The 2nd column is about the details of the two accounts involved in the business transaction. In the 1st line we mention the debit aspect whereas, credit aspect is mentioned in the 2nd line.
- **Narration:** Narration is written briefly and it is kept within brackets. It is brief explanation to the business transaction.
- **L.F. :** L. F. stands for Ledger Folio. It is reference number of the page in the respective ledger in which, this account appears.
- **Debit:** It is the amount debited.
- **Credit:** It is the amount credited.

4.2.1 Need for Journal:

(a) Need for Journal arises as we have to record all business transactions date – wise in a separate book called Journal. If necessary, one can take stock of all business transactions at a time from this journal. Hence, Journal is very much significant.

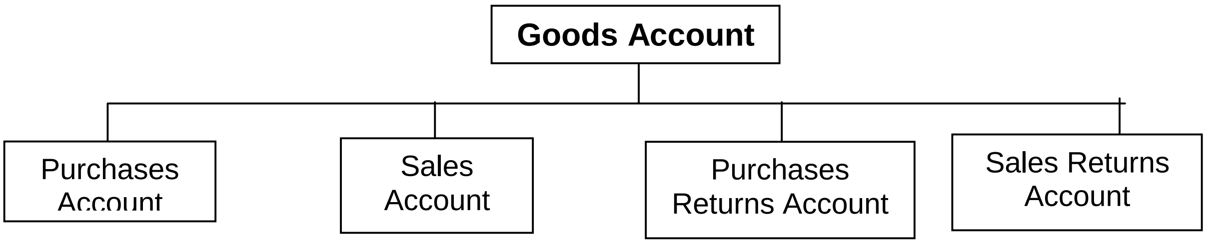
(b) Since narration is present for every transaction, in this Journal, transactions become easily understandable to us. Thus, journal is needed.

(c) Location of errors is easy when journal is there and hence, it is needed and important.

4.2.2. Handling some Important Transactions:

The under mentioned accounts need same special treatment. (1) Goods account, (2) Owner's transactions, (3) Bank transactions, (4) Debts becoming bad etc.

Goods a/c: When we record transactions relating to goods, we are reminded of purchases, purchase returns, sales and sales returns. But, in accounting, instead of goods Account, the following appropriate account is used.



1.	Purchases Account:	For the purchase of goods on cash / credit
2.	Sales Account:	For the sales of goods on cash / credit
3.	Purchase Returns a/c:	For returning the goods purchased
4.	Sales returns a/c :	For goods Returned by customers

Hence, the appropriate account is to be chosen from the above as per the real need.

Proprietor's a/c: Business entity concept in accounting states that owners of business are distinct from business itself and these two are two different entities and hence, their transactions also must be separated. So, all transactions relating to the proprietor must not be changed to business a/c and must be changed separately to an a/c called – Drawings a/c. Accordingly, the money brought by the other into business as capital is credited to the capital a/c while, the money (or) goods used by the owners are debited an account called – "Drawings".

4.2.3. Composite Entries:

Sometimes two or more transactions of the same nature may take place on the same date. Instead of making a separate entry for each such transaction it is proper to combine them and give a combined entry. Such entry of recording a number transactions is termed as Compound Journal Entry. In case of compound entry the total of all debits should be equal to the total of all credits. The compound entry may be recorded in any of the following three ways.

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

Illu.1 : Journalise the following transaction in the books of Mr. Rahul:

2007		**Rs.**
March 1	**Started business with cash**	**10,000**
2	**Purchased furniture and payment by cheque**	**2,000**
3	**Withdrew from bank for private use**	**500**
4	**Cash paid to Lal in full settlement of his account (6,000)**	**5,940**
5	**Paid for stationery Rs.200 and salaries Rs.2,000**	

Solution :

Journal Entries in the books of Rahul

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
2007				Rs.	Rs.
Mar.1	Cash a/c To Capital a/c (Being business started)	Dr.		10,000	 10,000
2	Furniture a/c To Bank a/c (Being the purchase of furniture)	Dr.		2,000	 2,000
3	Drawings a/c To Bank a/c (Being withdrew from bank)	Dr.		500	 500

4	Lal's a/c To Cash a/c To Discount a/c (Being full settlement of account)	Dr.		6,000	 5,940 60
5.	Stationery a/c Salaries a/c To cash a/c (Being expenses paid)	Dr. Dr.		200 2,000	 2,200

4.3. LEDGER

4.3.1 Need for Ledger:

Journal will not be able to help us when we want to know the final status of a particular want to know the final status of a particular account because, it contains innumerable transactions without being classified. Hence, a separate account for each transaction in the Journal is needed. The separate statement (or) account for an exclusive transaction is called ledger. Thus, new for ledger arises in accounting.

4.3.2 Ledger Defined:

It is a summary statement of all transactions relating to a person, asset, expense (or) income which have occurred during a given accounting period. The latest position (or) status, of any account can be easily noted by referring to this ledger. The following statements will help are correctly understand the concept ledger.

(a) For all types of accounts, ledger is opened.

(b) It is a final and permanent record.

(c) It is an easy means of reference.

(d) It supplies the final status of any a/c.

4.3.3. Proforma of ledger:

Each account in the ledger is divided into two equal halves by a vertical line of separation where, each of the two sides is further broken into 4 (four) columns for Date, particulars, Folio, and Amount. The left hand side is called debit side while, the right hand side is known as credit side. The following is the proforma of ledger.

Mr. Raju

Date	Particulars	Folio	Amount Rs.	Date	Particulars	Folio	Amount Rs.
2007				2007			
June 4	To Cash		1,000	June 3	By Purchases a/c		2,000
June 10	To Balance c/d		1,000				
			2,000				**2,000**
				June 15	By Balance b/d		1,000

From the above ledger of Mr. Raju, it can be understood that we purchased goods worth Rs.2,000 from Mr. Raju and Raju was paid Rs.1,000 in Cash and stock, another amount of Rs.1,000 is to be paid to him. In our accounting terminology, Mr. Raju is our creditor.

4.3.4. Other Ledgers:

As a matter of convenience, Ledger is subdivided into personal and impersonal ledgers. Depending upon the size of the organisation, personal ledger is further divided into debtors ledger and creditors ledger. The personal ledger contains only personal accounts (as defined earlier). In this there is no need to add a/c to every person, as a separate account is not opened for every person. Finally, the total picture of debtors / creditors is shown in Trial Balance. On the other hand, impersonal ledger contains all real and nominal accounts as defined earlier.

Creditors Ledger: It is also called “Suppliers Ledger”. It contains all creditors accounts of the business.

Debtors Ledger: It is also called “Customers Ledger”. It contains all accounts of debtors the business.

General Ledger: It contains all accounts except Debtors / Creditors. Accounts of owner’s expenses, incomes, capital, drawings etc. are found in this ledger.

4.3.5. Ledger Posting:

It is a periodical posting at entries from the Journal in the ledger based on the following guidelines.

- Ledger posting begins where Journal writing is complete.
- For each item in the Journal, a separate a/c is to be opened.
- Every account (or) ledger is named rightly. Name should precede while "account" should follow as for example: Kumar Account, Salaries Account, Furniture Account etc.
- Debit side of the Journal entry is to be posted on the debit side of the ledger starting with To.
- Similarly, the credit side of the Journal entry is to be posted on the credit side of the respective ledger starting with By.

Example for clarity:

Business Transaction:

Salary of Rs.10,000, paid on June 30th, 2007. In the journal, and ledger it will appear as under.

Date	Particulars (with narration)		L. F.	Debit Rs.	Credit Rs.
2007 June 30	Salary a/c To Cash a/c	Dr.		10,000	10,000

Salary a/c

Dr. **Cr.**

Date	Particulars	Folio	Amount Rs.	Date	Particulars	Folio	Amount Rs.
2007 June 30	To Cash a/c	-	10,000				

Cash a/c

Dr. **Cr.**

Date	Particulars	Folio	Amount Rs.	Date	Particulars	Folio	Amount Rs.
				2007 June 30	By Salaries a/c	-	10,000

4.3.6. Balancing of ledgers:

The very purpose of ledger will be lost, if the accounts maintained in the ledger are not balanced. Unless the a/c is balanced, we cannot under stand the final status of any account. Hence, balancing of ledger Accounts must be performed, for which, the following hints may be of same help.

(1) See the totals of both the sides and put the highest amount in both the sides.

(2) Find out the difference of there two totals.

(3) Enter this difference in amount column of that side showing less total, writing, against the difference in the particulars column, the words like: “To Balance c/d” (c/d means carried down) on the debit side of the a/c and “By Balance c/d” on the credit side of the account. In this way, total of two sides will agree.

(4) The balance is brought forward at the beginning of the next period. If “To Balance c/d” is written on the debit side of the a/c before balancing, it is brought forward on the credit side and “By Balance b/d” (b/d means brought down) is written against the balance in the particulars column and vice – versa.

(5) Sometimes, the totals of the debit side and credit side and equal. It means that the account has Nil balance. In this situation, the a/c is said to have been closed having no closing and no opening balance.

Naveen a/c

Dr. **Cr.**

Date	Particulars	Folio	Amount Rs.	Date	Particulars	Folio	Amount Rs.
2007 Feb 10	To Cash		7,000	2007 Feb 5	By Purchases a/c	-	10,000
Mar 12	To Cash		6,000	Mar 7	By Purchases a/c		5,000
Mar 31	To Balance c/d		2,000				
			15,000				**15,000**
				2007 April 1	By Balance b/d		2,000

Ravi a/c

Dr. **Cr.**

Date	Particulars	Folio	Amount Rs.	Date	Particulars	Folio	Amount Rs.
2007 Jan 8	To sales a/c		10,000	2007 March 28	By Cash a/c		15,000
	To Sales a/c		5,000				
			15,000				**15,000**

Illu.2: Rama, the businessman entered into the following transactions with Krishna on the following dates. Draft the ledger account of Krishna and balance the same :

		Rs.
2007 **Jan.1**	**Opening debt of Krishna to Rama**	**100**
3	**Sold goods to Krishna subject to 10% Trade Discount**	**1,000**
8	**Krishna returned goods**	**100**
9	**Sold goods to Krishna**	**200**

Solution :

In Rama's Ledger
Krishna's Account

Dr. **Cr.**

Date	Particulars	JF	Amount Rs.	Date	Particulars	JF	Amount Rs.
2007 Jan 1	To Balance b/d		100	2007 Jan 8	By Sales Returns		100
3	To Sales a/c (1,000 – 100)		900		By Balance c/d		1,100
9	To Sales a/c		200				
			1,200				**1,200**
Feb 1	To Balance b/d		1,100				

Illu. 3: Prepare the Personal Account of Srinivas from the following transactions :

		Rs.
2007 Jan 1	Debit balance on Srinivas's Account	1,000
2	Sold goods on credit to Srinivas	5,400
6	Received from Srinivas	6,300
6	Allowed him discount	100
10	Srinivas bought goods on credit	1,500
15	Received cash from Srinivas	1,450
15	Allowed him Discount	50

20	Purchased goods on credit from Srinivas	1,040
25	Paid cash to Srinivas	500
28	Returned goods to Srinivas	140
31	Paid cash to Srinivas in full settlement of his account	390

Solution :

Srinivas's Account

Dr. **Cr.**

Date	**Particulars**	**JF**	**Amount Rs.**	**Date**	**Particulars**	**JF**	**Amount Rs.**
2007 Jan 1	To Balance b/d		1,000	2007 Jan 6	By Cash a/c		6,300
2	To Sales a/c		5,400	15	By Discount a/c		100
10	To Sales a/c		1,500		By Cash a/c		1,450
25	To Cash a/c		500	20	By Discount a/c		50
28	To Purchase Returns a/c		140		By Purchase a/c		1,040
31	To Cash a/c		390				
	To Discount a/c (Bal. Fig)		10				
			8,940				**8,940**

4.4 TRIAL BALANCE

With the knowledge of Journal and Ledger, it is now clear to us that same accounts show debit balance and same others show credit balance. But, as per double entry book keeping principles accounts are said to be arithmetically accurate only when total of all debit balances is equal to the total of all credit balances. So, the statement prepared by the accountant for this purpose of verification is known as Trial Balance. Thus, Trial Balance is a statement of all debit and credit balances.

It is prepared on a date and the following are the important columns that need to be provided.

(1) Name of the account [Particulars]

(2) Debit

(3) Credit

Proforma of a Trial balance

S. No.	Name of Account	Debit Rs.	Credit Rs.s

Illu.4: Record the following transactions in journal, post them to ledger, balance all ledger accounts (including temporary accounts) and prepare a trial balance as at April 1, 2007 to check the arithmetical accuracy of posting for the month of March 2007 :

March 1 Commenced business with Cash Rs.40,000 and building worth Rs.2,00,000.

2 Deposited into bank Rs.25,000.

4 Cash Purchases Rs.5,000.

Credit Purchases Rs.15,000.

6 Furniture purchased and cheque issued Rs.5,000.

8 Cash Sales Rs.15,000

Credit Sales Rs.8,000

15 Received Rs.2,000 cash and a cheque of Rs.3,000 from a customer. Discount allowed Rs.500.

17 Paid salaries Rs.2,000.

20 Paid to suppliers Rs.5,000 cash and Rs.5,000 by cheque.

Discount received Rs.1,000.

25 Paid cash to the petty cashier Rs.200.

28 Withdrew cash for personal use Rs.1,000.

Issued a cheuqe to pay tuition fees Rs.1,000.

31 Petty expenses incurred by the petty cashier 150.

Solution :

Journal Entries

Date	Particulars		LF	Debit Amount Rs.	Credit Amount Rs.
2007					
Mar 1	Cash a/c	Dr.		40,000	
	Building A/c	Dr.		2,00,000	
	To Capital a/c				2,40,000
	(Being commencement of business with cash & Building)				
2	Bank a/c	Dr.		25,000	
	To Cash a/c				25,000
	(Being cash deposited in bank)				
4	Purchases a/c	Dr.		5,000	
	To Cash a/c				5,000
	(Being cash purchases of goods)				
	Purchases a/c	Dr.		15,000	
	To Supplier a/c				15,000
	(Being credit purchase of goods)				
6	Furniture a/c	Dr.		5,000	
	To Bank a/c				5,000
	(Being furniture purchased by cheque)				
8	Cash a/c	Dr.		15,000	
	To sales a/c				15,000
	(Being cash sale of goods)				

15	Cash a/c Bank a/c Discount Allowed a/c To Customer a/c (Being amount received from a customer and discount allowed)	Dr. Dr. Dr.		2,000 3,000 500	 5,500
17	Salaries a/c To Cash a/c (Being salaries paid)	Dr.		2,000	 2,000
20	Supplier a/c To Cash a/c To Bank a/c To Discount received a/c (Being amount paid to supplier & discount received)	Dr.		11,000	 5,000 5,000 1,000
25	Petty cash a/c To Cash a/c (Being payment of petty cashier)	Dr.		200	 200
28	Drawings a/c To Cash a/c To Bank a/c (Being amount withdrawn for purchaser)	Dr.		2,000	 1,000 1,000
31	Petty Expenses a/c To Petty Cash a/c (Being analysis of petty expenses)	Dr.		150	 150

LEDGER BOOK

Capital Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 31	To Balance c/d	2,40,000	2007 Mar 1	By Cash a/c	40,000
				By Building a/c	2,00,000
		2,40,000			**2,40,000**
			April 1	By Balance b/d	2,40,000

Building Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 1	To Capital a/c	2,00,000	2007 Mar 31	By Balance c/d	2,00,000
		2,00,000			**2,00,000**
April 1	To Balance b/d	2,00,000			

Cash Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 1	To Capital a/c	40,000	2007 Mar 2	By Bank a/c	25,000
8	To Sales a/c	15,000	4	By Purchases a/c	5,000
15	To Customer a/c	2,000	17	By Salaries a/c	2,000
			20	By Supplier a/c	5,000
			25	By Petty Cash a/c	200
			28	By Drawings a/c	1,000
			31	By Balance c/d	18,800
		57,000			**57,000**
April 1	To Balance b/d	18,800			

Bank Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 2	To Cash a/c	25,000	2007 Mar 6	By Furniture a/c	5,000
15	To Customer a/c	3,000	20	By Supplier a/c	5,000
			28	By Drawings a/c	1,000
			31	By Balance c/d	17,000
		28,000			**28,000**
April 1	To Balance b/d	17,000			

Purchases Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 4	To Cash a/c	5,000	2007 Mar 31	By Balance c/d	20,000
	To Supplier a/c	15,000			
		20,000			**20,000**
April 1	To Balance b/d	20,000			

Furniture Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 6	To Bank a/c	5,000	2007 Mar 31	By Balance c/d	5,000
		5,000			**5,000**
April 1	To Balance b/d	5,000			

Sales Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 31	To Balance c/d	23,000	2007 Mar 8	By Cash a/c	15,000
				By Customer a/c	8,000
		23,000			**23,000**
			April 1	By Balance b/d	23,000

Customer Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 8	To Sales a/c	8,000	2007 Mar 15	By Cash a/c	2,000
				By Bank a/c	3,000
				By Discount allowed a/c	500
				By Balance c/d	2,500
		8,000			**8,000**
April 1	To Balance b/d	2,500			

Supplier Account

Dr. **Cr.**

Date	**Particulars**	**Amount Rs.**	**Date**	**Particulars**	**Amount Rs.**
2007 Mar 20	To Cash a/c	5,000	2007 Mar 4	By Purchases a/c	15,000
	To Bank a/c	5,000			
	To Discount Received a/c	1,000			
31	To Balance c/d	4,000			
		15,000			**15,000**
			April 1	By Balance b/d	4,000

Discount allowed Account

Dr. **Cr.**

Date	**Particulars**	**Amount Rs.**	**Date**	**Particulars**	**Amount Rs.**
2007 Mar 15	To Customer a/c	500	2007 Mar 31	By Balance c/d	500
		500			**500**
April 1	To Balance b/d	500			

Salaries Account

Dr. **Cr.**

Date	**Particulars**	**Amount Rs.**	**Date**	**Particulars**	**Amount Rs.**
2007 Mar 17	To Cash a/c	2,000	2007 Mar 31	By Balance c/d	2,000
		2,000			**2,000**
April 1	To Balance b/d	2,000			

Discount Received Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 31	To Balance c/d	1,000	2007 Mar 20	By Supplier a/c	1,000
		1,000			**1,000**

Petty Cash Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 25	To Cash a/c	200	2007 Mar 31	By Petty expenses a/c	150
				By Balance c/d	50
		200			**200**
April 1	To Balance b/d	50			

Drawing Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 28	To Cash a/c	1,000	2007 Mar 31	By Balance c/d	2,000
	To Bank a/c	1,000			
		2,000			**2,000**
April 1	To Balance b/d	2,000			

Petty Expenses Account

Dr. **Cr.**

Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2007 Mar 31	To Petty Cash a/c	150	2007 Mar 31	By Balance c/d	150
		150			**150**
April 1	To Balance b/d	150			

S. No.	Particulars	LF	Amount Rs.	Amount Rs.
1.	Capital a/c		-	2,40,000
2.	Building a/c		2,00,000	-
3.	Cash a/c		18,800	-
4.	Bank a/c		17,000	-
5.	Purchases a/c		20,000	-
6.	Furniture a/c		5,000	-
7.	Sales a/c		-	23,000
8.	Customer a/c		2,500	-
9.	Supplier a/c		-	4,000
10.	Discount Allowed a/c		500	-
11.	Salaries a/c		2,000	-
12.	Discount Received a/c		-	1,000
13.	Petty Cash a/c		50	-
14.	Drawings a/c		2,000	-
15.	Petty expenses a/c		150	-
	Total		**2,68,000**	**2,68,000**

4.5 QUESTIONS

A. Short Answer Questions :

1. What is Journal
2. What is a compound entry?
3. What is a Ledger?
4. What is a Trial Balance?
5. Give a format of a journal and briefly explain its contents
6. Enumerate any five utilities of ledger

B. Eassy Type Questions :

1. Explain the procedure of posting
2. Explain the procedure for balancing a ledger account
3. Explain the methods of preparing a trial balance.
4. Distinguish between Journal and Ledger.

4.6 EXERCISES

1. Journalise the following transactions.

2006		**Rs.**
August 1	Shri Rajan invested to business	20,000
2	Opened an account with the bank of India by depositing cash	10,000
3	Purchased goods for cash	500
4	Purchased machinery for cash	800
5	Cash purchases of goods	300
6	Cash sales	900
15	Withdraw cash for personal use	200
16	Purchased goods from Preetam & Sons on credit	600
25	Received cash on account from Ramanand	350
26	Paid cash to Minakshi Bros	250
29	Paid rent	125
30	Received Commission	175
30	M/s Ram & Sons returned goods	100

2. Journalise the following transactions in the books of Sudhir Kumar

2006		Rs.
Jan.1	Sudhir commenced business with cash	40,000
3	Purchased goods for cash	500
5	Sold goods for cash	300
6	Purchased one motor car for cash	15,000
9	Sold machinery for cash	9,000
11	Purchased a building on credit from Narendra	20,000
15	Sold furniture on credit to Randhir Kapoor	9,500
17	Paid Cartage	110
22	Received Commission	50
27	Cash Sales	1,200
29	Cash Purchases	600
30	Received on account from Ahmed	350
31	Paid cash to Sunit kumar on account	190

3. Pass Journal entries of the following transactions in the books of Rajesh.

2006		Rs.
July 1	Rajesh commenced business with cash	16,000
3	He bought goods as his capital in beginning	4,000
7	Sold goods to Dinesh on credit	6,500
8	Purchased a horse for cash	3,100
17	Ramesh's a/c which is over due is closed as the amount is not recoverable	700
20	Goods burnt by fire	390
21	Received cash on account from Dinesh	3,300
25	Goods distributed as free samples	325

4. Journalise the following transactions in the books of Ram. Post them in the ledger and balance the various accounts opened in the ledger.

2006		Rs.
April 2	Ram started his business with cash	70,000
3	Deposited into bank	50,000
4	Purchased goods for cash from Mr. X	5,000
5	Bought goods on credit from Mr. Y	6,000
6	Returned goods to Y	1,000
10	Sold goods for cash for to Mr .A.	6,000
15	Sold goods to Mr. B	6,000
16	Mr. B Returned goods	1,000
17	Drew from bank for personal use	5,000
25	Paid to Mr. Y in full settlement by cheque	4,800
26	Received a cheque from Mr. B in full settlement	4,900
27	Drew cash from bank for office use	10,000
30	Drew cash for personal purposes	5,000
30	Paid salaries to staff	5,000
30	Issued a cheque for Rs.3,000 in favour of Sri Devi a landlady towards rent for April	
30	Withdrew goods for private use	1,000

5. Journalise the following transactions in the books of Mr. X Post them in the ledger and balance the various accounts opened in the ledger also prepare Trial balance.

2006		Rs.
April 1	Mr. X Commenced business with cash	80,000
4	Purchased furniture	22,000
5	Bought goods for cash from Mr. Y	24,000
8	Purchased goods from Mr. Z	40,000
12	Sold goods on credit to Mr.A	10,400

16	Received from Mr.A on account	4,800
20	Sold goods for cash to Mr. B	5,200
21	Paid to Mr. Z on account	12,000
27	Withdrew cash for personal use	500
28	Brought in further capital	10,000
29	Paid to Mr. Z on account	16,000
30	Paid to General expenses	250
30	Paid Rent	520
30	Paid Salaries to employees	12,000

4.7 SUGGESTED BOOKS

1. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
2. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
3. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
4. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
5. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter - 5

SUBSIDIARY BOOKS

Objectives :

After going to this unit we should be able to

- Know about various types of subsidiary books
- Prepare various types of subsidiary books

Structure :

5.1 Introduction

5.2 Advantages of Subsidiary Books

5.3 Purchases Book

5.4 Sales Book

5.5 Journal Proper

5.6 Questions

5.7 Exercises

5.8 Suggested Readings

5.1. INTRODUCTION

In earlier times, businessmen used only one Journal for recording all the business transactions. Since the volume of business was small, and the number of transactions very few, “Journal” as a book of accounts was convenient. But with the growth of business, the number of transactions increased manifold and the need was felt to have a better method of recording business transactions. If all these business transactions were recorded in one and the same Journal, the journal would be bulky and cumbersome. It would be very difficult to make a ready reference to such a Journal. Moreover, it is impossible for many clerks to work on the same Journal at one and the same time. Under such circumstances, it becomes necessary to divide the whole Journal into several subsidiary Journals so that work can be assigned to many at one and the same time. In each separate journal, one particular class of business transactions is recorded. That means the purchase Journal may be maintained to record credit purchases of goods and a Cash Book for recording cash transactions. Instead of recording all the transactions in one and the same journal, they are recorded in separate journals meant for the purpose.

Therefore, in order to meet the requirements of modern business, the original journal is divided into the following:

1. Purchase Book
2. Sales Book
3. Purchase Return Book (Return Outward Book)
4. Sales Return Book (Return Inward Book)
5. Cash Book
6. Bills Receivable Book
7. Bills Payable Book
8. Journal Proper

The chart given below indicates the different types of subsidiary books or journals and the category of business transactions recorded in them:

Subsidiary Books (Sub- Division of Journal)

Subsidiary Book / Subsidiary Journal	**Category of Business Transactions Recorded**
1. Purchase Book	Credit Purchases of goods only.
2. Sales Book	Credit Sales of goods only.
3. Purchase Return Book (Return Outward Book)	All return of goods purchased by us from suppliers i.e. Return Outwards.
4. Sales Return Book (Return Inward Book)	All return of goods sold by us to customers i.e. Return Inwards.
5. Cash Book	All cash and Bank transactions.
6. Bills Receivable Book	All Bills received by us.
7. Bills Payable Books	All bills accepted by us.
8. Journal Proper	All such transactions which cannot be entered in the above seven books. (Recorded in the form of journal entries)

5.2 ADVANTAGES OF SUBSIDIARY BOOKS

The advantages of using Special Journals are as under:

(a) Facilitates division of work: The accounting work can be divided among many persons.

(b) Permits the installation of internal check system: The accounting work can be divided in such a manner that the work of one person is automatically checked by another person. With the use of internal check, the possibility of occurrence of error/ fraud may be avoided.

(c) Permits the use of specialised skill: The accounting work requiring specialised skill may be assigned to a person possessing the required skill. With the use of a specialised skill, prompt, economical and more accurate supply of accounting information may be obtained.

(d) Time and labour saving in journalising and posting: For instance, when Sales Book is kept, the name of Sales Account will not be required to be written down in the journal as many times as the sales transactions and at the same time, Sales Account will not be required to be posted again and again since only a periodic total of Sales Book is posted to the Sales Account.

5.3 PURCHASE BOOK

This book is maintained mainly to record purchase in business. But here care must be exercised before entering the purchase transactions in this book. Only credit purchases are to be recorded in this book. Credit purchases means the purchase of goods without making payment on the spot. Such purchases are known as credit purchases. Purchases of goods on credit in which the trader deals is recorded in this journal. For example, if a Cloth Merchant has purchased cloth on a credit basis, that will be recorded in the Purchase Book. But if he has purchased furniture on credit, it will not appear in the Purchase Book since it is a purchase of an asset.

The entries in the purchases book are made on the basis of invoices received from the suppliers with the amounts net of trade discount / quantity discount. Trade discount is a reduction granted by a supplier from the list price of goods or services on business considerations (such as quantity bought, trade practice, etc.) other than for prompt payment.

Formate of Purchase Book:

Date	Particulars	L.F.	Inward Invoice No,	Details	Amount Rs.	Amount Rs.

5.3.1 Explanation of Columns:

1. **Date:** Date of purchases is written in this column.
2. **Particulars:** In this column, the names of the suppliers are entered. There is no need to write the address of the supplier since it appears, on the Invoice itself.
3. **L.F :** Page number of the "Ledger", on which the account of the supplier appears, is entered in this column.
4. **Inward Invoice No:** All inward invoices are filed properly, and the consecutive number of the Invoice is shown in this column.
5. **Details:** The value of goods purchased and amount of trade discount are written.
6. **Amount:** The net amount of purchases is entered in this column. Only the amount after deducting trade discount is recorded here.

5.3.2 INVOICE:

Specimen of an Inward Invoice

INVOICE

No.786 / 90
Date: 19th Feb, 2007

Reliance Co. Ltd.
40, Jawaharlal Nehru Road
Mumbai – 700016.

Customer Name Ram & Sons
R.P. Road
Hyderabad

Date	Description	Rate	Amount	Total (Rs)	Remarks

E & O. E.

The invoice is the basis of writing a Purchase Book. Transactions are recorded in the Purchase Book from the Invoices received from the suppliers. Hence it is necessary to know about Invoices.

An invoice is a statement sent by the Seller to the buyer giving a full description of the goods supplied.

All the invoices received are property arranged and consecutively numbered. They are filed in a proper file and then the purchase transactions are recorded in the Purchase Book.

When the trader receives such an invoice, he has to verify whether the goods are received as per the details given in the invoice in regard to quantity, quality etc. He also checks whether the calculations are made correctly. If the invoice is found to be correct in all respects it is given a serial number and after an entry is made in the purchase book, it is filed. All such invoices received are called Inward invoices.

5.3.3 Trade Discount:

Trade Discount is a reduction made in the catalogue price of an article to enable the retailer to earn a profit. Generally, it is recorded in the Purchase Book and Sales Book but it does not enter in the ledger accounts. In the ledger, only net amount of purchase and sale are entered.

Illu 1: Enter the following in the Purchase Book also post them into ledger.

2007		**Rs.**
Aug 10	Bought goods from Murali Mohan	5,000
Aug 15	Bought goods from Ranga Rao	4,000
Aug 20	Purchased goods from Gopal	8,000
Aug 25	Purchased goods from Harikrishna for cash	10,000
Aug 31	Purchased goods from Kavitha	6,000

Solution :

Purchases Book

Date	Particulars	Invoice No.	L. F.	Amount Rs.
2007				
Aug 10	Murali Mohan			5,000
15	Rama Rao			4,000
20	Gopal			8,000
31	Kavitha			6,000
Aug 31	Purchases a/c Dr.			**23,000**

Note:

1. Purchases Book deals only with credit purchases. As such purchase of goods from Hari Krishna for cash is not entered in this book.

5.4 SALES BOOK

A separate book is maintained to record all credit sales. The manner of recording sales in this Book is the same as in the case of the Purchase Book. The book is also known as the Sales Day Book or Sales Journal. The rulings of this book and other principles are almost identical with those of the Purchase Book.

Before entering the transactions in the Sales Book, it should be seen that the transaction satisfies the below mentioned two conditions:

1. It is a sale of articles on credit basis.
2. It is a sale of articles in which a businessman deals.

Sales of goods on a cash basis or the sale of an asset on a Cash / Credit basis cannot be entered in the Sales Book. Supposing a merchant dealing in radios, sells radios on credit, that will be entered in the sales book. But if he sells a Typewriter that being the sale of an asset on credit, will not be entered in the Sales Book:

5.4.1 Procedure for Writing – up the Sales Day Book

When goods are sold on credit, an outward invoice is prepared for every credit sale and are checked as to quality, quantity and price of the goods before thy are dispatched to the customers. The duplicate copy of the invoice remains with the firm and the original copy is sent to the customer. Sales Day Book is written – up on the basis of duplicate outward invoice.

INVOICE

No. P. 29

Date: 9th June 2007

Jeenath Co. Ltd.
31, Jawaharlal Nehru Road
Hyderabad.

Customer' Name Allwin Co. Ltd.
Hyderabad

Qty.	Description	Rate	Amount	Total (Rs)	Remarks

E & O. E.

The invoice contains the following details:

(i) The names and addresses of both the parties to the contract.

(ii) An exact description of the goods, including the quantity, rate and total value of the goods sold.

(iii) The terms and conditions of sales (on the overleaf).

E & O. E. means Errors and Omissions Excepted. The market reserves the right to correct any error in the invoice.

The ruling of the Sales Day Book is given below:

Sales Day Book

Date	Particulars	Outward Invoice No.	L. F.	Debit Rs.	Credit Rs.

(i) In the "Date" column, the date on which invoice is prepared is entered.

(ii) In the "Particulars" column, the names of the customers are recorded. A brief description of each of article sold are also written in this column.

(iii) In the "Outward Invoice No." column, the serial no. of Outward Invoice is written.

(iv) In the "L. F." column, the page no. of the Debtors' account in the Debtors' Ledger is written.

(v) In the "Details" column, the value of the goods sold and amount of trade discount is written.

(vi) In the "Total" column the actual amount receivable from debtors is written.

Illu.2 : Enter the following transactions in Sales Books of Narayana

2007		Rs.
February 2	Credit sales to Sravan	8,000
7	Goods sold to Hari on credit	9,000
12	Sold goods to Rajesh	6,000
16	Goods returned by Rajesh	800
20	Credit sales to Kishore	7,000
24	Credit Sales to Siva	12,000
27	Sold goods to Sankar	13,000

Solution :

Sales Book

Date	Customer Name	L.F.	Invoice No.	Amount
Feb 2	Sravan			8,000
7	Hari			9,000
12	Rajesh			6,000
20	Kishore			7,000
24	Siva			12,000
27	Sankar			13,000
Sales Book Total				**55,000**

5.4.2 Sales book with Sales Tax Column:

It is the duty of the seller to realise sales tax from customers and deposit it to the Government. Sales tax is calculated at a fixed percentage on the net price of the goods, i.e., after trade discount. Generally a separate column is provided in the Sales Day Book for Sales tax. Periodically, the total of sales tax column is credited to Sales Tax Account. When actual payment is made to the Government, the Sales Tax Account is debited and Cash / Bank Account is credited and any Balance of Sales Tax Account at the end of the year is shown in the Balance Sheet as a liability.

5.4.3 Purchases Returns Book:

It may be necessary to return some goods that the firm has bought on credit for a variety of reasons such as defective or excess quantity of goods supplied, etc. All return of goods are recorded primarily in the Purchases Returns Book.

When a firm returns some goods to its supplier, it prepares a “Debit Note” and sends it along with the goods returned. The supplier, in turn, will prepare a “Credit Note”. The original copy of the credit note will be sent tot the firm. Entries in the Purchases Returns Book are made on the basis of original “Credit Note” received from the supplier. On receipt, all credit notes should be numbered consecutively and should be filed properly for future reference.

The specimen of the Purchase Returns Book is given below:

Purchases Returns Book

Date	Particulars	Credit Note No.	L. F.	Rs.	Remarks

Illu.3 : M/s Naval Handicrafts Emporium, Madras returned the following goods to different parties. Prepare purchase returns book.

2007	
June 10	**Kalanjali, Hyderabad (Debit Note No. 6) 30 Wooden Toy Elephants at Rs.15 per toy Trade discount 20%**
22	**Bharathi Arts works, Madhurai (Debit Note No. 7) 40 toys each toy at Rs.12, Trade discount 10%**
29	**Modern Cultural Palace, Tanjavoor (Debit Note No. 8) 10 Tanjavoor plates at Rs.80. Trade discount 20%.**

Solution :

Purchases Returns Book

Date	Particulars	Invoice No.	L. F.	Debit Note	Amount Rs.
2007					
June 10	Kalanjali, Hyderabad			6	360
June 22	Bharati Arts Works, Madhurai			7	432
June 29	Modern cultural Palace, Tanjavur			8	640
June 30	Total				**1,432**

5.4.4 Sales Returns Book:

Goods may be returned by the customers for a variety of reasons such as wrong quantity and/ or quality. All goods returned by the customers are primarily recorded in this book.

When goods are returned by the customer, a “Credit Note” is made out in his name. A Credit Note is prepared in duplicate. The original being sent to the customer for his information and record. The duplicate is preserved in the file for future reference. Duplicate credit Note provides information for recording in the Sales Returns Book.

The specimen ruling of the Sales Returns Book is given below:

Sales Returns Book

Date	Particulars	Credit Note No.	L. F.	Rs.	Remarks

Illu.4 :: M/s Utility Garments Corporation, Tirupathi received the returns goods from various customers. Prepare sales returns account.

2007	
Feb 10	**Return of goods from Nityanandam & Sons 25 Tea shirts at Rs. 100 per each shirt. Trade discount 10%, Credit Note No. 8**
19	**Return of goods from M/s. Sumitra & sons 20 Pants at Rs.300 per pant. Trade discount 10% Credit Note No. 9**
24	**Return of goods from M/s. Nataraj & Co. 20 Pants at Rs.250 per pant. Trade discount 10% Credit Note No. 10**

Solution :

Sales Returns Book

Date	Particulars	L. F.	Credit Note No.	Amount Rs.
2007				
Feb 10	M/s Nityanandam & Sons		8	2,250-00
Feb 19	M/s Sumitra & Sons		9	5,400-00
Feb 24	M/s Nataraj & Company		10	4,500-00
Feb 28	Total			**12,150-00**

Illu.5 : Enter the following transactions in suitable subsidiary books:

Jan		*Rs.*
1	**Purchased goods from Rekaha**	**7,500**
4	**Sold goods to Midhun**	**8,000**
5	**Returned goods to Rekha**	**500**
6	**Sridevi bought goods from us**	**4,000**
8	**Received goods returned by Midhun**	**400**
10	**Rajesh sold goods to us**	**4,000**
15	**Sold goods to Kishore**	**3,000**
16	**Returned goods to Rajesh**	**600**
20	**Kishore returns goods**	**500**

Solution :

Purchase Book

Date	*Particulars*	*L.F. No.*	*Invoice No.*	*Amount Rs.*
Jan 1	Rekha			7,500
10	Rajesh			4,000
	Total			**11,500**

Sales Book

Date	***Particulars***	***L.F. No.***	***Invoice No.***	***Amount Rs.***
Jan 4	Midhun			8,000
6	Sridevi			4,000
15	Kishore			3,000
	Total			**15,000**

Purchase Returns Book

Date	***Particulars***	***L.F. No.***	***Invoice No.***	***Amount Rs.***
Jan 5	Rekha			500
16	Rajesh			600
	Total			**1,100**

Sales Returns Book

Date	***Particulars***	***L.F. No.***	***Invoice No.***	***Amount Rs.***
Jan 8	Midhun			400
20	Kishore			500
	Total			**900**

5.4.5 Bills Receivable Book:

For large organisations, where numerous bills of exchanges are drawn on debtors, it is advantageous to enter them primarily in the Bills Receivable Book.

Bills Receivable Book

Bill No.	**Date Recd.**	**From whom Recd.**	**Drawer**	**Acceptor**	**Date of Bill**	**Term**	**Due Date**	**L. F.**	**Rs.**
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

(1) Bill No. – In this column, the serial number of the bill is entered.

(2) Date Received – This column is used for entering actual date on which the bill is received.

(3) From Whom Received – This column records the name of the debtor from whom the bill is received.

(4) Drawer – This column records the name of the drawer of the bill.

(5) Acceptor – This column records the name of the acceptor.

(6) Date of the bill – This column records the actual date of drawing of the bill.

(7) Term – This column is used for entering the period of the bill, e.g., 60 days, 3 months, etc.

(8) Due Date – This column records the date on which the bill is payable.

(9) L. F. – The page no. of Debtors' Ledger is entered here.

(10) Amount – This records the value of the bill.

5.4.6 Bills Payable Book:

Where numerous bills payable are accepted, drawn by the creditors, it is advantageous to enter then primarily in the Bills Payable Book.

Bills Payable Book

Bill No.	Date Accepted	To whom given	Drawer	Date of Bill	Term	Due Date	L. F.	Rs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(1) Bill No. – This column, records the serial no. of bills accepted.

(2) Date Accepted – This column records the actual date of acceptance of the bill.

(3) To Whom given – This column records the name of the person to whom the bill is given.

(4) Drawer – This column records the name of the drawer of the bill.

(5) Date of Bill – This column records the actual date of drawing of the bill.

(6) Term – This column is used for entering the period of the bill, e.g., 60 days, 3 months, etc.

(7) Due Date – This column records the date on which the bill is payable

(8) L. F. – Page no. of Creditors' Ledger is entered here.

(9) Amount – This records the value of the bills payable.

5.5 JOURNAL PROPER

Journal Proper is used for making the original record of those transactions which do not find a place in any of the aforesaid books of original entry.

Entries recorded in the Journal Proper may be classified as follows:

(1) Opening entries; (2) Closing entries; (3) Transfer entries; (4) rectification of Errors entries; (5) Adjustment entries; (6) Credit Purchase of assets; (7) Credit sale of worn – out or obsolete

assets, (8) Credit purchase of Stationery etc. The specimen ruling of the Journal Proper is given below:

Journal Proper

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

(1) Date – This column records the date of transaction.

(2) Particulars – This column records the name of the accounts debited or credited. The account debited is written first, adjacent to the line of date and the account credited is written below with the prefix "To". In this column, the narration is also recorded.

(3) L. F. – This column records the page no. of ledger in which this account has been posted.

(4) Dr. Column – It records the debit amount.

(5) Cr. Column – it records the Credit amount.

(1) Opening Entries:

Opening entries are used at the beginning of the financial year to open the books by recording the assets, liabilities and capital, appearing in the Balance Sheet of the previous year. The rule to be applied is:

Assets Account Dr.
To Liabilities Account
To Capital Account.

(2) Closing Entries:

Closing entries are used at the end of accounting year for closing off accounts relating to expenses and revenues. These accounts are closed of by transferring their balances to the Trading and Profit and loss Accounts. Since records must not be made in the ledger without journal entries, closing entries are passed in the Journal Proper first and then posted to the ledger.

(3) Transfer Entries:

Transfer entries are passed in the Journal Proper for transferring an item, entered in one account, to another account.

(4) Rectification of Errors:

Mistake which has been made in passing an entry should be corrected by passing another entry in the Journal Proper and the practice of erasures should not be tolerated.

(5) Adjustment Entries:

Before preparation of Final Accounts, certain adjustment is required in respect of outstanding expenses, prepaid expenses, provision for doubtful debts, etc. Entries made for such adjustment is called Adjustment Entries and is done in the Journal Proper.

Illu.6 : Pass adjustment entries for the following:

i) Wages outstanding Rs.500.

ii) Interest on Capital Rs.720.

iii) Goods destroyed by fire accident Rs.7,000 out of which insurance company admits the claim for Rs.5,200.

Solution :

Journal Entries

Date	Particulars		L.F	Debit	Credit
				Rs.	Rs.
1	Wages a/c To Outstanding Wages a/c (Being the adjustment of outstanding wages)	Dr.		500	 500
2.	Interest on Capital a/c To Capital a/c (Being the interest on capital calculated)	Dr.		720	 720
3.	Insurance claim a/c Profit and Loss a/c To Abnormal loss a/c (Being the insurance claim admitted and the balance transfer to P & L account)	Dr.		5,200 1,800	 7,000

5.6 QUESTIONS

A. Short Answer Questions

1. What are the advantages of subsidiary books of accounts?
2. What is a purchase book? What conditions are to be satisfied before a transaction is recorded in the book?
3. Explain the nature and use of a sales book.

4. What is Invoice?
5. What is a Debit note? What is the use of a Debit Note?
6. What is a Credit Note? What is the use of a Credit Note?
7. Differences between debit note and credit note.
8. What is journal proper?
9. What kind of entries are passed in a journal proper?

B. Essay Questions

1. Explain various types of subsidiary books.
2. What is a subsidiary book? Why are they to be maintained?
3. Prepare purchases book and sales book with hypothetical figures.
4. Explain sales returns book and purchase returns book with proforma

5.7 EXERCISES

1. Record the following transactions in the purchases book and post them in the ledger.

2006		**Rs.**
July 1	Bought goods from Arvind & Co. for	500
3	Sunder & Co. invoiced goods to us	700
4	Purchased one typewriter for office use from Godrej Ltd.	1,100
6	Dinanath sold goods to us (Rs.500 less 5% trade discount)	475
7	Cash purchases	300

[Ans.: Purchases Book Total Rs.1,675]

2. Enter the following transactions in the sales book and post them to ledger accounts.

2006		**Rs.**
July 1	Sold two sarees to Hemamalini @ Rs.150 Less 5/% Trade Discount	
2	Supplied one saree to Sharmila	175

3	Babita purchased one saree from us	200
4	Cash sales	100
8	Invoiced 4 Sarees to Jayasree	500
9	Sold old Typewriter	375
10	Sold blouse pieces to Pramila	125

[Ans.: Sales Book Total Rs.1,285.00]

3. Enter the following transactions in proper subsidiary books.

2006 April 1	Purchased goods from Anand for Rs.800 less 20% Trade Discount
2	Purchased goods from Baskar for Rs.700 less 20% Trade Discount
4	Returned Anand goods worth Rs.100
5	Returned Baskar goods worth Rs.80
8	Sold godos to Chandar for Rs.500 less 10% Trade Discount
11	Chandar returned us goods worth Rs.100
16	Sold goods to David for Rs.300 less 10% Trade Discount
19	David returned us goods worth Rs.50
21	Bought goods from Easwar for Rs.300
22	Sold goods to Farook for Rs.150
25	Bought goods from Gopal for Rs.150 less 20% Trade Discount
28	Returned goods worth Rs.50 to Gopal

[Ans.: Purchases Book Total Rs.1,620; Sales Book total Rs.870; Purchases returns Book Rs.184.00 Sales Returns Book Rs.135.50]

4. Enter the following transactions in the Sales day book and post them into the ledger.

2006 March 1	Sold to Zankar Stores 5 T.V. sets @ Rs.8,000 each, less 10% Trade discount

10	Sold to S.K. Electronics 2 T.V. sets @ Rs.900 each, less 10% Trade Discount
23	Sold to Ameeta Kelkar and Co. 1 colour T.V. set for Rs.15,000 less 10% Trade Discount
	All sales are subject to 10% sales tax.

[Ans.: Sales Day Book Total Rs.72,270]

5. Record the following transactions in Journal Proper.

2006		**Rs.**
Jan.1	Purchase of typewriter on credit from Kantha Rao & Company	6,500
Jan.8	Sale of building to Kumar & Sons on credit	2,75,000
Jan.12	Bad debts due from Suresh who became insolvent	300
Jan.19	Purchase of furniture on credit from Gangadhar for personal use	2,500
Jan.28	Purchase of goods from Achari for cash for household purpose	300
Jan.30	Receipt of cash Rs.1,000 from Ramesh was posted to the account of Suresh	

5.8 SUGGESTED BOOKS

1. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
2. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
3. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
4. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
5. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter - 6

CASH BOOK

Objectives :

After studying this unit we should be able to

- Features of cash book and the advantages in the preparation of cash book
- Know the types of cash book
- Prepare different types of cash books
- Understand the meaning and need for petty cash book and how to prepare it.

Structure :

6.1 Introduction

6.2 Types of Cash book

6.3 Simple Cash book

6.4 Two Column Cash Book

6.5 Three column cash book

6.6 Petty Cash book

6.7 Questions

6.8 Exercises

6.9 Suggested Readings

6.1 INTRODUCTION

The Cash Book is a sub – division of the book of original entry recording transactions involving receipts or payments of Cash.

All Cash transactions are first entered in the Cash Book and then posted from Cash Book into the ledger. Cash Book is maintained in the form of a ledger with narration. Practically, the Cash Book is a substitute for Cash Account in the ledger.

Cash Book is not only a book of original entry but also a ledger account for cash transactions. Therefore, cash account is not maintained in ledger book and for preparing trial balance (which records balances of ledger accounts) balance of cash account is recorded from cash book. Therefore, it is said that cash book is a subsidiary as well as a principal book. Cash book represents in effect cash account in ledger books; therefore, rules discussed in last chapter for preparing cash account shall be applicable. To recapitulate, cash account records all cash receipts on debit side and all cash payments on credit side of the account.

6.1.1 Features:

1. Only Cash transactions are recorded in the Cash Book.
2. It performs the functions of both journal and the ledger at the same time.
3. All cash receipts are recorded in the debit side and all cash payments are recorded in the credit side.
4. It records only one aspect of a transaction, i.e., Cash.
5. All cash transactions are recorded chronologically in the Cash Book.
6. The Cash Book, recording only cash transactions, can never show a credit balance.

6.1.2 Necessity of Maintaining Cash Book:

The necessity of maintaining cash book are discussed below:

(i) If every cash transactions are recorded in the journal, a tremendous amount of work will be involved in debiting or crediting cash account every time cash received or paid. If the cash book is maintained, the botheration of posting every item or receipt or payment of cash individually to cash account in the Ledger is avoided.

(ii) Cash Book is maintained because it gives the balance of cash – in – hand.

6.2. TYPES OF CASH BOOK

The various types of Cash Book from the point of view of uses may be as follows:

Cash Book can be of several kinds:

(i) **Single Column Cash Book –** For recording cash transactions only.

(ii) **Cash Book with Cash and Bank Columns –** For recording cash and bank transactions.

(iii) **Cash Book with Cash, Bank and Discount Columns –** For recording cash and bank transactions involving loss or gain on account of discount.

6.3 SINGLE COLUMN CASH BOOK

Single column Cash Book or Simple Cash Book is a such a Cash Book appears like an ordinary account, with one amounts column on each side. The left – hand side records receipts of cash and the right – hand side the payments. The difference between the left hand side or debit side and right hand side or credit side represents the balance i.e., amount of cash in hand and the balance must be a debit one. This cash book records only cash transactions and for bank transactions, a separate Bank Account is opened in the ledger where all transactions relating to "Cheques" are recorded.

Specimen of Single Column Cash Book

Dr. **Cr.**

Receipts				Payments			
Date	**Particulars**	**L. F.**	**Amount Rs.**	**Date**	**Particulars**	**L. F.**	**Amount Rs.**

1. **Date:** The date column in the Cash Book enables a chronological record of each transaction. In this column year, month and actual date of transaction is recorded.
2. **Particulars:** The column for particulars is left for writing the heads of account to be credited and debited and also for providing the appropriate narration or explanation of the transaction recorded.
3. **Voucher No.:** The document in support of a transaction is called voucher. There are two types of Vouchers: (1) Receipts Voucher, and (2) Payments Voucher. Generally, voucher has a serial number and this number is written in this column.
4. **Ledger folio (L. F.) :** The column for ledger folio is for indexing. A folio is a page mark. The folio in which the accounts, named in the Cash Book, are maintained in the ledger are

marked in this column. This enables to locate the respective page or pages in the ledger easily.

5. **Amount:** The money value of the transaction is written in this column.

6.3.1 Balancing of the Single – Column Cash Book:

The cash book is balanced just like any other ledger account. As mentioned earlier, the cash book always shows debit balance since the cash payments can never exceed the amount of cash receipts. After closing the cash book, the balance is shown on the debit side. The difference is written on the credit side as 'By Balance c/d', and, then, on the debit side the balance is written as 'To balance b/d'. This becomes the opening balance for the next period.

Illu.1 : Prepare a cash book from the following information.

2006		**Rs.**
Jan.1	**Balance of cash**	**7,000**
Jan.10	**Bought goods for cash**	**2,500**
Jan.11	**Bought goods on credit from Z**	**3,000**
Jan.15	**Sold goods for cash**	**4,700**
Jan.17	**Paid salary**	**1,000**
Jan.18	**Withdrew for personal use**	**500**

Solution :

Cash book for the month of January

Date	**Particulars**	**L.F**	**Rs.**	**Date**	**Particulars**	**L.F.**	**Rs.**
2006 Jan.1	 To Balance b/d		 7,000	2006 Jan.10	 By Purchases		 2,500
Jan.15	To Sales		4,700	Jan.17	By Salary		1,000
				Ja.18	By Drawings		500
				Jan.31	By balance c/d		7,700
			11,700				**11,700**
Feb.1	To Balance b/d		7,700				

6.4 DOUBLE COLUMN CASH BOOK

If along with columns for amounts to record cash receipt and cash payment another column for discount is added on cash side, it is called a Double Column "Cash Book".

Cash receipts are entered in Debit side and cash payments in credit side like the single Column Cash Book.

The Double Column Cash Book has two columns on both the sides of the cash book. This cash book can have two columns on both the sides as under:

(a) Cash and Discount Columns, (b) Cash and Bank Columns, (c) Bank and Discount columns.

However, of the three types of Double Column Cash Book, the most common cash book used is with cash and discount columns.

When a firm makes payment at an earlier date it avails cash discount. So discount received is accompanied with the payment of cash. Discount received (nominal a/c) is a gain to the firm. So whenever cash discount is received it is to be recorded on the credit side of the Cash Book under discount column. Similarly, when a customer pays at an earlier date the firm allows Cash discount. So cash discount allowed is accompanied with the receipt of Cash. Discount allowed (nominal a/c) being a loss is to be recorded on the debit side of the cash book under discount column.

Specimen of Double Column Cash Book

Dr. **Cr.**

Receipts					Payments				
Date	**Particulars**	**L. F.**	**Discount (Rs.)**	**Cash (Rs.)**	**Date**	**Particulars**	**L. F.**	**Discount (Rs.)**	**Cash (Rs.)**

6.4.1 Cash Book with Cash and Discount Column:

In order to record cash discount allowed or received, one additional column for "discount" is provided on both the sides of the Cash Book.

1. **Cash Discount :** It is a discount allowed to customers as an inducement to make the payment immediately. Cash discount is closely related to cash receipt and cash payment.

When cash is received, discount is allowed and when it is paid discount is received. Cash discount allowed is a loss to a businessman while cash discount received is a gain to him.

2. **Trade Discount :** It is an allowance made by a wholesaler to a retailer in order to enable the retailer to sell the articles at list prices and earn a reasonable margin of profit. The amount of trade discount is deducted from the invoice, therefore, it has no connection as to the receipt and payment of cash. Hence, trade discount does not appear in the books of accounts.

6.4.2 Difference between Cash Discount and Trade Discount:

1. A trade discount is offered by the trader to a buyer as a reduction in the catalogue or invoice price of the goods sold. However, a cash discount is a reduction in the amount due from a debtor.
2. While a trade discount is offered by the manufacturer or wholesaler to a retailer, a Cash discount is offered by a creditor to a debtor.
3. The purpose of offering the trade discount by the manufacturer or a wholesaler to a retailer is to enable him to sell the goods at the invoice price and to have a margin of profit. The purpose of offering a cash discount is to induce the debtor to make an early payment.
4. A Trade discount is offered unconditionally whereas a cash discount is offered only on payment of the amount.
5. A Trade discount does not figure in the books of both the parties whereas a cash discount is accounted for either as a gain or as a loss.
6. The rate at which a trade discount is offered varies from trade to trade and one commodity to another. However, a cash discount is offered almost at the same rate in all kinds of trade, but the cash discount rate may vary depending on the period of credit.
7. A trade discount is usually predetermined whereas a cash discount is not pre-determined.

Illu.2 : Prepare two column cash book of Sri Raj for the following transactions.

2006		**Rs.**
Mar 1	Cash in hand	3,000

Mar 6	Cash purchases	2,000
10	Wages paid	40
11	Cash sales	6,000
12	Cash received from Suresh	1,980
	Discount allowed	20
19	Cash paid to Munna	2,470
	Discount received	30
27	Cash paid to Radha	400
28	Bought goods for cash	2,070

Solution:

Date	Particulars	LF	Discount	Amount Rs.	Date	Particulars	LF	Discount	Amount Rs.
2006					2006				
Mar 1	To Balance b/d			3,000	Mar 6	By Purchases			2,000
Mar 11	To Sales			6,000	Mar 10	By Wages			40
Mar 12	To Suresh		20	1,980	Mar 19	By Munnu		30	2,470
					Mar 27	By Radha			400
					Mar 28	By Purchases			2,070
					Mar 31	By Balance c/d			1,000
			20	**10,980**				**30**	**10,980**
Apr 1	To Balance b/d			4,000					

Illu.3 : Prepare a Cash book with Bank and Discount columns from the following transactions.

2006		**Rs.**
June 1	Balance at bank	8,820
1	Cash in hand	510
2	Cash Sales	5,500
3	Paid in to Bank	5,000
4	Stationery purchased	200
10	Paid Ramesh by cheque	180

	Discount received	20
11	Gave a cheque for cash purchases	1, 000
12	Withdrawn cash for personal use	400
15	Received from Ranga, a cheque for Rs.1,920 in full settlement of account for	2,000
16	Draw from bank	500
20	Paid wages by cheque	200
30	Bank charges as per pass book	50

Solution:

Date	Particulars	LF	Discount	Bank	Date	Particulars	LF	Discount	Bank
2006					2006				
June 1	To Balance b/d			8,820	June 4	By Stationery a/c			200
June 1	To Cash a/c			510	June 10	By Ramesh a/c		20	180
2	To Sales a/c			5,500	11	By Purchases a/c			1,000
3	To cash a/c			5,000	12	By Drawings a/c			400
15	To Ranga a/c		80	1,920	16	By Cash a/c			500
					20	By Wages a/c			200
					30	By Bank charges a/c			50
					30	By Balance c/d			19,220
			80	**21,750**				**20**	**21,750**
July 1	To Balance b/d			19,220					

6.5 THREE COLUMN CASH BOOK

A three – column cash book is prepared when there are a large number of cash and bank transactions. It has three columns on each side, namely, a cash column for cash received and cash paid, a bank column for money discount received and discount allowed.

Specimen of Three Column Cash Book

Date	Receipts	LF	Discount Rs.	Cash Rs.	Bank Rs.	Date	Payments	LF	Discount Rs.	Cash Rs.	Bank Rs.

6.5.1 Balancing the Three – column Cash Book :

The cash and bank columns are balanced separately like other columns. Cash account always shows a debit balance. The bank account may show a debit or a credit balance. A credit balance shows a bank overdraft i.e., an excess amount drawn from the bank. The discount columns are not totaled in this cash book.

6.5.2 Special Points of a Three – column Cash book :

Following are some of the special points to be kept in mind while preparing a three – column cash book.

1. **Opening Balance:** The cash column of a cash book always shows a debit balance. It is written as 'balance brought down' on the debit side. But the opening balance of a bank column may be a debit or credit. If it is a debit balance, it will be shown on the debit side of the bank account while if a credit balance is given, it implies an overdraft and is shown on the credit side as 'By Balance b/d'.
2. **Contra Entries:** Contra entries means such entries that are made on both the sides of the cash book. When cash or a cheque is paid into the bank, the cash balance in the office will be reduced and the bank balance will be increased. In such a case, the Bank account is to be debited and the cash account is to be credited. Since in three column cash book, both cash and Bank accounts are included the amount will be written in a bank column on the receipt side and also in the cash column on the payment side of the cash book.

   The transactions affecting the Cash Account and Bank Account (either Cash Account or Bank Account debited or credited) are recorded on both the sides of the Cash Book. As the Triple Column Cash Book consists of Cash Account and Bank Account. Ledger posting of such transactions is completed by recording them on both the sides of the Cash Book.

Entries passed to record such transactions in the Triple Column Cash Book are regarded as contra entries. Letter “C” is written in the “L. F.” column of the Cash Book in order to identify such entries.

3. **Treatment of cheques received:** Cheques received may be treated in the following two ways.
   (i) A cheque received by a business may be sent to the bank on the same day for collection. In such a case it will be shown on the debit side of the bank column as soon as it is received.
   (ii) A cheque received by the business may be sent to the bank at a later date. In such a case, it is shown on the debit side of the cash account when it is received. When the cehque is sent for collection to the bank, it is shown on both sides of the cash book.

4. **Endorsement of cehques received:** A cheque received by a business may not be sent for collection to the bank but may be endorsed and transferred in favour of a creditor of the business. The cheque received will be taken as a receipt of cash. The cheque endorsed will be taken as payment of cash.

5. **Dishonour of cheques :** The term ‘dishonour of a cheque’ refers to non – payment of a cheque while being presented for collection. The party from whom the cheque received is debited while the account of the bank is credited.

6. **Bank Charges :** A bank usually charges some amount for the services provided to its customers. Such a charge will be recorded on the credit side of the cash book under the bank column.

7. **Interest allowed bank :** Interest allowed by the bank increases the bank balance. The amount is recorded on the debit side of the cash book in the bank column.

8. **Amount withdrawn for person use :** Amount withdrawn from the bank for personal use is shown on the credit side of bank column in the cash book.

6.5.3 Posting from Cash Book:

The posting of the debit and credit sides of cash books is done as follows:

1. **Posting of debit side of cash book :** All the receipts appearing on the debit side are posted to the credit side of the respective ledger accounts. All entries relating to discounts are posted to the credit side of the respective personal accounts in the ledger. The total of discounts allowed on the debit side is posted to the debit of the discount allowed account in the ledger.
2. **Posting of credit side of cash book :** All the payments appearing on the credit side are posted to the debit side of the respective ledger accounts. All entries relating to the discount received column are posted to the debit side of the respective personal accounts. The total of discount received is posted to the credit of the discount
3. received account in the ledger.

Illu.4 : Enter the following transactions in three columns Cash Book.

1995 March

1. **Cash at Office Rs.600 and Bank balance Rs.3,000**
2. **Received a cheque for Rs.500 from Balu in full settlement of Rs.525**
4. **Drawn from Bank for office use Rs.800**
7. **Balu's cheque returned dishonored**

Solution :

Cash book with Cash, Bank and Discount columns

Date	Particulars	L.F.	D.A.	Cash	Bank	Date	Particulars	L.F	D.R	Cash	Bank
2006			Rs.	Rs.	Rs.	2006		`	Rs.	Rs.	Rs.
Ma.1	To Balance b/d			600	3,000	Ma.4	By Cash				800
2	To Balu		25		500	Ma.7	By Balu		25		500
4	To Bank	C		800		31	By Balance c/d			1,400	2,200
			25	1,4000	3,500				25	1,400	3,500
Ap.1	To Balance b/d			1,400	2,200						

Illu.5 : Prepare a triple column cash book with bank, cash and discount columns from the following transactions:

2006		Rs.
June 1	Cash balance Rs.5,000 and bank balance Rs.2,000	10,000
5	Cash received from sale of goods	2,000
6	Paid into bank	1,000
7	Paid Anil by cheque	800

Solution :

Three Column Cash Book

Date	Particulars	L.F.	Discount	Cash	Bank	Date	Particulars	L.F.	Discount	Cash	Bank
2006			Rs.	Rs.	Rs.	2006			Rs.	Rs.	Rs.
June 1	To Balance b/d			5,000	2,000	June 6	By Bank			1,000	
5	To Sales			2,000		7	By Anil				800
6	To Cash	(c)			1,000	7	By Balance c/d			6,000	2,200
				7,000	**3,000**					**7,000**	**3,000**
8	To Balance b/d			6,000	2,200						

Illu.6 : Prepare a Three column cash book from the following:

2006		Rs.
Jan.1.	Cash balance	15,000
	Bank balance	50,000
2.	Cash sales	40,000
5.	Furniture purchased and issued cheque	8,000
6.	Rent paid by the cheque	5,000
7.	Cash deposited on the bank	40,000
8.	Received interest on Investments	4,000
9.	Paid Salaries	5,000

10.	**Received from Vishnu discount allowed**	**500**
12.	**Received cheque from Anjaneyulu and deposited in the bank**	**8,000**
13.	**Anjaneyulu cheque dishonoured**	**8,000**
14.	**Goods purchased from Gopi for cash**	**6,000**
18.	**For office use cash withdrawn from Bank**	**12,000**
20.	**Cheque issued to Raja**	**5,800**
	Discount Received	**200**
24.	**Cash withdrawn for personal use**	**4,000**

Illu.7 : Enter the following transactions in three columnar cash book:

2006		**Rs.**
Dec 1	**Cash in hand**	**14,000**
	Balance at bank	**10,000**
3	**Cash sales**	**6,000**
5	**Paid into bank**	**7,000**
7	**Received a cheque from Suresh**	**2,000**
9	**Paid into bank Suresh 's cheque**	**2,000**
10	**Paid to Amar by cheque Rs.980 in full settlement of his account**	**1,000**
	Withdrew from bank for office use	**5,000**
12	**Goods purchased from Naveen**	**3,000**
13	**Purchase of furniture**	**3,000**
14	**Received a cheque from John for Rs.10,000 and paid into the bank on the same day**	
17	**Paid commission to Ram**	**500**
18	**John 's cheque was dishonoured**	
20	**Drew a cheque for Rs.800 for personal use**	
24	**Paid salaries**	**2,000**

Illu.8 : Enter the following transactions in the three column cash book of Raghunath.

2006	
March 1	**Cash at Office Rs.600**
	Bank balance (Cr.) Rs.3,000
2	**Cash Sales Rs.2,000**
3	**Deposited into bank Rs.2,000**
5	**Narayana settled his account of Rs.530 by giving a cheque for Rs.500**
8	**Purchased from Narendra goods worth rs.1,000 at 5% trade discount and paid half the amount by cheque and the balance by cash**
15	**Narayana's cheque returned dishonoured**
20	**Drew from bank Rs.300 for office use and Rs.200 as drawings**
25	**Paid Office rent Rs.200**
27	**Bank charges as per pass book Rs.10**
29	**Paid salaries by cheque Rs.500**
30	**Received from Satyam cash Rs.500, Cheque Rs.1,000 and allowed him a discount of Rs.50**
31	**Paid to Ramachandra Rs.475 in full settlement of his account Rs.500**

SOLUTION - 6 :

Dr. **Cash Book** **Cr.**

Date	Receipts	L.F.	Dis. Allowed	Cash	Bank	Date	Payments	L.F	Dis Allowed	Cash	Bank
2006 Jan.1	To Balance b/d			15,000	50,000	2006	By Furniture				8,000
Jan.2	To Sales			40,000		Jan. 6	By Rent				5,000
Jan.7	To Cash	C			40,000	Jan. 7	By Bank	C		40,000	
Jan.8	To Interest on Investments				4,000	Jan.9	By Salaries			5,000	
Jan.10	To Vishnu		500	15,000		Jan.13	By Anjaneyulu				8,000
Jan.12	To Anjaneyulu				8,000	Jan.14	By Purchased			6,000	
Jan.18	To Bank			12,000		Jan.18	By Cash	C			12,000
						Jan.20	By Raja		200		5,800
						Jan.24	By Drawings				4,000
						Jan.31	By Balance c/d			31,000	59,200
			500	**82,000**	**1,02,000**				**200**	**82,000**	**1,02,000**
2006 February	To Balance b/d			31,000	59,200						

Solution - 7 :

Triple Column Cash book

Date	Particulars	L. F.	Cash Rs.	Bank Rs.	Discount allowed Rs.	Date	Particulars	L.F.	Cash Rs.	Bank Rs.	Discount Received Rs.
2006						2006					
Dec 1	To Balance b/d		14,000	10,000		Dec 5	By Bank a/c	(C)	7,000		
Dec 3	To Sales a/c		6,000			9	By Bank a/c	(C)	2,000		
5	To Cash a/c	(C)		7,000		10	By Amar a/c			980	20
7	To Suresh a/c		2,000			11	By Cash a/c	(C)		5,000	
9	To Cash a/c	(C)		2,000		13	By Furnish a/c			2,500	
11	To Bank a/c	(C)	5,000			17	By Commission a/c		500		
14	To John a/c			10,000		18	By John a/c			10,000	
						20	By Drawings a/c			800	
						24	By Salaries a/c		2,000		
						31	By Balance c/d		15,500	9,720	
			27,000	**29,000**					**27,000**	**29,000**	**20**
2007 Jan 1	To Balance b/d		15,500	9,720							

Solution - 8 :

Three Column Cash book of Raghunath

Date	Particulars	L.F.	Discount	Cash	Bank	Date	Particulars	L.F.	Discount	Cash	Bank
2006			Rs.	Rs.	Rs.	2006			Rs.	Rs.	Rs.
Mar.1	To Balance b/d			600		Mar.1	By Balance b/d				3,000
Mar.2	To Sales			2,000		Mar.3	By Bank	©		2,000	
Mar.3	To Cash	©			2,000	Mar.8	By Purchases			475	475
Mar.5	To Narayana		30		500	Mar.15	By Narayana		30		500
Mar.20	To Bank	C		300		Mar.20	By Cash	C			300
Mar.30	To Satyam		50	500	1,000	Mar.25	By Office rent			200	
Mar.31	To Balance c/d				1,485	Mar.27	By Bank charges				10
						Mar.29	By Salaries				500
						Mar.31	By Ramachandra		25	475	
						Mar.31	By balance c/d			250	
			80	3,400	4,985				55	3,400	4,985
Ap.1	To Balance b/d			250		Ap.1	By Balance b/d				1,485

6.6 PETTY CASH BOOK

Petty cash is the amount of cash an organization keeps in notes or coins on its premises to pay small items of expenses. In every business there are a number of small payments in cash such as conveyance, cartage, entertainment of the customers, etc. These are generally repetitive in nature. If all these petty expenses are recorded in the cash book along with other payments, the cashier will be over burdened and the cash book overloaded. To avoid this, a separate book called a 'petty cash book' is maintained to record all such payments. A person called the 'petty cashier' is appointed to record all such small payments. The sum of money given to the petty cashier for making small payments is called 'Petty cash'. It is usually kept in an imprest account.

6.6.1 Types of Petty Cash Books:

Following are the two types of petty cash books:

a) Simple Petty Cash Book,

b) Columnar Petty Cash Book.

a) Simple Petty Cash Book: A Simple Petty Cash Book is identical with a Cash Book. It has two sides viz., a receipt side and a payment side like a Cash Book. This type of Petty Cash Book is less useful. Therefore, many traders do not use this type of Petty Cash Book.

A simple Petty Cash Book is written on the lines of a Cash Book. There is only one amount column for recording all petty cash payments. There is no separate column for recording all classes of petty cash payments.

1. The "Amount Received" column is used for recording the amount received from the Cashier by the petty cashier.
2. The "Cash Book Folio" column is used for recording the page number of the cash book where the payment of the petty cashier is made by the cashier.
3. The "Date" column which is common to both the "Receipt" and "payment" side is used for writing the date of the receipt of an amount by the petty cashier on the "receipt" side and the date of payment on the "Payment" side.
4. Similarly, the "Particulars" column which is common to both the sides is used for recording the particulars of Receipts and Payments.
5. The "Voucher Number" column is used for recording the Number of the Voucher obtained by the petty cashier while making the payment.

6. The “Ledger Folio” column is used for writing the page number of the ledger on which the particular ledger account is maintained.
7. The “Amount Paid” column is used for recording the amount paid for a particular class of expenditure.

b) The Columnar petty Cash Book (Analytical Petty Cash Book) : This type of Cash Book has two sides. The left hand side is used for recording receipts of Cash or Cheque from the Chief Cashier. This part is very small as compared to the right hand side of the petty cash book. The right hand side is meant for recording payment. The payment side is ruled in suitable columns. A separate column is provided for recording a particular item of expenditure, i.e., Postage, Stationery, Travelling, Advertisement etc. In addition to it, a separate column for ledger is also provided for recording payment made on account of personal accounts or impersonal accounts. Payment made on a personal or impersonal account is entered in the Ledger Column and posted item wise in the respective ledger account.

When the amount is received from Chief Cashier, it is entered on the receipt side of the Petty Cash Book and when payments are made, they are first entered in the total column of the Petty Cash Book and then transferred in the respective column of expenditure. At the end of a certain period, the expenditure columns are totaled. The Petty cashier prepares a statement stating the summary of expenses paid and submits it to the Chief Cashier for incorporation in the main Cash Book.

6.6.2 Maintenance of Petty Cash Book :

The money which is received by the Petty cashier from the chief cashier is recorded on the left hand side under the column “Receipts”. Payments are recorded on the right hand side. For each type of expenses separate column is opened. Each cash payment is recorded under the appropriate head of expenses. As payments are analysed and recorded under appropriate columns, Petty Cash Book with separate heads for each expense is known as “Analytical Petty Cash Book”.

6.6.3 Important Advantages of Petty Cash Book :

The important advantages of a petty cash book are given below:

(i) It relieves the main cash book of numerous transactions involving petty sums.

(ii) Posting involves lesser labour and time.

(iii) Reduces work load of chief cashier.

(iv) Effective control can be exercised over small payments because each payment has to be supported by vouchers.

6.6.4 Imprest System of Petty Cash Book :

The most popular system of Petty Cash Book is the Imprest System. Under this system, the chief cashier advances a certain amount to the Petty Cashier at the beginning of a fixed period e.g. a month or a fortnight or a week. This advance given to the petty cashier for meeting small expenses is called "Float". The amount of float is fixed in such a way that the amount is enough to meet the petty expenses for a certain period. At the end of a certain period, the petty cashier submits the account to the Chief Cashier. On receiving the account from the petty cashier, the chief cashier scrutinises it, and sends an amount equal to the actual amount spent for meeting petty expenses of the next period. As such the petty cashier begins the next period with the fixed amount of float.

6.6.5 Advantages of the Imprest System :

The Imprest System has got many advantages over the other system. The Advantages are given below:

1. The record of Petty Cash is checked periodically. Therefore, mistakes, if any, in recording the transactions can be rectified immediately.
2. The Petty Cashier is not allowed to have idle cash in hand. If it is found that the float is more than adequate, it will be immediately reduced.
3. Chances of cash being misused by the petty cashier are reduced.
4. The regular check of the petty cash book creates a sense of responsibility in the petty cashier.
5. The main cashier is relieved from the botheration of petty disbursements.

Owning to the above three advantages, the Imprest System has become very popular in modern business houses.

Illu.9 :Enter the following transactions in Analytical petty cash book and balance the same:

2006		Rs.
June 1	Received for petty cash payments	1,000
2	Paid for postage	80
5	Paid for stationery	50

8	Paid for advertisement	100
12	Paid for wages	40
16	Paid for carriage	30
20	Paid for conveyance	44
25	Paid for travelling expenses	160
27	Paid for postage	100
28	Wages paid	20
29	Paid for telegrams	40
30	Paid for postage	6

Illu.10 : From the following particulars prepare Petty Cash Book on imprest system:

1-6-2006 : Received for petty cash payments: Rs.1,000.

		Rs.
2.	Paid for postage	80
5.	Paid for stationery	50
8.	Paid for advertisement	100
12.	Paid for wages	40
16.	Paid for carriage	30
18.	Paid for conveyance	44
20.	Travelling expenses	160
25.	Postage	100
27.	Wages to office cleaner	20
28.	Telegrams	40
30.	Sent registered notice to landlord	06

SOLUTION – 9 :

Petty Cash Book

Receipts	Date	Particulars	V. No	L.F	Total payments	Analysis of Payments				Advert-isement	Conveyance & Travelling Expenses
						Postage & Telegram	Carriage & Cartage	Stationery	Wages		
	2006 Jan										
1,000	1	To Cash Received									
	2	By Postage			80	80					
	5	By Stationery			50			50			
	8	By Advertisement			100					100	
	12	By Wages			40				40		
	16	By Carriage			30		30				
	20	By Conveyance			44						44
	25	By Travelling Expenses			160						160
	27	By Postage			100	100					
	28	By Wages			20				20		
	30	By Telegrams			40	40					
	30	By Postage			6	6					
		Total			**670**	**226**	**30**	**50**	**60**	**100**	**204**
	30	By Balance c/d			330						
1,000					**1,000**						
330	Feb.1	To Balance b/d									

Solution – 10 :

Petty Cash book

Amount Received Rs.	CBF No.	Date	Particulars	Voucher No.	Total Payments Rs.	Analysis of Payments					
						Postage & Telegram Rs.	Printing & Stationery Rs.	Travelling Expenses Rs.	Carriage & Cartage Rs.	Adverti sement Rs.	Wages Rs.
1,000		2006 June 1	To Cash								
		2	By Postage		80	80					
		5	By Stationery		50		50				
		8	By Advertisement		100					100	
		12	By Wages		40						40
		16	By Carriage		30				30		
		18	By Conveyance		44			44			
		20	By Travelling expenses		160			160			
		25	By Postage		100	100					
		27	By Wages to office cleaner		20						20
		28	By Telegram		40	40					
		30	By Sent registered notice to landlord		6	6					
					670	**226**	**50**	**204**	**30**	**100**	**60**
		30	By Balance c/d		330						
1,000					**1,000**						
330		July 1	To Balance b/d								
670		July 1	To Cash received								

6.7 QUESTIONS

I. Short Answer Questions

1. What is cash book?
2. What are the types of cash book?
3. What is contra entry?
4. What is a petty cash book? Explain its nature.

II. Eassy type Questions

1. Define Cash Book. Is it a subsidiary book or principal book of accounts? Give reasons
2. What is Three column cash book? How do you prepare it?
3. What purpose does an analytical petty cash book serve?
4. Explain the `Imprest System of Petty Cash Book?

6.8 EXERCISES

1. Enter the following transactions in a simple cash book.

2006		**Rs.**

Jan.1	Cash in hand	5,000
3	Received from Teji	500
6	Received from Nandu	370
8	Paid to Mahesh on account	750
10	Made cash purchases	1,500
17	Sold goods to Sathe for cash	350
20	Paid into Bank	1,000
22	Purchased furniture for office use	300
25	Received for interest on debentures	75
27	Paid electricity charges	25
29	Paid rent	150
31	Paid salaries to staff	570

[Ans.: Cash balance Rs.2,000]

2. Prepare two column cash book (with cash and discount column) of Bharvanji

2006		**Rs.**
Feb.1	Opening cash balance	2,700
2	Received Rs.980 from Raghav and cash discount allowed to him	20
3	Paid Rs.880 to Ambedkar in settlement of his account for Rs.900	

4	Cash sales	1,700
5	Cash purchases	2,250
6	Paid Rs.675 to Raj and discount allowed by him Rs.25	
10	Deposited Rs.400 in Janatha Bank	
14	Received Rs.1,560 through cheque from Samant after allowing him cash discount of Rs.40. The cheque was deposited in Bank on the same day	
18	Issued a cheque of Rs.135 towards advertisement expenses	
22	Received Rs.1,150 through cheque from Ramesh after allowing him discount of Rs.50. The cheque was immediately deposited in the bank.	
25	Bhavanji withdrew Rs.1,000 for personal expenses through cheque	
29	Cash sales Rs.1,800	
29	Deposited cash in Bank in excess of Rs.500	

[Ans.: Cash Balance Rs.500; Discount (Dr.) Rs.110; (Cr.) Rs.45]

3. Enter the following transactions of the Premier Trading Company's cash book with three columns discount, cash and bank and balance the accounts as on 31st December, 2005.

Dec. 2005	
1	Cash in hand Rs.4, 000.
1	Bank Rs.1, 000 (Cr.)
3	Receives a cheque from A Rs.290 and allowed him discount of Rs.40.
7	A's cheque deposited in to bank.
10	Withdrew from bank for office use Rs.800.
12	Paid B/p by cheque Rs.600.
15	B/R from Ram Rs.2, 500; discounted it, crediting with bank Rs.2, 400.
20	Issued a cheque for petty cash Rs.100.
25	Paid to Gupta by Cheque Rs.920; discount received Rs.30.
28	Made cash sales Rs.900

[Ans.: Cash Balance Rs.5,700; Bank Balance Rs.730; Discount (Dr.) Rs.140; (Cr.) Rs.30

4. Prepare a three column cash book for the month of March 2006 from the following transactions:

March 2006

1 Cash in hand Rs.55,000 and cash at bank Rs.35,000

2 Bought goods by cheque Rs.10,000

3 Paid trade expenses Rs.1,000

4 Received a cheque from Naresh for Rs.30,000 and deposited into

bank on the same day.

5 Paid Rs.2,000 to kumar by cheque in full settlement of Rs.2,100

6 Sold goods to Vijay Rs.5,000

10 Naresh ‘s cheque dishonoured.

12 Received cheque from Vijay for Rs.5,000.

14 Withdrew from bank for personal use Rs.5,000

20 Withdrew from bank for office use Rs.6,000

24 Cash sales Rs.10,000

25 Paid into bank Rs.15,000

26 Received a cheque from Rakesh for Rs.5,900 in full settlement of an amount of Rs.6,000.

31 An insolvent debtors pays 50% of Rs.8,000 due from him.

[Ans.: Cash Balance Rs.59,000; Bank Balance Rs.37,900; Discount (Dr.) Rs.100; (Cr.) Rs.100]

5. Write out an analytical petty cash book maintained on imprest system from the following transactions:

2004

January 1 Issued a Cheque of Rs.200 to the Petty Cashier

2	Paid electricity expenses		6.50
3	Paid Trunk call charges		5.00
4	Paid for refreshments	10.00	
6	Paid for Cartage		2.50
8	Paid for Printing		7.50
10	Purchased typing papers and ribbon	9.00	

14	Paid for stationery		12.00
17	Paid railway freight		11.00
19	Postal charges		6.00
24	Paid for Auto charges	24.00	
26	Paid taxi hire to the Sales Manager	40.00	
28	Tea and Tip to peon		3.00
31	Paid krishna against his account		30.00

[Ans.: Cash Balance Rs.33.50]

6. Enter the following transactions in petty cash book.

2006		Rs. Ps.
March 1	Amount received from Cashier	100.00
2	Purchased typing paper	4.00
8	Office cleaning	3.00
10	Postage	10.00
14	Cartage	12.00
18	Postage	8.00
22	Stationery	9.00
25	Ink	4.00
31	Telegram	10.00

[Ans.: Cash balance Rs.40]

6.9 SUGGESTED BOOKS

1. Agarwala, A.N., Amitabha Mukherjee, Mohammed Hanif, **Principles and Practice of Accountancy,** Kitab Mahal Agencies, New Delhi.
2. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
3. Chopde, L.N., & Choudhari, D.H., **Accountancy,** Sheth Publishers, Pune
4. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
5. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
6. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
7. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter - 7

BANK RECONCILIATION STATEMENT

Objectives :

After studying this unit we may be able to :

- Know the meaning of Bank Reconciliation Statement
- Understand the need for preparing Bank Reconciliation Statement
- Analyse the reasons for differences between the cash book balance and pass book balance.
- Prepare the bank reconciliation statement in different circumstances.

Structure :

7.1 Introduction

7.2 Need for Bank Reconciliation Statement

7.3 Reasons for Disagreement

7.4 Procedure for Preparation of BRS

7.5 Questions

7.6 Exercises

7.7 Suggested readings

7.1. INTRODUCTION

This is a statement prepared so as to agree the bank balance as shown by the Pass Book with the Bank balance as shown by the Bank Column of the Cash Book. This statement is usually copied into the Cash Book at the end of a certain period. Generally, this statement is prepared monthly in order to verify the accuracy of the banking transactions made by a trader with his Bank. These transactions are recorded by the bank in the Pass Book. Bank opens a separate account of each depositor in its ledger. All the banking transactions are recorded in the respective ledger account in the books of the Bank. Similarly the banking transactions are recorded by a trader in the bank column of the Cash Book or in a separate Bank Account in the Ledger. That means every transaction with a bank is recorded in the Cash book, as well as in the Pass Book. For example, if a trader has deposited Rs.5,000 in the Bank, it will be recorded by the trader in the bank column appearing on the receipt side of the Cash Book or a Bank Account opened in the ledger will be debited. In the books of the Bank, credit will be given to customer's account i.e., a credit entry will be made in the Pass Book. That means a Bank Account in the books of a trader is debited, and a customer's account in the Pass Book will be credited with the same amount. As such, theoretically, both the balances must agree. But in practice, this does not happen. Bank balance as shown by Bank column of the Cash Book does not tally with the balance as shown by Pass Book on a particular date. Therefore, it is necessary to find out the causes of difference between the two balances. Hence, the statement explaining the causes of disagreement between the two balances is drawn up.

7.2 NEED OF BANK RECONCILIATION STATEMENT

The following are the necessary for preparing Bank Reconciliation Statement.

1. It helps to understand the actual bank balance position.
2. It facilitates detection of any mistakes in the Cash Book and in the Pass Book.
3. It helps to prevent frauds in recording the banking transactions.
4. It explains any delay in collection of cheques.

7.3 REASONS OF DISAGREEMENT BETWEEN CASH BOOK AND PASS BOOK

The following are the reasons of disagreement between the Cash Book Bank balance and the Pass Book Bank Balance :

1. **Cheques issued but not presented for payment :** A business man issues cheques to his creditors in settlement of their accounts. The cheques issued are recorded in the bank column appearing on the payment side of the Cash Book immediately on the date of issue, but the Bank does not make a debit entry in the Pass Book. Entry in the Pass Book is made on presentation of the cheques by the creditors for payment. If creditors have not presented the cheques for payment, the Bank will not make an entry in the

Pass Book. Therefore, if we compare the Cash Book with the Pass Book, we will find that entry for issue of cheques appears in the Cash Book, and therefore, there will be a difference between the two balances.

2. **Cheques deposited in the Bank but not Collected :** Cheques are received from customers from time to time in settlement of the account. The cheques received are sent to the bank for collection and the entry is made in the bank column on the receipt side of the Cash Book. But its corresponding entry does not appear in the Pass Book, as the Bank does not give credit immediately. Credit is given only after collecting the amount of the cheques. Therefore, the bank balance as shown by the Cash Book does not agree with the balance as shown by the Pass Book.
3. **Cheques received and entered in the Cash Book, but not deposited into bank for collection :** Cheques received from customers may be entered in the Bank column of the cash Bank but the proprietor may forget to deposit the same into bank for collection. No entry is made by the bank in the Pass Book. In such a case the two balances will not agree.
4. **Cheques deposited into bank for collection but not entered in the Cash book :** Some times the customer might have received a cheque from the party and deposited the same into his bank for collection. But he might have failed to enter the cheque in the Cash Book. The cheque might have been entered by the bank in the Pass Book and customer's ledger as it has been collected. In this case, the two balances will not tally.
5. **Direct Payment into the Customer's Bank a/c by other parties but not recorded in the Cash Book:** Sometimes a third party may deposit money in the Bank a/c of the customer directly but the intimation of the same may not be received by the customer. As a result corresponding entry of the same may not be made in the Cash Book. As such these two balances will not agree.
6. **Interest allowed and credited by the Bank :** The Bank allows interest on a customer's deposit account and gives credit in the Pass Book. The entry in the Cash Book is made after receiving intimation from the bank. If a reconciliation statement is prepared before the receipt of such an intimation, there will be no corresponding entry in the Cash Book on its receipt side. Hence, a difference will arise between the two balances.
7. **Collection of dividend by the Bank:** A businessman earns income. He may instruct the Bank to collect the amount of dividend on his shares. The Bank makes a credit entry in the

Pass Book immediately after collection. But it may not be entered in the Cash book immediately unless an intimation to that effect is received from the Bank. Therefore, there will be disagreement between the two balances.

8. **Interest charged or Bank charges or commission debited in the Pass Book :** May not appear in the Cash Book due to lack of intimation from the Bank. Therefore, the balance as shown by the Pass Book will not agree with the balance as shown by the Cash Book.
9. **Standing Instructions :** A businessman may give standing instructions to the Bank for payment of insurance premium, short rent, electricity charges etc. On making payment, the Bank passes a debit entry in the Pass book, thereby reducing the customer 's balance. The intimation of the same may not be received by the businessman. Therefore, it may not be recorded in the Cash Book. This will result in disagreement between the said balances.
10. **Dishonour of Cheques :** When the cheques deposited in the Bank are dishonoured, the Bank a debit entry in the Pass Book. The corresponding entry is passed in the Cash Book on receiving advise from the Bank. If a Bank Reconciliation Statement is prepared during this period, a difference will arise between the said two balances.
11. **Errors :** The balance as shown by the Cash Book will not agree with the balance as shown by the Pass Book, if certain errors are committed either by the accountant of a businessman or by the Bank clerk in recording the transactions.

7.4. PROCEDURE OF PREPARATION OF BRS

The following procedure is to be followed in the preparation of bank reconciliation statement.

1. **Selection of a date:** Select the date on which the Bank Reconciliation Statement is to be prepared. Preferably select the last date of the month on which the balances as per Cash Book and Pass Book are known easily.
2. **Comparison of entries :** Compare the Cash Book debit column entries with the credit side of the Pass Book, and credit column entries with the respective entries in the Pass Book on debit side. Majority of the items will tally.
3. **Classification of unticked items :** Examine the unticked items and list them. Classify them according to their characteristics and headings. The unticked items are the discrepancies.

4. **Selection of the base :** Select any balance as a base i.e. the starting point. The base may be either Cash Book balance or Pass Book balance whichever is given.
5. Apply the rule of addition and subtraction.
6. Draw the bank reconciliation statement.

A. When the Balance as per Cash Book is given :

Add : 1. Cheques issued but not presented for payment.

5. Interest and dividend collected by the Bank but not recorded in the Cash Book.
6. Direct deposit made by a customer in the Bank account.
7. Interest on a deposit allowed by the Bank but not recorded in the Cash Book.

Less 1. Cheques deposited in the Bank but not realised.

2. Commission charged by the bank, the entry of which does not appear in the Cash Book.
3. Bank charges debited in the Pass Book but not entered in the Cash Book.
4. Insurance premium paid by the Bank but not entered in the Cash book owing to lack of intimation.
5. Dishonour of cheques or dishonour of Bills Recivable discounted debited in the Pass Book but not entered in the Cash Book.

B. When the Balance as per pass book is given :

Add : 1. Cheques deposited in the Bank but not collected.

2. Bank Charges, commission, interest charged, debited in the pass book but not entered in the Cash Book.
3. Insurance Premium paid by the bank and debited in the Pass Book but which does not appear in the cash book.
4. Dishonour of cheques or dishonour of Bills Receivable discounted debited in the Pass book but not recorded in the Cash Book.

Less : 1. Cheques issued but not presented for payment.

2. Interest and dividend collected by the Bank but not recorded in the Cash Book.
3. Direct deposit by a customer in the Bank account, not recorded in the Cash Book.
4. Interest on a Bank deposit allowed by the Bank but not recorded in the Cash Book.

7.4.2 Specimen Form :

The following form is usually used for preparation of a Bank Reconciliation Statement :

Bank Reconciliation Statement as on -------

	Rs.	**Rs.**
Bank Balance as per Cash Book		-----
Add: i) ………………	….	
ii) ……………	….	
iii) ……………	….	
Less: i) ……………	….	
ii) ……………	….	
iii) …………..	….	
Bank Balance as per Pass Book	**….**	**….**

Illu.1 : Prepare Bank Reconciliation Statement as on 31-3-2007

(a) Balance as per cash book – Rs.15,000

(b) Cheques paid in but not credited – Rs.1,000

(c) Cheques issued but not presented – Rs.1,550

(d) Bills collected and credited in Pass Book only Rs.2,000

(e) Interest credited in Pass Book only Rs.50

(f) Commission charged and debited in Pass Book only Rs.100

(g) Cheques received entered in cash book but omitted to be banked Rs.500.

Solution :

Bank Reconciliation Statement on 31-3-2007

		Rs.	**Rs.**
Balance as per Cash Book			**15,000**
Add :	1. Cheques issued, but not presented	1,550	
	2. Bills collected and credited in pass book only	2,000	
	3. Interest credited in Pass Book	50	3,600

			18,600
Less:	1. Cheques paid in but not credited	1,000	
	2. Commission debited in pass book	100	
	3. Cheques entered in cash book, but not sent to bank	500	1,600
	Balance as per Pass Book		**17,000**

Illu.2 : On 31-3-2002, the cash book of Mr. Ganesh showed a bank balance of Rs.8,500. A comparison of pass book and cash book revealed the following.

- **(i) Cheques deposited but not cleared by 31-3-2002 Rs.1,000**
- **(ii) Interest on investments collected by the bank on behalf of Ganesh but not recorded in cash book Rs.400.**
- **(iii) Cheques for Rs.5,100 were issued during the month of March. But of these cheques, Rs.1,200 were presented in the month of a April 2002.]**
- **(iv) The bank paid insurance premium of Rs.600 as per Ganesh's standing instructions. This has not been entered in cash book.**
- **(v) A customer deposited Rs.150 directly into the bank. This was entered only in Pass book.**
- **(vi) Bank charges debited in Pass book but not recorded in Cash Book Rs.50.**
- **(vii) A debit of Rs.400 in respect of dishonoured cheque appears in Pass book but not in Cash book.**

Prepare Bank Reconciliation Statement as on 31-3-2002.

Solution :

Bank Reconciliation Statement of Ganesh as on 31-3-2002

		Rs.	**Rs.**
Balance as per Cash Book			8,500
Add:	1. Interest collected by bank, not entered in Cash book.	400	
	2. Cheques issued, but not presented for payment	1,200	
	3. Deposition to bank by the customer, not		

	entered in Cash Book	150	1,750
			10,250
Less:	1. Cheques deposited, but not clear	1,000	
	2. Insurance premium paid by the bank, not entered in Cash Book	600	
	3. Bank charges debited in pass book, not entered in Cash Book	50	
	4. Dishonoured cheque debited in pass book only	400	2,050
	Balance as per Bank Pass Book		**8,200**

Illu.3 : From the following particulars, prepare the Bank Reconciliation Statement as on 30-6-2005 :

	Rs.
(a) Balance as per cash book	**10,000**
(b) Cheques issued but not presented	**1,500**
(c) Cheques paid into bank, but not credited	**1,000**
(d) Interest credited in pass book only	**100**
(e) Cheques received entered in cash book but omitted to bank	**500**
(f) Bill collected and credited in pass book only	**2,000**
(g) Commission charged and debited in pass book only	**150**

Solution :

Bank Reconciliation Statement as on 30-6-2005

		Rs.	**Rs.**
Balance as per Cash Book			**10,000**
Add	(a) Cheques issued, but not presented	1,500	
	(b) Interest credit only in pass book	100	
	(c) Bill collected and credited in Pass book only	2,000	3,600
			13,600

Less:	(a) Cheques paid in but not Credited	1,000	
	(b) Cheques received and entered in cash book but omitted to be banked	500	
	(c) Commission charged and debited in pass book only	150	1,650
	Balance as per Pass Book		**11,950**

Illu.4 : Prepare Bank Reconciliation Statement from the following

(a) Bank balance as per pass book Rs.10,000

(b) Interest on Investments collected by bank Rs.500

(c) Bank has paid Rs.300 towards insurance premium and was not entered in cash book.

(d) Cheque received, entered in cash book but not sent to Bank for collection Rs.500

(e) A wrong debit of Rs.400 is appearing in pass book.

Solution :

Bank Reconciliation Statement

	Particulars	**Rs.**	**Rs.**
	Balance as per Pass Book		10,000
Add :	Insurance premium debited in the pass book only	300	
	Cheque received was not sent to bank for collection	500	
	Wrong debit entered in the pass book	400	1,200
			11,200
Less :	Interest on Investments credited in the pass book		500
	Balance as per Cash Book		10,700

Illu.5 : From the following particulars, ascertain the bank balance as per cash book of Swami as at 31st March 2007.

a. Credit balance as per passbook as on 31-3-07 Rs.2,500.

b. Bank charges of Rs.60 had not been entered in the cash book.

c. Out of the cheques Rs.3, 500 paid into the bank, a cheque of Rs.1, 000 was not yet credited by the banker.

d. Out of the cheques issued for Rs.4, 500, cheques of Rs.3, 800 only were presented for payment.

e. A dividend of Rs.400 was collected by the banker directly but not entered in the cash book.

f. A cheque of Rs.600 had been dishonored prior 31-3-07 but no entry was made in the cash book.

Solution :

Bank Reconciliation Statement of Mr. Swamy as on 31-3-2007

	Particulars	***Amount Rs.***	***Amount Rs.***
	Credit balance as per Passbook		2,500
Add :	Bank charges has not been entered in the cash book	60	
	Cheques paid into bank but not credited by the banker	1,000	
	Dishonored cheque not entered in cash book	600	1,660
			4,160
Less :	Cheques issued but not presented for payment	700	
	Dividends collected by bank not entered in cash book	400	1,100
	Balance as per Cash Book		**3,060**

Illu.6 : From the following particulars prepare a bank reconciliation statement showing the balance as per cash book on 31-12-2003.

(a) The following cheques were paid into bank in December, 2003 but were credited by the Bank in January 2004.

Prem Nath	**Rs.350**
Shyam Lal	**Rs.250**
Ram Lal	**Rs.200**

(b) The following cheques were issued by the firm in December 2003, but were presented for payment in January 2004.

Suresh	**Rs.400**

Ramesh Rs.450

(c) A cheque for Rs.100 which was received from a customer was entered in the bank column of the cash book in December 2003, but was omitted to be banked in the month of December.

(d) The pass book shows a credit of Rs.100 for interested and a debit of Rs.20 for bank charges.

(e) Interest on investment Rs.500 collected by bank appeared in the pass book.

(f) The bank balance as per pass book was Rs.6,200 on 31st December 2003.

Solution :

Bank Reconciliation Statement

		Rs.	Rs.
Bank balance as per pass book			**6,200**
Add:	1. Cheques deposited but not credited (Rs.350 + 250 + 200)	800	
	2. Cheque entered in cash book but not sent to bank	100	
	3. Bank charges not entered in cash book	20	920
			7,120
Less:	1. Cheques issued, but not presented for payment	850	
	2. Interest credited in pass book only	100	
	3. Interest on investment entered in pass book only	500	1,450
	Balance as per Cash Book		**5,670**

Illu.7 : On 31st March, 2007 Pass Book of Kiran showed a credit balance of Rs.37,400 in Account No. 1 which did not agree with his cash book. On scrutiny, the following discrepancies were located:

(i) Three cheques totaling Rs.15,200 were deposited into his account, of which only those for Rs.9,800 were credited before 31st March .

(ii) Kiran has issued two cheques of Rs.1,200 and Rs.1,400. Only the first cheque was presented for payment before 31st March.

(iii) The banker paid electricity bill of Rs.750; telephone bill of Rs.900 as per the standing instructions of Kiran.

(iv) Pass book shows entries of Rs.50 towards charges and Rs.75 towards interest.

(v) A cheque issued for Rs.300 against a/c No.1 has wrongly entered in A/c 2 by the banker.

(vi) The pass book has no entry for the cheque of Ram prasad for Rs.270 as it has been dishonoured.

(vii) Payments side bank column has been under cost by Rs.20.

Prepare a Bank Reconciliation Statement as on 31st March 2007.

Solution :

Bank Reconciliation Statement of Kiran as on 31st March, 2007

	Particulars	**Rs.**	**Rs.**
	Balance as per Pass Book		37,400
Add :	Cheques deposited but not credited in the pass book	5,400	
	Electricity bill and telephone bill paid by bank entered in the pass book only	1,650	
	Bank charges debited in the pass book only	50	
	Payments side of the cash book undercaste	20	7,120
			44,520
Less :	Cheques issued but not presented for payment	1,400	
	Interest credited in the pass book only	75	
	Cheques issued but not entered in the pass book	300	
	Dishonoured cheques not entered in the pass book	270	2,045
	Balance as per cash book		**42,475**

Illu.8 : From the following particulars, ascertain the pass book balance of Phani Kumar as on 31-12-2007:

(a) Bank Overdraft as per Cash Book Rs.16,340.

(b) Interest on Overdraft debited in pass book Rs.1,000

(c) Bank charges debited in pass book only Rs.60.

(d) Cheques issued but not cashed up to 31-12-2007 Rs.1,500.

(e) Interest on investments recorded in Pass book only Rs.1,000.

(f) Cheque paid into Bank but not cleared before 31-12-2007 Rs.2,500.

Solution :

Bank Reconciliation Statement of Kumar on 31-12-2007

	Particulars	Rs.	Rs.
	Overdraft balance as per Cash Book		16,340
Add :	i. Interest on overdraft debited only in pass book	1,000	
	ii. Bank charges debited only in pass book	60	
	iii. Cheque paid upto bank but not cleared	2,500	3,560
			19,900
Less :	i. Cheques issued but not cashed upto 31-12-07	1,500	
	ii. Interest on investment credited in pass book	1,000	2,500
	Overdraft balance as per pass book		**17,400**

Illu.9 : On the basis of the following information, ascertain the bank balance as per Pass book No: 1.

Bank overdraft as per Cash book No: 1 account Rs.4, 500

(a) Rs.2,000 paid in No: 1 account stands wrongly credited in Pass Book No: 2 account

(b) A payment of Rs.200 from Account No: 2 has been wrongly debited by bankers in Account No: 1

Solution :

Bank Reconciliation Statement

	Particulars	Amount Rs.
	Bank overdraft as per Cash Book No. 1	**4,500**
Add:	Wrongly credited in pass book No.2 a/c	2,000
Add:	Wrongly debited in Pass book a/c No. 1	200
	Bank overdraft balance as per passbook no. 1	**6,700**

Illu.10 : From following particulars that appear in the Bank Pass Book of Randal as on 31st December 2007, prepare a bank Reconciliation statement and find out the balance.

		Rs.
(a)	**Overdraft as per cash book on 31-12-2007**	**10,540**
(b)	**Interest on overdraft for six months**	**240**
(c)	**Interest on investments collected by bank**	**300**
(d)	**Bank charges for the December 2007**	**60**
(e)	**Cheques drawn (issued) but not cashed by the customers prior to December 2007**	**2,500**
(f)	**Cheques paid into the bank, but not collected before 31st December 2007**	**4,200**
(g)	**A Bill receivable for Rs.1000 (discounted with the bank in November) was dishonoured on December 31st.**	**13,000**

Solution :

Bank Reconciliation statement of Randal & Sons as on 31-12-2007

	Rs.	Rs.
Overdraft as per cash book		**10,540**
Add (b) Interest on over draft	240	
(d) Bank charges entered in pass book	60	

(f) Cheques sent for collection not cleared	4,200	
(g) Dishonoured bills receivable entered in pass book	1,000	5,500
		16,040
Less (c) Interest on investments collected by the Bank	300	
(e) Cheques issued but not presented for payment	2,500	2,800
Over draft as per pass book		**13,240**

Illu.11 : Prepare a bank reconciliation statement from the following particulars as on 31-3-2005.

		Rs.
(i)	**Credit balance as per cash book**	**4,000**
(ii)	**Cheques deposited but not collected**	**600**
(iii)	**Cheques received but not sent to bank**	**500**
(iv)	**Credit side of bank column cast short**	**50**
(v)	**Insurance premium debited in pass book only**	**300**
(vi)	**Bank charges debited twice in pass book**	**10**
(vii)	**Cheques issued but not presented**	**400**
(viii)	**Bills directly collected by bank**	**200**
(ix)	**Bills discounted dishonoured**	**300**

Solution :

Bank Reconciliation Statement on 31-3-2005

Particulars	Rs.	Rs.
Overdraft balance of Cash Book		**4,000**
Add: 1. Cheques deposited but not collected	600	
2. Cheques received but not sent to bank	500	
3. Credit side of bank column cast short	50	
4. Insurance premium debited in passbook only	300	
5. Bank charges debited twice in pass book	10	

	6. Bills discounted dishonoured	300	1,760
			5,760
Less:	1. Cheques issued but not presented	400	
	2. Bills directly collected by bank	200	600
	Overdraft Balance as per pass book		**5,160**

Illu.12 : From the following information, prepare Mr. Ganesh 's Bank Reconciliation statement as on 31-12-2005.

(a) Bank overdraft as per pass book Rs.16, 500

(b) Cheques issued but not presented for payment Rs.8, 750

(c) Cheques deposited with the Bank but not collected Rs.10, 500

(d) Cheques recorded in the Cash Book but not sent to the Bank for collection Rs.2, 000

(e) Payments received from Customers direct by the bank Rs.3, 500

(f) Bank charges debited in Pass Book Rs.20

(g) Premium on life policy of Mr. Ganesh paid by the bank on standing advice Rs.180.

(h) A bill for Rs.3, 000 (discounted with the bank in November) dishonoured on 31-12-2005 and noting charges paid by the bank Rs.10.

Solution :

		Rs.	Rs.
Bank overdraft as per pass book			**16,500**
Add :	(a) Cheques issued, but not presented for payment	8,750	
	(b) Direct payments made by the customers	3,500	12,250
			28,750
Less:	(a) Cheques deposited, but not collected	10,500	
	(b) Cheques recorded in cash book, but not send to bank for collection	2,000	
	(c) Bank charges debited only in pass book	20	
	(d) Premium on life insurance policy paid by		

	the bank	180	
	(e) Noting charges entered in pass book only	10	12,710
Overdraft as per cash book			**16,040**

Illu.13 : On 31.1.2004 the pass book of Ram Prasad shows on debit balance of Rs.41,000. Prepare Bank Reconciliation statement with the following information :

(a) Cheques amounted Rs.15,600 were issued on 27th January of which Rs.11,000 were cashed upto 31st January.

(b) Wrong debit of Rs.800 has been given by the banker in the pass book.

(c) A cheque of Rs.200 was credited in pass book but was not recorded in cash book.

(d) Cheques amounting to Rs.21,000 were deposited in Bank, but cheques for Rs.7,400 have been credited in the pass book on 21.1.2004.

(e) A cheque for Rs.1,000 returned dishonoured and was debited in pass book only.

(f) Interest and bank cahrges Rs.100 were debited only in pass book.

(g) A cheque of Rs.500 debited in cash book was not sent to Bank.

Solution :

Bank Reconciliation Statement of Prabhu as on 31-1-2004

		Rs.	**Rs.**
Overdraft balance as per Pass Book			41,000
Add:	1. Cheques issued, but not presented for payment (Rs.15,600 – 11,000)	4,600	
	2. Chque credited in Pass Book, but not recorded in Cash book	200	4,800
			45,800
Less:	1. Wrong debit given in the pass book	800	
	2. Cheques deposited but not collected	7,400	
	3. Dishonured cheque entered in Pass Book only	1,000	
	4. Interest and Bank charges debited in Pass Book only	100	

	5. Cheque debited in Cash Book, not sent to Bank for collection	500	9,800
	Overdraft balance as per Cash Book		**36,000**

Illu.14 : From the following particulars, prepare a Bank reconciliation statement of Mr. Sastry:

(a) Overdraft as per Pass Book on 31-3-2004 Rs.12, 900

(b) Cheque issued before 31 March but not presented for payment Rs.1, 200

(c) Cheques paid into the bank but not cleared and credited before 31-3-2004 amounted Rs.3, 2000

(d) Interest on overdraft amounting to Rs.175 debited only in the pass book

(e) Interest on investment Rs.700 was collected by the bank and credited in the Pass Book only

(f) Rs.950 in respect of a dishonoured cheque entered in the pass book but not in the Cash book.

Solution :

		Rs.	Rs.
Overdraft as per Pass Book			12,900
Add:	(i) Cheque issued, but not presented for payment	1,200	
	(iii) Interest on investments collected by the bank	700	1,900
			14,800
Less:	(i) Cheques paid into bank, but not cleared	3,200	
	(ii) Interest on overdraft not entered in cash book	175	
	(iii) Dishonoured cheque entered in Pass Book only	950	4,325
Over Draft balance as per Cash Book			**10,475**

Illu.15 : On 1st July 2007, the Pass Book of Anvesh showed an overdraft of Rs.7,540. On scrutiny with cash book, the following discrepancies were found:

i) Rs.3,200 worth cheques deposited are not credited by the banker.

ii) Pass book shows an interest of Rs.57 on overdraft.

iii) Rs.1,500 worth of cheques issued are still not presented for payment.

Prepare Bank Reconciliation statement.

Solution :

Bank Reconciliation Statement of Anvesh as on 1st July, 2007

	Particulars	**Rs**	**Rs.**
	Overdraft as per pass Book		7,540
Add :	Cheques issued but not presented for payment		1,500
			9,040
Less :	Cheques deposited but not credited by the bank	3,200	
	Interest on overdraft debited in the pass book	57	3,257
	Overdraft as per cash book		**5,783**

Illu.16 : On 31-12-2007 the pass books of Prabhu showed a debit balance of Rs.41,000. Prepare a bank reconciliation statement with the following information:

a) Cheques amounting to Rs.15,600 were drawn on 27-1-2007 out of which cheques for Rs.11,000 were cashed up to 31-1-2007.

b) A wrong debit of Rs.800 has been given by the Bank in pass book.

c) A cheque for Rs.200 was credited only in the pass book.

d) Cheques accounting to Rs.21,000 were deposited for collection. But cheques for Rs.7,400 has been credited in the pass book on 5-2-2007.

e) A cheque for Rs.1,000 returned dishonoured and were debited in pass book only.

f) Interest and bank charges Rs.100 were not recorded in cash book.

g) A cheque of Rs.500 debited in the cash book omitted to be banked.

h) A wrong credit has been given by the banker for Rs.500 in the pass book.

Solution :

Bank Reconciliation statement of Prabhu as on 31-12-2007

	Particulars	**Rs.**	**Rs.**
Overdraft balance as per Pass Book			41,000
Add:	Cheques issued but not presented for payment (Rs.15,600 – 11,000)	4,600	
	Cheque credited only in pass book	200	
	Wrong credit given only in pass book	500	5,300
			46,300
Less:	Wrong debit given in pass book	800	
	Cheques deposited but not yet collected	7,400	
	Cheque returned dishonoured debited in pass book only	1,000	
	Interest and bank charges entered in pass book only	100	
	Cheque debited in cash book but omitted to be sent to bank	500	9,800
Overdraft balance as per Cash Book			**36,500**

Illu.17 : From the following particulars, prepare a Bank reconciliation statement of Mr. Sastry.

a) Overdraft as per pass book on Marc 31, 2006 was Rs.12,900.

b) Cheque issued before that date but presented for payment after that date amounted to Rs.1,200

c) Cheques paid into the bank but not cleared and credited before 31-3-2006 amounted to Rs.3,200.

d) Interest on overdraft amounting to Rs.175 debited only in the pass book.

e) Interest on investments Rs.700 was collected by the bank and credited in the pass book but not entered in the cash book.

f) Rs.950 in respect of a dishonoured cheque entered in the pass book but not in the cash book.

Solution :

Bank Reconciliation statement as on 31-3-2006

Particulars		Rs.	Rs.
Overdraft balance as per Pass Book			12,900
Add:	1) Cheques issued but not presented for payment	1,200	
	2) Interest on Investment	700	1,900
			14,800
Less:	1) Cheques deposited but not yet cleared	3,200	
	2) Interest on overdraft	175	
	3) Dishonoured cheque entered only in pass book	950	4,325
Overdraft as per Cash Book			**10,475**

Illu.18 : On 31st January, 2007 the pass book showed debit balance of Rs.12,300. Prepare a Bank Reconciliation Statement with the following information.

- **(i) Cheques amounting to Rs.4,680 were drawn on 25th January, 2007 out of which cheques for Rs.3,300 were cashed up to 31st January, 2007**
- **(ii) A wrong debit of Rs.240 has been given by bank in pass book**
- **(iii) A cheque for Rs.60 was credited in Pass Book but was not recorded in Cash Book.**
- **(iv) Cheques amounting to Rs.6,300 were deposited for collection. But cheques for Rs.2,220 have been credited in Pass Book at 5th February, 2007.**
- **(v) A cheque for Rs.300 returned dishonoured and was debited in Pass Book.**
- **(vi) Interest and bank charges amounted to Rs.30 were not accounted in Cash book.**
- **(vii) A cheque received, entered in Cash Book but not sent to Bank for collection Rs.150.**

Solution :

Bank Reconciliation Statement as on 31st January, 2007

	Particulars	**Rs.**	**Rs.**
	Overdraft balance as per pass book		12,300
Add :	Cheques issued but not presented for payment	1,380	
	Cheques credited in the pass book but not recorded in the Cash book	60	1,440
			13,740
Less :	Wrong debit given by bank in pass book	240	
	Cheques deposited for collection but not entered in the pass book	2,220	
	Cheque dishonoured but not entered in the cash book	300	
	Interest and bank charges debited in the pass book only	30	
	Cheque received entered in the cash book but not sent to bank for collection	150	2,940
			10,800

Illu.19 : From the following particulars of Murali Traders, prepare a Bank Reconciliation statement as on 31st July, 2007.

(a) Overdraft as per pass book on 31st July, 2007 Rs.42,100

(b) Cheques issued for Rs.7,500 and Rs.3,500 respectively on 25th July were encashed on 4th August.

(c) Cheques deposited on 30th July but not credited Rs.5,000

(d) A cheque for Rs.2,000 received from a customer was entered in the bank column of the cash book on 29th July but not sent to bank for collection till 3rd August.

(e) Electricity bill of Rs.150, paid by the Bank as per standing instructions on 20th July was not entered in the cash book.

(f) A credit for interest Rs.50 and a debit for bank charges Rs.10 appear in pass book only.

(g) Debit side of the bank column of the cash is over caste by mistake Rs.1,000

Solution :

Bank Reconciliation Statement on 31-7-2007

	Particulars	Rs.	Rs.
	Overdraft as per pass book		42,100
Add :	(a) Cheques issued, but not presented for payment (Rs,7,500 + 3,500)	11,000	
	(b) Interest not entered in Cash Book	50	11,050
Less :	(a) Cheques presented, but not collected	5,000	
	(b) Cheque not sent to bank for collection	2,000	
	(c) Electricity bill paid by bank, not entered in cash book	150	
	(d) Bank charges not appeared in cash book	10	
	(e) Wrong totalling of cash book	1,000	8,160
	Overdraft as per Cash book		44,990

7.5 QUESTIONS

A. Short Answer Questions

1. Why is a Bank Reconciliation Statement?
2. Why is a Bank Reconciliation Statement Prepared?
3. What is pass book?

B. Essay Questions

1. What is a Bank Reconciliation Statement How is it prepared?
2. Give reasons for the difference between the Balance as per Cash Book and that as per Pass Book on a Particular day.
3. What are the usual reasons for disagreement between the Cash Book Balance and the Pass Book balance?
4. Explain the procedure in the preparation of Bank Reconciliation Statement.

7.6 EXERCISES

1. From the following particulars ascertain the balance that would appear in the pass book of Mr. Rajalingam as on 31st December, 2000.
   - i. The cash book showed a credit balance of Rs.18,500
   - ii. Out of the cheques worth Rs.30,000 issued prior to this data, it was found that the bank had paid only cheque worth Rs.14,500.
   - iii. There was also a credit in passbook for an amount by our customer direct into the Bank Rs.11,610.
   - iv. The bank had also collected the bill for Rs.8,200 which fell due on 31-12-2000.
   - v. Rs.950 in respect of a cheque paid in but dishonoured appear in the pass book only.
   - vi. Cheques paid in before 31-12-2000 amounted to Rs.23,000 but the bank had collected and credit cheque worth Rs.9,000.
   - vii. Interest on investment collected by Bank and credited in the pass book amounts to Rs.95.
   - viii. There was an entry on the debit side in the pass book for bank charges Rs.25.

   [Ans.: Bank Balance as per Pass Book Rs.1,930]
2. The bank balance of Venkatachalam as per his Bank Pass Book on 30th September, 2003 was Rs.6,300 (credit balance). On comparing the Pass Book with the Cash Book, the following details were made known.
   - a. Cheques received from Joseph Rs.420 and Chander for Rs.310 were entered in Pass Book on 3rd October, 2003, though deposited by venkatachalam on 30th September, 2003.
   - b. Cheques issued on 28th September, 2003 by Venkatachalam to Raj, Reddy and Rao for Rs.430, Rs.350, Rs.570 respectively were entered in the Pass Book on 3rd, 4th and 6th October, 2003 respectively.
   - c. The Pass Book showed a credit for Rs.1,000 representing a direct payment made by a customer of Venkatachalam, which was not recorded in Cash Book up to 30th September, 2003.
   - d. A Bill payable for Rs.500 was duly paid off by the Bank on 30th September, 2003 according to the standing instructions of Venkatachalam but this was not entered in Cash Book.

e. Bank Charges of Rs.150 were debited in Pass Book.

f. An amount of Rs.300 interest on investments was collected by the Bank and credited in Pass Book only.

Prepare Bank Reconciliation Statement as on 30th September, 2003 and show the Bank balance as per Cash Book.

[Ans: Bank Balance as per Cash Book Rs.5,030]

3. From the following particulars, ascertain the bank balance of Mr.Ramesh as per the bank pass book on 31-12-2002.

a. Bank overdraft as per cash book on 31-12-2002 was Rs.6,000.

b. Interest on overdraft for six months ending 31-12-02 Rs.200 is debited in the pass book.

c. Cheques issued but not cashed before 31-12-02 amounted to Rs.1,500.

d. Cheques deposited into bank but not cleared and credited before 31-12-02 amounted to Rs.2,500.

e. Interest on Investments collected by bank and posted in the pass book amounted to Rs.1,800.

f. Bills receivable which was discounted with the bank in November, 02 was dishonoured on 31-12-02 and bank had debited Rs.1,050 including Rs.50 for bank charges.

g. The bank column of cash book receipts side was overcast by Rs.1,000 in December, 2002.

h. Bank had wrongly debited Mr. Ramnath for Rs.500 on 10-12-02 on account of dishonour of cheque pertaining to Mr. Ramgopal but rectified the said mistake on 30-12-02.

[Ans.: Overdraft balance as per pass book Rs.7,450]

4. Prepare the bank reconciliation statement as on 30-6-03 from the following particulars.

(i) Debit balance as per pass book on 30-6-03 Rs.15,000

(ii) A cheque for Rs.200 was deposited on 25-6-03 but was not recorded in cash book.

(iii) Cheques of Rs.17,000 were issued but, of these Rs.10,000 worth were presented before 30-6-03.

(iv) Cheques received on 20-6-03 Rs.2,000 were not sent to bank but noted in cash book.

(v) Cheques worth Rs.10,000 were sent to bank for collection. Of these Rs.2,000 were credited on 8-7-03 and Rs.1,000 credited on 10-7-03. Remaining cheques were credit before 30-6-03.

(vi) Bank paid Rs.300 on behalf of customer to Trade Association. This was not recorded in cash book.

(vii) Interest on overdraft Rs.800 was not entered in cash book.

(viii) Bank expenses Rs.40 were recorded twice in cash book and another bank charge for Rs.35 was not recorded in the cash book.

(ix) Cash book credit side bank column was undercost by Rs.1,000.

[Ans.: Overdraft balance as per Cash Book Rs.15,105]

5. From the following particulars prepare Bank Reconciliation Statement as on 31-3-2002.

(i) Credit balance as per Cash book Rs.1,500

(ii) Interest charged by the bank Rs.50.

(iii) Out of cheques paid into the bank Rs.2,500, only cheques for Rs.1,875 were cleared and credited by bank.

(iv) Two cheques of Rs.750 and Rs.1,500 were issued but out of them only one cheque of Rs.750 was presented for payment up to 31st March.

(v) Dividend of Rs.450 were collected by bank but were not appearing in cash book.

[Ans.: Overdraft balance as per Pass Book Rs.225]

6. The Cash Book (Bank Columns) and the Pass Book of Umasankar are given below. Prepare Bank Reconciliation Statement as on 31st December, 2005.

Cash Book (Bank Column)

Dr. **Cr.**

		Rs.			**Rs.**
2005			2005		
Dec 24	To Balance b/d	360	Dec 29	By Mahesh	15
Dec 27	To Prasad	60	Dec 29	By Ganesh	145
Dec 28	To Giridhar	120	Dec 29	By Viswanath	35
Dec 28	To Sankar	42	Dec 31	By Balance c/d	387
		582			**582**
Jan 1	To Balance b/d	387			

Bank Pass Book

Dr. **Cr.**

		Rs.			**Rs.**
2005			2005		
Dec 31	To Ganesh	145	Dec 25	By Balance b/d	360
Dec 31	To Balance c/d	400	Dec 28	By Prasad	60
			Dec 29	By Giridhar	120
			Dec 31	By Interest	5
		545			**545**
			2006 Jan 1	By Balance b/d	400

7.7 SUGGESTED BOOKS

1. Agarwala, A.N., Amitabha Mukherjee, Mohammed Hanif, **Principles and Practice of Accountancy,** Kitab Mahal Agencies, New Delhi.
2. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
3. Chopde, L.N., & Choudhari, D.H., **Accountancy,** Sheth Publishers, Pune
4. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
5. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
6. Prasad, G., Uttama Durga Devi., A., **Financial Accounting, Part – I,** Jai bharath Publishers, 2006
7. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
8. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter – 8

Trial Balance

Objectives :

After thorough study of this chapter, we should be able to

- Meaning and objectives of trial balance
- Understand the methods in the preparation of trial balance.

Structure :

8.1 Introduction
8.2 Preparation of Trial balance
8.3 Methods are used the Preparation of Trial balance
8.4 Questions
8.5 Exercises
8.6 Suggested Readings

8.1 INTRODUCTION

An important aspect of the double entry accounting system is that for each transaction there is an equal amount of debit and credit in two or more accounts. Therefore, the total of all the entries on the debit side of the account must be equal to the total of all the entries on the credit side of the accounts. For this purpose, a statement known as a trial balance showing the balances of various accounts is prepared. The trial balance is usually prepared just before the preparation of final accounts (profit and loss account and balance sheet) in order to check the arithmetical accuracy of the transaction recorded into the ledger accounts.

According to J.R. Batliboi ``Trial balance is a statement prepared with the debit and credit balances of accounts to test the arithmetical accuracy of books.''

8.1.1 Objectives

The following are the objectives of preparing a trial balance.

1. **To ascertain the arithmetical accuracy of ledger accounts :** Trial balance helps in ascertaining the arithmetical accuracy of the accounting entries. It indicates that equal debit and credit amounts have been recorded in the ledger accounts and the balances have been calculated correctly.
2. **To help in locating errors :** When the total of trial balance does not tally, it indicates that some errors have been committed. On the basis steps can be taken to locate the errors committed in the preparation of trial balance.
3. **To help in the preparation of final accounts :** Trial balance contains the list of all the ledger accounts. This helps in the preparation of final accounts. All revenue and expenses accounts appear in the trial balance, which are transferred to the trading and profit and loss accounts. All assets, liabilities, and capital accounts are transferred to the balance sheet. Together, they constitute the final accounts.

8.2 PREPARATION OF TRIAL BALANCE

The final accounts are prepared with the help of trial balance, which shows all the ledger balances at the end of accounting period. Generally, the trial balance is given and there is no difficulty in identifying the items of income expenses, assets and liabilities. However, sometimes the trial balance is not correctly given. In such a case, it has to be prepared. T can be easily ascertained whether a particular account has a debit balance or a credit balance. The problem arises when a list of balances is given but it is not indicated whether the account has a debit or a credit balance. Under these circumstances, the nature of each balance has to be ascertained before the preparation of trial balance. The rules of debit and credit help in the preparation of trial balance. A few guidelines, which help in the preparation of trial balance are as follows.

(i) All accounts of expenses and losses have debit balance.

(ii) All accounts of income and gains have a credit balance.

(iii) All accounts of liabilities have a credit balance

(iv) The capital account usually has a credit balance.

The format of a trial balance is as shown.

Trial Balance

S.No.	Name of the Account	Debit balances Rs.	Credit Balances Rs.

The first column is the serial number, the second column is the title or the name of the account and the third and fourth columns are the debit and credit columns respectively, representing the balance of each account.

8.3 METHODS ARE USED IN THE PREPARATION OF TRIAL BALANCE :

The following two methods are used in the preparation of trial balance.

1. Balance Method
2. Total Amounts Method

8.3.1 Balance Method :

Under this method, all the accounts showing debit balances in the ledger accounts are put on the debit side of the trial balance and the accounts showing credit balances are put on the credit side of the trial balance. After this, the debit and credit columns of the trial balance are totalled. The total of two the sides must be equal.

8.3.2 Total amounts method :

Under this method, the total of debits and credits, instead of the balances of each account, are shown in the trial balance. A trial balance by this method, can be prepared immediately after the completion of posting from the books of original entry to the ledger.

Illu.1 : Prepare the Trial Balance from the following:

	Rs.
Purchases	**82,800**
Buildings	**30,000**

Wages	**68,000**
Fuel	**2,000**
Creditors	**18,000**
Bills payable	**700**
Discount received	**100**
Sales	**1,93,000**
Insurance	**1,300**
Income Tax	**3,700**
Opening stock	**18,000**
Commission paid	**300**
Debtors	**19,000**
Bad debts	**800**
Salaries	**25,000**
Printing and stationary	**7,600**
Postage and Telegrams	**3,400**
Bills receivable	**6,900**
Cash at bank	**13,000**
Capital	**70,000**

Solution :

Trial Balance

Debit Balances	Rs.	Credit Balances	Rs.
Purchases	82,800	Creditors	18,000
Buildings	30,000	Bills payable	700
Wages	68,000	Discount received	100
Fuel	2,000	Sales	1,93,000
Insurance	1,300	Capital	70,000
Income tax	3,700		
Opening stock	18,000		
Commission paid	300		

Debtors	19,000		
Bad debts	800		
Salaries	25,000		
Printing and Stationery	7,600		
Postage and Telegrams	3,400		
Bills Receivable	6,900		
Cash at Bank	13,000		
	2,81,800		**2,81,800**

Illu.2 : From the following particulars prepare Trial Balance:

	Rs.		**Rs.**
Capital	**60,000**	**Repairs**	**500**
Drawings	**6,000**	**Bad debts**	**1,000**
Purchases	**25,000**	**Discount allowed**	**1,000**
Debtors	**4,000**	**Commission received**	**4,000**
Creditors	**3,000**	**Insurance**	**1,000**
Bills payable	**2,000**	**General expenses**	**2,000**
Sales	**50,000**	**Depreciation**	**3,000**
Carriage inwards	**1,000**	**Furniture**	**10,000**
Carriage outwards	**2,000**	**Land and buildings**	**32,000**
Wages	**5,000**	**Bills receivable**	**3,000**
Salaries	**10,000**	**Fixed deposit with SBI**	**6,000**
Advertisement	**1,000**	**Opening stock**	**4,000**
Power	**1,000**		
Postage	**500**		

Solution :

Trial Balance as on….

Particulars	Rs.	Rs.
Capital		60,000
Drawings	6,000	
Purchases	25,000	
Debtors	4,000	
Creditors		3,000
Bills payable		2,000
Sales		50,000
Carriage inwards	1,000	
Carriage outwards	2,000	
Wages	5,000	
Salaries	10,000	
Advertisement	1,000	
Power	1,000	
Postage	500	
Repairs	500	
Bad debtors	1,000	
Discount allowed	1,000	
Commission received		4,000
Insurance	1,000	
General expenses	2,000	
Depreciation	3,000	
Furniture	10,000	
Land and buildings	32,000	
Bills Receivable	3,000	
Fixed deposit with SBI	6,000	
Opening stock	4,000	

	1,19,000	**1,19,000**

Illu.3 : The following are the balances extracted from the books of Ramu on 31-12-2006. Prepare Trial Balance.

	Rs.
Capital	**30,000**
Drawings	**5,000**
Furniture	**2,600**
Bank Overdraft	**4,200**
Creditors	**11,000**
Premises	**20,000**
Stock	**22,000**
Debtors	**18,000**
Rent (Cr.)	**1,000**
Discount (Dr.)	**1,600**
Discount (Cr.)	**2,000**
Purchases	**1,10,000**
Sales	**1,50,000**
Returns inwards	**2,000**
Wages	**2,000**
Salaries	**9,000**
General expenses	**4,000**
Commission	**2,200**
Carriage	**1,800**
Reserve for bad and doubtful debts	**2,000**

Solution :

Trial Balance as on 31-12-2006

Debit balances	**Rs.**	**Credit balances**	**Rs.**
Drawings	5,000	Capital	30,000
Furniture	2,600	Bank Overdraft	4,200
Premises	20,000	Creditors	11,000
Stock	22,000	Rent	1,000
Debtors	18,000	Discount	2,000
Purchases	1,10,000	Sales	1,50,000
Return inwards	2,000	Reserve for bad and doubtful debts	2,000
Wages	2,000		
Salaries	9,000		
General expenses	4,000		
Commission	2,200		
Carriage	1,800		
Discount	1,600		
	2,00,200		**2,00,200**

Illu.4 : From the following particulars prepare Trial Balance

	Rs.
Capital	**65,000**
Drawings	**5,000**
Salaries	**12,000**
Sales	**35,000**
Purchases	**25,000**
Debtors	**9,600**
Creditors	**12,000**
Carriage inwards	**2,000**

Wages	**5,000**
Advertisement	**3,000**
Bills payable	**5,000**
Carriage out	**1,500**
Commission received	**2,500**
Power	**1,500**
Postage	**500**
Repairs	**1,200**
Insurance	**1,500**
General Expenses	**3,000**
Depreciation	**3,000**
Discount received	**500**
Furniture	**10,000**
Land and Buildings	**25,000**
Bills receivable	**3,000**
Opening stock	**5,000**

Solution :

Trial Balance

Account name	**Debit Rs.**	**Credit Rs.**
Capital		65,000
Drawings	5,000	
Salaries	12,000	
Sales		35,000
Purchases	25,000	
Debtors	9,600	
Creditors		12,000
Carriage inwards	2,000	
Wages	5,000	

Advertisement	3,000	
Bills payable		5,000
Carriage out	1,500	
Commission received		2,500
Power	1,500	
Postage	500	
Repair	1,200	
Bad debts	2,000	
Discount allowed	1,200	
Insurance	1,500	
General expenses	3,000	
Depreciation	3,000	
Discount received		500
Furniture	10,000	
Land and buildings	25,000	
Bills receivable	3,000	
Opening stock	5,000	
	1,20,000	**1,20,000**

8.4 QUESTIONS

1. What is Trial balance?
2. What are the advantages in the preparation of Trial Balance?
3. What are various methods in the preparation of trial balance?
4. ``Trial balance is a statement prepared with the debit and credit balances of accounts to test the arithmetical accuracy of books.'' Discuss

8.5 EXERCISES

1. From the information given below, prepare a Gross Trial Balance as on 31st December, 2006

Account	Debit Rs.	Credit Rs.
Capital a/c		25,000
Drawings a/c of Proprietor	5,000	
Purchases a/c	85,000	
Sales a/c		1,80,000
Purchase Returns a/c		2,000
Sales returns a/c	1,500	
Commission a/c	700	200
Interest a/c	300	
Office Expenses a/c	7,500	
Sundry debtors a/c	1,35,000	1,12,700
Sundry Creditors a/c	50,000	1,25,000
Cash a/c	2,00,000	25,000
Bank a/c	85,000	1,00,000

[Ans.: Trial balance Total Rs.5,70,000]

2. Prepare Trial balance from the following balances extracted from the books of accounts of Jayashree Traders as on 31st March, 2006

	Rs.		Rs.
Capital	1,50,000	Goodwill	1,00,000
Sundry Debtors	35,000	Office Expenses	10,000
Sundry Creditors	42,000	Outstanding expenses	15,000
Machinery	21,000	Interest received	3,200
Furniture	19,000	Cash balance	1,800
Sales	2,00,000		

Purchases	1,16,000		
Opening stock (1-4-2005)	1,07,400		

[Ans.: Trail balance Total Rs.4,10,200]

3. From the following balances given below extracted from the books of Randhir, prepare a Trial balance as on 31st December, 2006

	Rs.		**Rs.**
Cash in hand	200	Rent and Rates	2,000
Cash at Bank	2,500	Purchase returns	200
Capital account	50,000	Sales returns	300
Drawings	5,000	Plant and Machinery	15,000
Sales	35,000	Loan (taken)	20,000
Purchases	30,000	Furniture	5,000
Sundry Debtors	32,000	Opening stock	7,500
Sundry Creditors	15,000	Travelling expenses	7,000
Discount allowed	500	Carriage outward	10,000
Commission received	1,000		
Wages	3,000		
Salaries	1,200		

[Ans.: Trial balance Total Rs.1,21,200]

8.6. SUGGESTED BOOKS

1. Agarwala, A.N., Amitabha Mukherjee, Mohammed Hanif, **Principles and Practice of Accountancy,** Kitab Mahal Agencies, New Delhi.
2. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
3. Chopde, L.N., & Choudhari, D.H., **Accountancy,** Sheth Publishers, Pune
4. Jain, S.P., Narang, K.L., **Accoutancy, Part - I,** Kalyani Publishers
5. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005

6. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
7. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
8. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter – 9

FINAL ACCOUNTS - I

Objectives :

After study of this unit we should be able to

- Know the meaning of financial statements
- Know how to prepare trading and profit and loss account
- Understand the meaning of balance sheet
- Know the methods in the preparation of balance sheet

Structure :

9.1 Introduction
9.2 Trading Account
9.3 Profit and Loss account
9.4 Balance Sheet
9.5 Arrangement of Assets and Liabilities
9.6 Important points regarding to Balance Sheet
9.7 Questions
9.8 Exercises
9.9 Suggested Readings

9.1 INTRODUCTION

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. While the financial position is judged by means of preparing a balance sheet of the business. The two financial statements together (i.e., Incomes Statement and the Balance sheet) are termed as Final Accounts. As term indicates, Final Accounts means accounts which are prepared at the final stage to give the financial position of the business.

9.1.1. Trading and Profit and 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 accounts contain the items of Income and Expenses relating to a particular period. The account is prepared in two parts (I) Trading Account, and (ii) Profit and Loss account.

9.2 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 away. 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.

9.2.1 Equation for Preparing Trading Account :

The following equation can be derived for preparing 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)
Gross Profit	(Sales + Closing stock) – (Opening stock + Purchases + Direct expenses)

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 of

For the year ending ….

Dr. **Cr.**

Particulars	**Rs.**	**Particulars**	**Rs.**
To Opening Stock	X x x	By Sales Less Returns	X x x
To Purchases less returns	X x x	By Closing stock	X x x
To Direct expenses	X x x	By Gross Loss *	X x x
To Gross Profit *	X x x		
	X x x		X x x

- Only one figure will be appear

9.2.4 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 in 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 business 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 amount of closing stock is shown on the credit side of the Trading Account 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 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. This valuation is done because of the accounting convention of `conservatism' according to which expected losses are to be taken into account while not expected profits.

2. **Purchases :** The term `Purchases' includes both cash and credit purchase 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 purpose of plant, furniture etc., are not included in the purchases of goods. Similarly, purchase of article 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. Similarly, in case certain goods are given by way of free samples etc., the value of such goods should be charged to advertisement account and deducted from purchases. 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 back to the suppliers. In other words, purchases will be taken to the Trading Account after deducting purchases returns and goods as drawing 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 records sale of those goods which have been sold at the end of the financial year but have not yet been delivered. The sale 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 buildings or similar other articles 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 expenses 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 ad salaries' to be charged to trading account while `salaries and wages' to be charged to the profit and loss account. Wages paid for purchases of an asset for long term use in the business e.g., 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 ``Cartage 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 in'' are used as synonymous terms. Similarly carriage out or ``Carriage outward'' are also the 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 coal mine to its owner for taking out the coal from the coal mine. Similarly, royalty is paid to the owner of a patent for using his right. It is generally taken as a direct expenses 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 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.

9.2.5 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 these accounts which relate to the Balance sheet.

The principle of passing a 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 debt balance. The Trading Account will have to be debited. The closing entries are passed in the Journal Proper. The different closing entries to be passed by the Accountant for preparing a Trading Account are being explained below.

9.2.6 Importance of the Trading Account :

Trading Account provides the following information to a businessman regarding 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.
2. He can calculate his Gross profit ratio 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 out efforts to obtain goods at cheaper prices. Thus, he can prevent at least fall in the figure of his gross profit if can not 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.

Illu.1 : From the following information take the appropriate items relating to trading account and prepare trading account for the year ending 31-12-2007.

	Rs.
Stock 1-1- 2007	**2,000**
Purchases	**7,000**
Productive wages	**1,500**
Freight	**750**
Marine Insurance	**250**
Customs duty	**400**
Salaries	**1,500**
Power	**120**
Carriage inwards	**75**
Carriage outwards	**100**
Sales	**15,000**
Packing material	**200**
Sales returns	**400**
Purchase returns	**300**
Office lighting	**250**
Office rent	**1,200**
Stock 31-12-2007	**3,000**

Solution :

Trading a/c for the year ended 31-12-2007

	Rs.	Rs.		Rs.	Rs.
To Opening stock		2,000	By Sales	15,000	
To Purchases	7,000		Less : Returns	400	14,600
Less : Returns	300	6,700	By Closing stock		3,000
To Freight		750			
To Marine insurance		250			
To Customs duty		400			
To Carriage inwards		75			
To Power		120			
To Productive wages		1,500			
To Packing materials		200			
To Gross profit c/d		5,605			
		17,600			**17,600**
			To Gross profit b/d		5,605

Illu.2 :The following information is taken from in the books of Srinivas. Prepare Trading account for the year ended 31-12-2007 and write closing entries.

	Rs.		Rs.
Opening stock	**5,000**	**Sales returns**	**400**
Sales a/c	**20,000**	**Manufacturing expenses**	**100**
Purchase returns	**200**	**Octroi**	**500**
Carriage inwards	**300**	**Fuel**	**700**
Wages a/c	**4,000**	**Purchases a/c**	**8,000**
Closing stock (31-3-2007)	**2,000**		

Solution :

Journal Entries

Date	Particulars		L.F.	Debit	Credit
2007				**Rs.**	**Rs.**
Mar.1	Trading a/c To Opening stock a/c To Purchases a/c To Wages a/c To Carriage inwards a/c To Manufacturing expenses a/c To Octori a/c To Fuel a/c (Being the transfer of accounts to trading account)	Dr.		18,600	 5,000 8,000 4,000 300 100 500 700
	Purchase returns a/c To Purchases a/c (Being the transfer of returns to purchases a/c)	Dr.		200	 200
	Sales a/c Closing stock a/c To Trading a/c (Being the transfer of accounts to trading account)	Dr. Dr.		20,000 2,000	 22,000
	Sales a/c To Sales returns a/c (Being the transfer of returns to sales a/c)	Dr.		400	 400

Trading a/c of Srinivas for the year ended 31-3-2007

	Rs.	Rs.		Rs.	Rs.
To Opening stock		5,000	By Sales	20,000	
To Purchases	8,000		Less : Returns	400	19,600
Less : Returns	200	7,800	By Closing stock		2,000
To Wages		4,000			
To Carriage inwards		300			
To Manufacturing expenses		100			

To Octroi		500			
To Fuel		700			
To Gross profit c/d		3,200			
		21,600			**21,600**
			By Gross profit b/d		3,200

Illu.3 : From the following information prepare the trading account of Sankar for the year ended 31-12-2006.

2006		**Rs.**
Jan 1	**Raw material**	**24,000**
	Work – in – progress	**10,000**
	Finished goods	**2,42,000**
Dec 31	**Purchases**	**3,56,000**
	Purchase returns	**12,500**
	Manufacturing wages	**1,82,000**
	Factory rent	**16,500**
	Coal, water	**8,500**
	Sales	**6,57,000**
	Carriage	**24,000**
	Customs duty	**15,000**
	Raw materials	**32,000**
	Work – in – progress	**12,000**
	Finished goods	**3,08,000**

Solution :

Trading a/c of Sankar for the year ended 31-12-2006

	Rs.	**Rs.**		**Rs.**	**Rs.**
To Opening stock			By Sales		6,57,000
Raw materials	24,000		By Closing stock		
Work-in-progress	10,000		Raw materials	32,000	

Finished goods	2,42,000	2,76,000	Work-in-progress	12,000	
To Purchases	3,56,000		Finished goods	3,08,000	3,52,000
Less : Returns	12,500	3,43,500			
To Wages		1,82,000			
To Factory rent		16,500			
To Coal water		8,500			
To Carriage		24,000			
To Customs duty		15,000			
To Gross profit c/d		1,43,500			
		10,09,000			**10,09,000**
			By Gross profit b/d		1,43,500

Illu.4 : Following are the balances extracted from the books of M/s Ram & Co. Motors Company as on 31st March 2003. You are required to prepare the Manufacturing Account and Trading Account for the year ended on that date:

	Rs.		Rs.
Raw Materials (Opening stock)	**50,000**	**Repairs to Machinery**	**3,750**
Work – in – progress (opening stock)	**37,500**	**Royalty**	**2,500**
Finished goods (opening stock)	**45,000**	**Purchases returns**	**1,250**
Raw material purchases	**1,25,000**	**Sales returns**	**2,500**
Finished goods purchases	**50,000**	**Factory insurance**	**3,750**
Productive wages	**75,000**	**Factory rent**	**46,250**
Coal and fuel	**12,500**	**Stock on 31st March 2003**	
Sales	**3,95,000**	**Raw materials**	**37,500**

Carriage inwards	**2,500**	**Work – in – progress**	**45,000**
Railway freight	**1,250**	**Finished goods**	**25,000**

Solution :

Manufacturing a/c of M/s Ram & Co. for the year ended 31-3-2003

	Rs.	**Rs.**		**Rs.**	**Rs.**
To Opening stock			By Closing stock		
Raw materials	50,000		Raw materials	37,500	
Work-in-progress	37,500	87,500	Work-in-progress	45,000	82,500
To Purchases	1,25,000		By Manufacturing cost transferred to trading a/c		2,76,250
Less : returns	1,250	1,23,750			
To Productive wages		75,000			
To Coal & fuel		12,500			
To Carriage inwards		2,500			
To Railway freight		1,250			
To Repairs to machinery		3,750			
To Royalty		2,500			
To Factory insurance		3,750			
To Factory rent		46,250			
		3,58,750			**3,58,750**

Trading a/c of M/s Ram & Co. for the year ended 31-3-2003

	Rs.		Rs.	Rs.
To Opening stock of finished goods	45,000	By Sales	3,95,000	
To Manufacturing cost transferred from Manufacturing a/c	2,76,250	Less : Returns	2,500	3,92,500
To Purchase of finished goods	50,000	By Closing stock of finished goods		25,000
To Gross profit transferred to profit & Loss a/c	46,250			
	4,17,500			4,17,500

9.3 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. 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 of …… for the year ending ….

Dr. **Cr.**

Particulars	**Rs.**	**Particulars**	**Rs.**
To Gross Loss b/d *	X x x	By Gross Profit b/d*	X x x
To Salaries	X x x	By Discount received	X x x

To Rent	X x x	By Net loss transferred to Capital a/c	X x x
To Commission	X x x		
To Advertisements	X x x		
To Bad debts	X x x		
To Discount	X x x		
To Net profit transferred to Capital Account	X x x		

- Only one figure will appear

9.3.1 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.
4. **Interest :** Interest on loans whether short term or long term is an expenses of an indirect nature and, therefore, is charged tot he 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.
5. **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 expenses 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.

6. **Trade expenses :** Trade expenses are expenses of a miscellaneous nature. They are of small amounts 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.
7. **Printing and Stationery :** This item of expenses 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.
8. **Advertisement :** 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, advertisements expenses incurred for purchasing of goods should be charged to the Trading account, while 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 capital expenditure and debited to the concerned asset account. Similarly, advertisements expenditure incurred for sale of a capital asset should be deducted out of the sale proceeds of the asset concerned.
9. **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.
10. **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.

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 form. 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.

9.3. 2 Importance of Profit and Loss Account :

The profit and loss account provides information regarding the following manner.

1. 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.
2. 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.
3. 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.
4. 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 of 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 courses of action.

Illu.5 : From the following ledger balances prepare Trading, Profit and Loss account for the year ending 31-3-2007.

	Debit Rs.	**Credit Rs.**
Opening Stock (1-4-2006)	**2,000**	
Purchases	**18,000**	

Sales		**21,000**
Wages	**300**	
Carriage inwards	**100**	
Carriage outwards	**150**	
Sales returns	**2,000**	
Purchase returns		**1,000**
Salaries	**2,400**	
Rent	**600**	
Discount	**50**	
General expenses	**500**	
Commission		**1,800**

Closing stock as on 31-3-2007 for Rs.9,000.

Solution :

Trading, Profit & Loss a/c for the year ended 31-3-2007

	Rs.	Rs.		Rs.	Rs.
To Opening stock		2,000	By Sales	21,000	
To Purchases	18,000		Less : Returns	2,000	19,000
Less : Returns	1,000	17,000	By Closing stock		9,000
To Wages		300			
To Carriage inwards		100			
To Gross profit c/d		8,600			
		28,000			**28,000**
To Salaries		2,400	By Gross Profit b/d		8,600
To Rent		600	By Commission		1,800
To General expenses		500			
To Discount		50			
To Carriage outwards		150			
To Net profit (transferred to capital		6,700			

account)					
		10,400			**10,400**

Illu.6 : From the following Trial Balance of Venugopal as on 31-12-2003. Prepare Trading, Profit and Loss Account.

	Rs.		Rs.
Opening stock	**12,600**	**Sales**	**26,000**
Salaries, wages	**2,000**	**Purchase returns**	**200**
Carriage	**200**	**Discount received**	**300**
Sales returns	**500**	**Capital**	**8,000**
Trading expenses	**550**	**Creditors**	**900**
Rent	**250**	**Loan**	**2,000**
Plant	**2,500**		
Plant repairs	**450**		
Cash in hand	**300**		
Cash at bank	**1,000**		
Debtors	**5,150**		
Income tax	**600**		
Drawings	**900**		
Commission on purchases	**400**		
Purchases	**10,000**		
	37,400		**37,400**

Closing stock value as on 31-12-2003 Rs.3,000.

Solution :

Trading, Profit & Loss a/c of Venugopal

for the year ended 31-12-2003

	Rs.	Rs.		Rs.	Rs.
To Opening stock		12,600	By Sales	26,000	
To Purchases	10,000		Less : Returns	500	25,500
Less : Returns	200	9,800	By closing stock		3,000
To Carriage		200			
To Commission on purchases		400			
To Gross profit c/d		5,500			
		28,500			**28,500**
			By Gross profit b/d		5,500
To Salaries, wages		2,000	By Discount received		300
To Rent		250			
To Trading expenses		550			
To Plant repairs		450			
To Net profit (transferred to capital a/c)		2,550			
		5,800			**5,800**

Note :

1. Income tax and drawings are personal expenses and hence they are not to be shown in profit and loss a/c.
2. Drawings are to be deducted from capital on the liability side of the Balance Sheet.

Illu.7 :From the following trial balance prepare trading and profit and loss account for the year ended March 31st 2004.

	Debit Rs.	Credit Rs.
Capital		**7,610**
Cash in hand	**30**	
Purchases	**8,990**	
Sales		**11,060**
Cash in bank	**885**	
Fixtures and Fittings	**225**	
Freehold premises	**1,500**	
Lighting and heating	**65**	
Bills Receivable	**825**	
Returns inwards	**30**	
Salaries	**1,075**	
Creditors		**1,950**
Debtors	**5,700**	
Stock at April 1st, 2003	**3,000**	
Printing	**225**	
Bills Payable		**1,875**
Rates, Taxes and Insurance	**190**	
Discounts received		**445**
Discounts allowed	**200**	
	22,940	**22,940**

Closing stock on 31st March 2004 was valued at Rs.1,800.

Solution :

Trading, Profit & Loss a/c for the year ended 31-3-2004

	Rs.		Rs.	Rs.
To Opening stock	3,000	By Sales	11,060	
To Purchases	8,990	Less : returns	30	11,030
To Gross profit c/d	840	By closing stock		1,800
	12,830			**12,830**

To Salaries	1,075	By Gross profit		840
To Light, Heat	65	By Discount		445
To Printing	225	By Net loss – transferred to capital a/c		470
To Rates, taxes, insurance	190			
To Discount allowed	200			
	1,755			**1,755**

9.4 BALANCE SHEET

Having prepared the 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 off 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 had 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 hand his liabilities.'' According to Freeman, ``A Balance Sheet is an itemised list of the asset, liabilities and proprietorship of a business of an individual at a certain date. The definition given by the American Institute of Certified Public Accountants makes the meaning of Balance Sheet more clear. According to it, Balance Sheet is ``a list of balance in the assets and liability accounts. The list depicts the position of assets and liabilities of a specific business at a specific point of time.

9.5 ARRANGEMENT OF ASSETS AND LIABILITIES

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 are more 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 on come next and so on. A proforma of Balance Sheet according to liquidity order is given below.

Balance Sheet as on…..

Liabilities	**Rs.**	**Assets**	**Rs.**
Bank overdraft	X x x	Cash in hand	X x x
Outstanding expenses	X x x	Cash at bank	X x x x
Bills payable	X x x	Prepaid expenses	X x x
Sundry Creditors	X x x	Bills receivable	X x x
Long term loans	X x x	Sundry Debtors	X x x
Capital	X x x	Closing stock	X x x
		Furniture	X x x
		Plant and Machinery	X x x
		Buildings	X x x
		Land	X x x
		Goodwill	X x x
	X x x		**X x x**

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 parmanent come first, less permanent come next and son. In other words, an asset will be sold in the last or a liability which will be paid 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.

9.6 IMPORTANT POINTS REGARDING BALANCE SHEET

1. **Liabilities :** The term `Liabilities' denote claims against the assets of a firm whether those of owners of the business or of the creditors. As a matter of fact, the term `Equity is more appropriate than the term liabilities. This is supported by the 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 are 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 purpose of this book.

   Liabilities can be classified in two categories.

   1. Current Liabilities and
   2. Long term or Fixed Liabilities.

   (i) 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 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 payment has not been made.

   (c) Bank overdraft

   (d) Short-term loans, i.e., loan 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.

(ii) **Fixed Liabilities :** All liabilities other than current liabilities come within this category. In other words, these are 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 required by the business from the funds made available either by the owners of the business or others. It thus includes all rights of properties which a business owns Cash, investments, bills receivable, debtors, stock of raw materials, work in progress and finished goods, land, buildings, machinery, trade marks, patents, rights etc., are some examples of assets. Assets may be classified into the following categories.

(a) **Current assets :** Current assets are those assets which are acquired with the intention of converting them into cash during the normal business operations of the company. According to Grady, ``the term Current assets used to designate cash and other assets or resources commonly identified as those which are reasonably expected to be realised in cash or sold during the normal operating cycle of the business. Thus the term current assets include 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 assets. In computing liquid assets, stocks 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 of the enterprise. They are not meant for resale. Land and buildings, machinery, furniture are some of the examples of Fixed assets. Sometimes, the words 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 :** These are assets not represented by tangible possession or property. Examples of such assets are : formation expenses incurred for establishing a business such as, registration charges paid to the registrar of a 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.

Ilu.8 : From the following balances prepare Trial Balance as on 31-12-2003. Prepare Trading and Profit and Loss Account for the above year ended and Balance Sheet as on that date.

	Rs.		Rs.
Rajakumar 's capital	**15,000**	**Opening stock (1-1-2003)**	**15,000**
Drawings	**3,000**	**Purchases**	**60,000**
Furniture, Fittings	**500**	**Sales**	**80,000**
Typewriters	**1,000**	**Purchase returns**	**500**
Cycles	**250**	**Sales returns**	**1,000**
Debtors	**15,000**	**Carriage inwards**	**750**
Creditors	**13,500**	**Carriage outwards**	**1,250**
Rent	**2,500**	**Rates, Taxes**	**600**
Salaries	**3,600**	**Cash in hand**	**2,425**
Discount allowed	**425**	**General expenses**	**1,800**

Closing stock on 31-12-2003 Rs.11,000.

Solution :

Trial balance of Raj Kumar as on 31-12-2003

	Rs.		Rs.
Drawings	3,000	Capital	15,000
Furniture, fittings	500	Creditors	13,500
Typewriters	1,000	Sales	80,000
Cycle	250	Purchase returns	500
Debtors	15,000		
Rent	2,400		
Salaries	3,600		

Discount allowed	425		
General expenses	1,800		
Opening stock (1-1-2003)	15,000		
Purchases	60,000		
Sales returns	1,000		
Carriage inwards	750		
Carriage outwards	1,250		
Rates, taxes	600		
Cash in hand	2,425		
	1,09,000		**1,09,000**

Trading, Profit & Loss a/c of Raj Kumar for the year ended 31-12-003

	Rs.	Rs.		Rs.	Rs.
To Opening stock		15,000	By Sales	80,000	
To Purchases	60,000		Less : returns	1,000	79,000
Less : Returns	500	59,500	By Closing Stock		11,000
To Carriage inwards		750			
To Gross profit c/d		14,750			
		90,000			**90,000**
To Salaries		3,600	By Gross profit b/d		14,750
To Rent		2,400			
To Discount allowed		425			
To General expenses		1,800			
To Carriage outwards		1,250			
To Rates, taxes		600			
To Net profit transferred to capital a/c		4,675			
		14,750			**14,750**

Balance Sheet of Raj Kumar as on 31-12-2003

	Rs.	Rs.		Rs.	Rs.
Creditors		13,500	Cash in hand		2,425
Capital	15,000		Debtors		15,000
Add : Net profit	4,675		Stock		11,000
	19,675		Furniture, Fittings		500
Less : Drawings	3,000	16,675	Typewriters		1,000
			Cycle		250
		30,175			**30,175**

Illu.9 : From the following trail balance of Rao and Bors. Preparing Trading and Profit and Loss account for the year ended 31st , 2007 and Balance Sheet as on that date.

Trial Balance of Rao & Bros. As on 31-12-2007

	Debit Rs.		Credit Rs.
Debtors	**12,000**	**Creditors**	**7,900**
Drawings	**2,900**	**Capital**	**30,000**
Rent, Taxes	**250**	**Sales**	**14,290**
Trade expenses	**670**	**Purchases returns**	**280**
Purchases	**8,640**	**Discount received**	**240**
Sales returns	**190**		
Carriage inwards	**250**		
Wages	**2,920**		
Salaries	**1,200**		
Stock (1-1-2007)	**3,100**		
Discount allowed	**180**		
Bad debts	**200**		
Plant, Machinery	**2,510**		
Furniture, Fittings	**1,800**		
Cash in hand	**500**		

Cash at Bank	**15,400**		
	52,710		**52,710**

Closing stock as on 31-12-2007 Rs.14,220.

Solution :

Trading and Profit & Loss a/c of Rao & Bros. , for the year ended 31-12-2007

	Rs.	Rs.		Rs.	Rs.
To Opening stock		3,100	By Sales	14,290	
To Purchases	8,640		Less : Returns	190	14,100
Less : Returns	280	8,360	By Closing stock		14,220
To Wages		2,920			
To Carriage inwards		250			
To Gross profit c/d		13,690			
		28,320			**28,320**
To Salaries		1,200	By Gross profit b/d		13,690
To Rent, Taxes		250	By Discount received		240
To Trade expenses		670			
To Discount allowed		180			
To Bad debts		200			
To Net profit (transferred to capital a/c)		11,430			
		13,930			**13,930**

Balance Sheet of Rao & Bros. as on 31-12-2007

Liabilities	**Rs.**	**Rs.**	**Assets**		**Rs.**
Creditors		7,900	Cash in hand		500
Capital	30,000		Cash at bank		15,400

Add : Net profit	11,430		Debtors		12,000
	41,430		Closing stock		14,220
Less : Drawings	2,900	38,530	Furniture, Fittings		1,800
			Plant, Machinery		2,510
		46,430			**46,430**

Illu.10 : From the following Trial Balance prepare Trading and profit and Loss account for the year ended 31st March, 2004 and balance sheet as on that date.

	Rs.		**Rs.**
Machinery	**30,000**	**Capital**	**1,00,000**
Stock (1-4-2003)	**16,000**	**Sales**	**2,03,600**
Wages	**50,000**	**Creditors**	**12,500**
Carriage	**500**	**Purchase returns**	**2,000**
Salaries	**5,000**	**Discount received**	**250**
Factory rent	**2,400**	**Bills payable**	**8,500**
Repairs	**400**		
Fuel, power	**2,500**		
Furniture	**5,500**		
Buildings	**40,000**		
Debtors	**20,000**		
Purchases	**1,22,000**		
Sales returns	**3,600**		
Drawings	**2,000**		
Discount allowed	**750**		
Office expenses	**1,000**		
Manufacturing expenses	**600**		
Bills receivable	**5,000**		
Cash in hand	**2,400**		
Cash at Bank	**15,400**		

Office rent	**1,800**		
	3,26,850		**3,26,850**

Closing stock as on 31-3-2004 Rs.20,000.

Solution

Trading, Profit & Loss a/c

for the year ended 31-3-2004

	Rs.	**Rs.**		**Rs.**	**Rs.**
To Opening stock		16,000	By Sales	2,03,600	
To Purchases	1,22,000		Less : Returns	3,600	2,00,000
Less : Returns	2,000	1,20,000	By Closing stock		20,000
To Carriage inwards		500			
To Fuel, Power		2,500			
To Wages		50,000			
To Factory rent		2,400			
To Manufacturing expenses		600			
To Gross profit c/d		28,000			
		2,20,000			**2,20,000**
To Salaries		5,000	By Gross profit b/d		28,000
To Repairs		400	By Discount allowed		250
To Discount allowed		750			
To Office expenses		1,000			
To Office rent		1,800			
To Net Profit (transferred to capital a/c)		19,300			
		28,250			**28,250**

Balance Sheet as on 31st March, 2004

Liabilities	**Rs.**	**Rs.**	**Assets**	**Rs.**
Creditors		12,500	Cash in hand	2,400
Bills payable		8,500	Cash at Bank	15,400
Capital	1,00,000		Bills receivable	5,000
Add : Net profit	19,300		Debtors	20,000
	1,19,300		Closing stock	20,000
Less : Drawings	2,000	1,17,300	Furniture	5,500
			Machinery	30,000
			Buildings	40,000
		1,38,300		**1,38,300**

Illu.11 : From the following trial balance of M/s Jairaj & Co. prepare Trading and profit and Loss Account for the year ending 31st March 2004 and Balance Sheet as on that date.

	Debit Rs.	**Credit Rs.**
Stock (1-4-2003)	**20,000**	**-**
Purchases	**80,000**	**-**
Sales	**-**	**1,15,000**
Returns inward	**15,000**	**-**
Returns outward	**-**	**10,000**
Carriage inwards	**7,000**	**-**
Carriage outwards	**8,000**	**-**
Wages	**10,000**	**-**
Salaries	**12,000**	**-**
Rent	**7,000**	**-**
Drawings	**10,000**	**-**
Capital	**-**	**69,000**
Interest Received	**-**	**7,000**

Investments	**30,000**	
Cash	**5,000**	**-**
Bank	**8,000**	**-**
Debtors	**12,000**	**-**
Creditors	**-**	**15,000**
Bills Payable	**-**	**5,000**
Commission Received	**-**	**3,000**
	2,24,000	**2,24,000**

Closing stock on March 31, 2004 was valued at Rs.19,000.

Solution :

Trading, Profit & Loss a/c Jai raj & Co.

for the year ended 31-3-2004

	Rs.	**Rs.**		**Rs.**	**Rs.**
To Opening stock		20,000	By Sales	1,15,000	
To Purchases	80,000		Less : Returns	15,000	1,00,000
Less : Returns	10,000	70,000	By Closing Stock		19,000
To Wages		10,000			
To Carriage inward		7,000			
To Gross profit c/d		12,000			
		1,19,000			**1,19,000**
To Salaries		12,000	By Gross profit b/d		12,000
To Carriage outwards		8,000	By Interest received		7,000
To Rent		7,000	By Commission received		3,000
			By Net Loss (transferred to capital a/c)		5,000
		27,000			**27,000**

Balance Sheet of Jai Raj & Co. as on 31st March, 2004

Liabilities	**Rs.**	**Rs.**	**Assets**	**Rs.**
Creditors		15,000	Cash	5,000
Bills payable		5,000	Bank	8,000
Capital	69,000		Debtors	12,000
Less : Drawings	10,000		Stock	19,000
	59,000		Investments	30,000
Less : Net Loss	5,000	54,000		
		74,000		**74,000**

9.7 QUESTIONS

1. What are financial statements?
2. What is a trading account?
3. What do you meant by direct expenses?
4. Distinguish between capital and revenue expenditure
5. Distinguish between capital and revenue income
6. What is Profit & Loss account?
7. Explain the important points to be followed in the preparation of trading and profit & loss account.
8. What is a Balance Sheet?
9. What is Marshalling?
10. Explain the important points to be considered in the preparation of the balance sheet.
11. Give the proforma of trading and profit and loss account with hypothetical figures
12. Prepare a Balance sheet of an organisation with hypothetical figures.
13. Explain the need for adjustments in final accounts
14. Give five journal entries for adjustments in final accounts
15. How do you treat the following in final accounts?

(a) Outstanding expenses
(b) Prepaid expenses
(c) Outstanding income
(d) Income received in advance
(e) Depreciation on assets
(f) Treatment of bad debt, provision for doubtful debts and provision for discount
(g) Provision for bad debts
(h) Provision for discount on debtors
(i) Provision for discount on creditors
(j) Interest on Drawings
(k) Interest on capital
(l) Closing Stock

9.8 EXERCISES

1. From the following information, prepare the final accounts for the year ending 31-3-06.

	Rs.		Rs.
Cash in hand	7,000	Furniture	2,500
Building	4,000	Capital	60,000
Drawings	4,000	Wages	8,000
Creditors	33,000	Debtors	30,000
Bad debts	1,000	Misc. Expenses	700
Postage & Telegram	400	Insurance	2,200
Printing	1,500	Discount received	1,000
Discount allowed	2,000	Rent & Rates	4,500
Carriage	3,000	Stock	18,000
Returns outward	2,300	Returns inward	1,500
Purchases	70,000	Sales	1,00,000
Outstanding expenses	1,000	Bills Payable	4,000

Stock on 31-3-06 Rs.26,000.

[Ans.: Gross Profit Rs.27,800, Net Profit Rs.16,500]

2. From the following information, prepare the final accounts for the year 2006.

Dr. Balances	Rs.	Cr. Balances	Rs.
Cash at Bank	7,000	Sundry Creditors	30,000
Sundry Debtors	60,000	Discount	1,000
Plant & Machinery	50,000	Returns	4,000
Cash in hand	1,000	Sales	1,50,000
Advertising	6,000	Capital	56,000
Rent, Rates & Taxes	5,000		
Bank Charges	500		
Discount	2,000		
Stock	20,000		
Returns	5,000		
Purchases	70,000		

Stock as on 31-12-1996 Rs.31,000.

[Ans.: Gross Profit Rs.81,000, Net profit Rs.63,000]

3. From the following information, prepare the final accounts for the year 2006:

Dr. Balances	Rs.	Cr. Balances	Rs.
Furniture	15,000	Bills payable	20,000
Carriage	9,000	Sales	2,20,000
Bad Debts	5,000	Returns	7,000
Manufacturing Expenses	7,000	Creditors	50,000
Bills receivable	12,000	Capital	1,89,000
Rent	10,000		

Stock	45,000		
Repairs	8,000		
Salaries	30,000		
Cash at Bank	10,000		
Cash in hand	5,000		
Wages	40,000		
Returns	10,000		
Purchases	1,10,000		
Debtors	70,000		
Plant & Machinery	80,000		
Drawings	20,000		

Stock as on 31-12-2006 Rs.51,000

[Ans.: Gross Profit Rs.57,000, Net profit Rs.4,000]

4. From the following information, prepare the final accounts for the year 2006.

Dr. Balances	Rs.	Cr. Balances	Rs.
Returns	15,000	Capital	1,41,000
Cash in hand	2,000	Returns	10,000
Bills Receivable	20,000	Bank overdraft	20,000
Purchases	1,50,000	Bills Payable	30,000
Bad debts	5,000	Sales	3,40,000
Income Tax	2,000	Commission	9,000
Bank Charges	1,000		
Salaries	35,000		
Insurance	5,000		
Rent & Rates	12,000		
Carriage	8,000		
Wages	70,000		

Power	10,000		
Stock	50,000		
Furniture	15,000		
Machinery	70,000		
Building	80,000		

Stock as on 31-12-2006 Rs.61,000.

[Ans.: Gross Profit Rs.1,08,000, Net Profit Rs.59,000, Balance Sheet Total Rs.2,48,000]

5. From the following information, prepare the final accounts for the year 2006.

Dr. Balances	Rs.	Cr. Balances	Rs.
Cash at Bank	5,000	Capital	60,000
Bills Receivable	9,000	Bills Payable	7,000
Salaries	11,500	Creditors	30,000
General Charges	3,000	Sales	2,20,000
Taxes & Insurance	4,000	Returns	4,000
Cash in hand	2,000	Commission	5,000
Interest	5,000		
Advertising	9,000		
Returns	5,000		
Purchases	1,20,000		
Stock	40,000		
Debtors	50,000		
Bad debts	2,500		
Furniture	10,000		
Building	50,000		

Stock as on 31-12-96 Rs.21,000.

[Ans.: Gross Profit Rs.80,000, Net Profit Rs.50,000, Balance Sheet Total Rs.1,47,000]

6. From the following Trial Balance of M/s Ram & Sons, prepare trading and profit and loss account for the year ending on 31st December, 2006 and the balance sheet as on that date.

Particulars	**Dr. Rs.**	**Cr. Rs.**
Purchase	21,750	
Discount allowed	1,300	
Wages	6,500	
Salaries	2,000	
Sales		35,000
Travelling Expenses	400	
Commission	425	
Carriage Inward	275	
Administration Expenses	105	
Trade Expenses	600	
Interest	250	
Building	5,000	
Furniture	200	
Debtors	4,250	
Capital		13,000
Creditors / Cash	7,045	2,100
	50,100	**50,100**

Stock on 31st December, 2006 was Rs.6,000. Depreciate buildings by 20%, create a provision for bad debts at 10% on debtors. Provide for outstanding wages Rs.475, salaries Rs.500 and goods used by the proprietor Rs.500.

[Ans.: Gross profit Rs.12,500, Net Profit Rs.5,495, Balance Sheet Total Rs.21,070]

7. From the following ledger balances prepare Trading and profit and Loss Account for the year ended 30th September, 2006 and a Balance Sheet as on that date.

Particulars	Rs.	Particulars	Rs.
Rama's Capital a/c	1,19,400	Cash	530
Rama's drawings a/c	10,550	Repairs & Renewals	3,370
Bills Receivable	9,500	Bank	18,970
Plant and Machinery	28,800	Interest and Discount (Dr.)	5,870
Sundry debtors (including Madan's dishonoured bill Rs.1,000)	62,000	Bad Debts	3,620
Loan a/c (Cr.) at 6%	20,000	Sundry Creditors	39,630
Wages (Manufacturing)	40,970	Fixtures & Fittings	8,970
Returns Inwards	2,780		
Purchases	2,56,590		
Sales	3,56,430		
Commission received	5,640		
Rent and Taxes	5,620		
Stock on 1st October, 2006	89,680		
Salaries	11,000		
Travelling Expenses	1,880		
Insurance (including Rs.300 p.a. paid up 31st March 2006)	400		

Stock in hand on 30th September, 2006 was Rs.1,28,960. Write off half of Madan's dishonoured bill. Depreciate Plant and Machinery by 5% and Fixtures and Fittings by 10%.

[Ans.: Gross Profit Rs.95,370; Net Profit Rs.66,563 and Balance Sheet Total Rs.2,55,043].

8. From the following Trial Balance of Mr. A, Prepare Trading and Profit & Loss Account for the year ending 31st December, 2006 and a Balance Sheet as on that date :

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	5,275	Capital	59,700

Bills Receivable	4,750	Loan at 8% on (1-1-88)	10,000
Machinery	14,400	Commission received	2,820
Debtors (including X for Dishnoured Bill of Rs.1,000)	30,000	Creditors	29,815
Wages	20,485	Sales	1,78,215
Returns inwards	2,390		
Purchases	1,28,295		
Rent	2,810		
Stock (1-1-06)	44,840		
Salaries	5,500		
Travelling Expenses	945		
Insurance	200		
Cash	9,750		
Repairs	1,685		
Interest on Loan	500		
Discount Allowed	2,435		
Bad Debts	1,810		
Furniture	4,480		
	2,80,550		**2,80,550**

The following adjustments are to be made:

(i) Stock in the shop on 31st December, 2006 was Rs.64,480.

(ii) Half the amount of X's bill is irrecoverable.

(iii) Create a provision of 5% on other debtors.

(iv) Wages include Rs.600 for erection of new machinery.

(v) Depreciate Machinery by 5% and Furniture by 10%.

(vi) Commission include Rs.300 being Commission received in advance.]

[Ans.: Gross profit Rs.47,285, Net Profit Rs.30,472, Balance Sheet Total Rs.1,25,312].

9. The following are the balances of Messers Gupta & Co. as on June, 2006.

Debit Balances	Rs.	Credit Balances	Rs.
Cash in hand	540	Sales a/c	98,780
Cash at Bank	2,630	Returns outward	500
Purchases a/c	40,675	Capital Account	62,000
Returns Inwards	680	Sundry creditors	6,300
Wages Account	8,480	Rent	9,000
Fuel & power	4,730		
Carriage on Sales	3,200		
Carriage on Purchases	2,040		
Stock (1-7-06)	5,760		
Building a/c	32,000		
Freehold Land	10,000		
Machinery	20,000		
Patents	7,500		
Salaries	15,000		
General expenses	3,000		
Insurance	600		
Drawings	5,245		
Sundry debtors	14,500		
	1,76,580		**1,76,580**

Prepare Trading and Profit & Loss a/c and a Balance Sheet as on 30th June, 2006 after taking into account the following adjustments:

(i) Stock on hand as on 30th June, 2006 is Rs.6,800.

(ii) Machinery is to be depreciated at 10% and Patents at 20%.

(iii) Salaries for the month of June, 2006 amounting to Rs.1,500 were unpaid.

(iv) Insurance, includes a premium of Rs.170 on a policy expiring on 31st December, 2006.

(v) Further Bad Debts are Rs.725.

(vi) Rent Receivable Rs.1,000.

[Ans.: Gross profit Rs.43,715, Net profit Rs.26,275, Balance Sheet Total Rs.90,830].

9.9 SUGGESTED BOOKS

1. Agarwala, A.N., Amitabha Mukherjee, Mohammed Hanif, **Principles and Practice of Accountancy,** Kitab Mahal Agencies, New Delhi.
2. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
3. Chopde, L.N., & Choudhari, D.H., **Accountancy,** Sheth Publishers, Pune
4. Jain, S.P., Narang, K.L., **Accoutancy, Part - I,** Kalyani Publishers
5. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
6. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
7. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
8. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter - 10

FINAL ACCOUNTS

(WITH ADJUSTMENTS)

Objectives :

After going through this unit, we should be able to

- Know the reasons for adjustments in final accounts
- Understand various types of adjustments and their adjustment in practice
- Prepare the final accounts after taking the adjustment into account.

Structure :

10.1 Need for Adjustments in Final Accounts

10.2 Adjustments in Final Accounts

10.3 Questions

10.4 Exercises

10.5 Suggested Readings

10.1 NEED FOR ADJUSTMENTS IN FINAL ACCOUNTS

After ascertaining the arithmetical accuracy of the books of accounts by preparing a Trial balance, a trader has to ascertain the results of his business activities and the financial position of the organisation. For this purpose he has to prepare a Trading and profit and loss account and a balance sheet. Final accounts (i.e., the Trading and profit and loss account and balance sheet) are prepared on the basis of a trial balance. But the trial balance is not the complete tool for the purpose of preparation of final accounts. The trial balance contains only those items, which have been recorded in the books of accounts. It does not consider the items such as expenses payable, income receivable, expenses paid in advance and income received in advance, non cash items such as depreciation on asset, interest on capital, interest on drawings, anticipated loses such as reserve for bad debts, reserve for discount on debtors etc. Unless these items are considered and given effect, the final accounts cannot disclose a true and fair view of the organisation. Hence, necessary adjustments about the above items should be made.

10.1.2 Meaning of Adjustments :

Adjustments in final accounts mean bringing into accounts the items which have not been included in the trial balance It means bringing into account the expenses incurred but not paid, income earned but not actually received, depreciation on assets, interest on capital, interest on drawings, reserve for bad debts, reserve for discount on debtors and anticipated gains like reserve for discount on creditors.

10.1.3. Adjustment Entries :

Various adjustments in Trading and profit and loss account and Balance sheet are made by means of journal entries. Journal entries passed for adjustments at the end of the year are called adjustment entries. All the adjustment entries are passed in the journal proper.

10.2 ADJUSTMENTS IN FINAL ACCOUNTS :

The following are usual items of adjustments which require adjustments while preparing Trading and Profit and Loss Account and Balance Sheet.

1. Outstanding expenses
2. Prepaid expenses
3. Outstanding income
4. Income received in advance
5. Depreciation on assets
6. Treatment of bad debt, provision for doubtful debts and provision for discount
7. Provision for bad debts
8. Provision for discount on debtors
9. Provision for discount on creditors
10. Interest on Drawings
11. Interest on capital
12. Closing Stock

10.2.1 Outstanding Expenses :

Expenses, which are incurred during the year but not paid, are called ``outstanding or unpaid expenses''. Such unpaid expenses must be considered, otherwise the profit will be overstated. Outstanding expenses must be duly accounted for because the parties who have given services have claim against the business and hence these become the liabilities at the end of the year.

For example, office rent due for the month of December is not paid in the same month, it will be outstanding rent for the month of December. Office rent outstanding is a liability and must be shown in the Balance sheet and the amount due for Office rent will be transferred to the Profit and Loss account. Next year, when this due amount will be paid off, office rent outstanding account will be debited and cash account credited.

10.2.2. Prepaid Expenses :

When an expenses is paid in advance, and the benefit of the amount paid will be available in the next year, it is called prepaid expenses. Such expenses are shown in the Balance Sheet as an asset. Such expenses are paid during the year but not incurred..

10.2.3. Outstanding Income :

The income which is earned but not yet received in cash during the year is called as an outstanding income. Such incomes, which are earned in the current year should be credited to the Profit and Loss Account and as the amount is yet to be received, it will be transferred to the Balance Sheet on the assets side. For example, the commission earned in the month of December, 2005, but received as yet, will be outstanding incomes for the year ending 31st December, 2005. The original amount of commission shown in the Trial balance will be increased by the amount of commission receivable. Next year, when the amount due on commission will be received, it will be credited by debiting the cash account.

10.2.4 Income received in Advance :

Sometimes, a trader receives the amount of income in advance before rendering the full service. Such incomes should not be transferred to the credit side of the profit and loss account. The portion of such income is deducted from the income concerned and it is treated as liability. For example, during the year ended 31st March, 2006, the total amount received as Rent is Rs.650, out of which Rs.50 are related to the next months of April, 2006. In this case, Rent for the year ended 31st march, 2006 will be only (Rs.650 – 50) = Rs.600 and Rs.50 will be shown in the Balance Sheet as liability. Next year, rent received in advance account will be transferred to Rent (received account)

10.2.5 Depreciation :

The assets become useless after some time by continuous usage. Every fixed asset has a definite period of utility to the business. The value of an asset goes on decreasing year by year. Such a loss in value is known as depreciation. It is an invisible loss, but must be shown in the profit and loss account each year as long as the asset is in use. And the asset must be shown in the Balance sheet at its reduced value. Generally, the depreciation is charged on the basis of the life of the asset. One thing should be noted that, depreciation is charged only on fixed assets, and not on floating assets, because floating assets are not held by the business for a long time.

10.2.6. Bad debts :

A businessman has to sell goods on credit also in order to increase sales. In credit sales, goods are delivered to the customers immediately and cash is received from the debtors after a certain period. Hence, there is a risk of loss due to bad debt. It is likely that some customers may not pay their dues for one or the other reason. Thus, the debt due from customers becomes bad for recovery. Bad debt is the irrecoverable debt from customers. Bad debt is a loss to business. It reduces profits. It is a nominal account. Hence, it is placed on debit side of Profit and Loss account.

10.2.7. Sundry Debtors :

It represents the total debt due from various parties on account of sale of goods on credit.

Provision for Doubtful debts : The term `doubtful debts' suggests that the debt may be recovered or may not be recovered. It is rather doubtful about recovery of such debt. Under such a circumstances, it cannot be considered as bad. At the same time, it cannot be considered good for recovery. If all such debtors are treated as good and shown in the balance sheet, it will amount to showing the assets at a higher value. The profit and loss account also will not show true position. The profit will be overstated. On other hand, if all such debts are shown as bad the profit will be understated and the balance sheet will not show true position as the debtors will be understated. Hence, it is necessary to show the position which is very close to the correct position. This can be done by providing for doubtful debts. The amount of doubtful debt provision is estimated on the basis of past experience. A certain percentage of debt is treated as doubtful and accordingly provided for while preparing financial statement. The amount thus provided for is called ``Provision for doubtful debts''. There is a distinction between provision for doubtful debts and reserve for doubtful debts. A provision is interpreted as the amount retained by way of providing for a known liability. The amount of such provision cannot be determined with substantial accuracy. The term `reserve is interpreted as, the amount retained for known liability which is in excess of the necessary amount. The amount which is in excess of the required amount is referred to as a `reserve;. However, for the purpose of accounting the above distinction is ignored as the distinction does not materially affect accounting treatment.

10.2.8 Provision for Discount on Debtors :

In business, a proprietor may be required to allow discount to debtors if they pay their dues before the due dates. The discount allowed would be a loss to business and it is in connection with the debtors created during the year. Hence, it is quite advisable to make a provision for such discount by charging the profit and loss account. Such a provision is called as ``Provision for discount on debtors.''

10.2.9 Bad debts recovery : After writing off bad debts, it is quite likely that some debtors may pay their dues which have been written off as bad. The amount received from debtor against such bad debts written off is called as `Bad debts Recovery'' The amount received is credited to Bad debts Recovery Account.

10.2.10 Reserve or provision for discount on Creditors :

As the trader allows a cash discount to his debtors he may also receive a cash discount from him creditors if he makes the payment during the stipulated period. As such, the trader may receive the cash discount from his creditors which can be estimated. Thus, the cash discount likely to be received from creditors is estimated and a provision is made for discount on creditors. Such a provision is called as `Provision or Reserve for Discount on Creditors.''.

A Discount received from creditors is a gain, and it is transferred to the credit of the Profit and Los Account. A reserve for discount on creditors is created by debiting such a Reserve Account and crediting the profit and loss account. The debit balance of Reserve for discount on creditors is shown in the Balance Sheet by subtracting it from sundry creditors.

The actual amount of discount received is credited to the Discount Received Account and debited to the Creditors personal account. At the end of the year, the total amount of Discount received is transferred to the credit side of Reserve for Discount on Creditors Accounts . Then, a new estimate is made regarding the Discount receivable from Sundry Creditors by crediting the Profit and Loss Account.

10.2.11 Interest on Drawings :

Drawings denotes 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. In case of a partnership firm, interest on drawings will be charged on the drawings made by each partner.

Computation of Interest on drawings : There is a difference between the method of computation of interest on capital and 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. 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 with

10.2.11. Closing Stock :

Stock remaining unsold at the end of the accounting year is called ``Closing stock''. Closing stock has to be taken into account while preparing final accounts. Unless it is taken into account Trading and profit and loss account and balance sheet will not disclose a true and fair view of the state of affairs of the business concern. Closing stock is credited to Trading Account and shown in the Balance Sheet on the Assets side.

Illu.1 : From following Trial Balance of Swaroop, prepare Trading and Loss account for the year ended 31st March 2006 and a Balance sheet as on that date.

Debit Balances	***Rs.***	***Credit Balances***	***Rs.***
Stock	**45,000**	**Capital**	**75,000**
Plant and machinery	**75,000**	**Sales**	**4,20,750**
Purchases	**2,25,000**	**Sundry Creditors**	**15,000**
Trade expenses	**10,000**	**Bad debts provision**	**200**
Carriage inwards	**2,500**	**Bills payable**	**2,000**
Carriage outwards	**1,500**		
Factory rent	**1,500**		
Discount	**350**		
Insurance	**700**		
Sundry debtors	**60,000**		
Office rent	**3,000**		
Stationery	**600**		
Salaries	**17,800**		
Advertising	**15,000**		
Bills receivable	**6,000**		
Drawing	**6,000**		
Wages	**20,000**		
Furniture	**7,500**		
Coal and gas	**1,000**		
Cash in hand	**2,000**		
Cash at Bank	**12,500**		
	5,12,950		**5,12,950**

Adjustments :

a. Closing stock amounted to Rs. 35,000

b. Depreciate Machinery by 10% and Furniture by 5%

c. Raise the Bad debts provision to 5% on Debtors

d. Outstanding Factory rent Rs.300 and Office rent Rs. 600

e. Insurance prepaid Rs.100.

Solution :

Trading Profit & Loss Account of

Dr. Swaroop for the year ending 31.3.2006 Cr.

		Rs.		Rs.
To Opening Stock		45,000	By Sales	4,20,750
To Purchase		2,25,000	By Closing Stock	35,000
To Wages		20,000		
To Coal and Gas		1,000		
To Carriage Inwards		2,500		
To Factory Rent	1,500			
Add outstanding	300	1,800		
To Gross profit c/d		1,60,450		
		4,55,750		**4,55,750**
To Salaries		17,800	By Gross profit b/d	1,60,450
To Advertising		15,000		
To Stationary		600		
To Office Rent	3,000			
Add outstanding	600	3,600		
To Insurance	700			
Less Prepaid	100	600		
To Discount		350		
To Carriage outwards		1,500		
To Trade expenses		10,000		
To Depreciation				
Machinery	7,500			

Furniture 375	7,875		
To Provision for Bad Debts	2,800		
To Net Profit transferred to capital	1,00,325		
	1,60,450		**1,60,450**

Balance sheet of Swaroop as on 31-3-2006

Liabilities	***Rs.***	***Assets***	***Rs.***
Sundry creditors	15,000	Cash in Hand	2,000
Bills payable	2,000	Cash at Bana	12,500
Outstanding		Bills receivable	6,000
Factory rent 300		Debtors 60,000	
Office rent 600	900	Less P.B.D. 3,000	57,000
Capital 75,000		Closing Stock	35,000
Add Net Profit 1,00,325		Plant & Machinery 75,000	
1,75,325		Less Deprecia 7,500	67,500
Less Drawings 6,000	1,69,325	Furniture 7,500	
		Less Deprecia. 375	7,125
		Prepaid Insurance	100
	1,87,225		**1,87,225**

Existing Rs. 200+ New Rs. 2,800= Rs.3,000.

Illu.2 : From following Trial Balance, prepare Trading, Profit and Loss account for the year ended 31-12-2006 and the Balance Sheet as on that date:

Debit Balances	***Rs.***	***Credit Balances***	***Rs.***
Chandra Sekhar's drawing	**4,500**	**Chandra Sekhar's Capital**	**24,000**

Purchases	**20,000**	**Sales**	**30,500**
Returns inwards	**1,500**	**Discounts**	**1,900**
Opening Stock	**8,000**	**Sundry Creditors**	**10,000**
Salary	**4,200**	**Bills payable**	**2,500**
Wages	**1,200**		
Rent	**350**		
Bad debts	**400**		
Discounts	**700**		
Sundry debtors	**14,000**		
Cash in hand	**260**		
Cash at Bank	**5,940**		
Insurance	**400**		
Trade expenses	**300**		
Printing	**150**		
Furniture	**2,000**		
Machinery	**5,000**		
	68,900		**68,900**

Adjustments :

a. **Closing Stock Rs. 7,000**

b. **Insurance pre – paid Rs. 60**

c. **Outstanding salary Rs. 200 and wages Rs. 200**

d. **Make provision for doubtful debts at 5% on Sundry debtors**

e. **Calculate interest on capital at 5% p.a.**

f. **Depreciate Machinery at 5% and Furniture at 10%**

g. **Reserve for discount on creditors at 1%.**

Solution :

Dr. **Trading and Profit and Loss Account as on 31-12-2006** **Cr.**

	Rs.	Rs.		Rs.	Rs.
To Opening Stock		8,000	By Sales	30,500	
To Purchases		20,000	Less Returns	1,500	29,000
To Wages	1,200		By Closing Stock		7,000
Add Outstanding	200	1,400			
To Gross Profit c/d		6,600			
		36,000			**36,000**
To Salary	4,200		By Gross profit b/d		6,600
Add outstanding	200	4,400	By Discounts		1,900
To Rent		350	By Discount reserve on Creditors		100
To Bad debts		400	By Net loss – transfer to capital		390
To Discount		700			
To Insurance	400				
Less pre-paid	60	340			
To Trade expenses		300			
To Printing		150			
To Provision for Doubtful debts		700			
To Interest on Capital		1,200			
To Depreciation c/d					
Machinery 5%		250			
Furniture 10%		200			
		8,990			**8,990**

Balance Sheet as on 31-12-2006

Liabilities		***Rs.***	***Assets***		***Rs.***
Bills payable		2,500	Cash in Hand		260
Sundry Creditors	10,000		Cash at bank		5,940
Less Discount reserve	100	9,900	Sundry Debtors	14,000	
Outstanding salary		200	Less provision	700	13,300
Wages		200	Closing Stock		7,000
Capital	24,000		Furniture	2,000	
Add Interest	1,200		Less Depreciation	200	1,800
Less Net Loss	25,200 390		Machinery	5,000	
Less Drawings	24,810 4,500	20,310	Less Depreciation	250	4,750
			Prepaid Insurance		60
		33,110			**33,110**

Illu.3 : The following Trial Balance is extracted from the books of merchant on 31-12-2006:

	Rs.	**Rs.**
Capital		**12,500**
Furniture	**640**	
Vehicles	**6,250**	
Buildings	**7,500**	
Bad debts	**125**	
Provision for bad debts		**200**
Debtors and creditors	**3,800**	**2,500**

Stock on 1-1-2006	**3,460**	
Purchases and sales	**5,475**	**15,450**
Bank overdraft		**2,850**
Returns	**200**	**125**
Advertising	**568**	
Commission		**375**
Cash	**650**	
Insurance	**1,250**	
General expenses	**782**	
Salaries	**3,300**	
	34,000	**34,000**

Adjustments:

a) **Stock on 31-12-2006 was Rs.3,250.**

b) **Depreciate buildings by 5%, Furniture by 10% and Vehicles by 20%.**

c) **Outstanding interest Rs.85, Salaries 300 and taxes Rs.120.**

d) **Prepare insurance is Rs.100.**

e) **1/3 of the commission received is in respect of work to be done next year.**

f) **Write off further bad debts Rs.100 and provision for bad debts is to be made equal to 5% on debtors.**

Prepare final accounts for the year ending 31-12-2006.

Solution :

Trading and Profit & Loss a/c
for the year ending 31-12-2006

Dr. **Cr.**

	Rs.		**Rs.**
To Opening stock	3,460	By Sales 15,450	
To Purchase 5,475		**Less:** Sales Returns 200	15,250

Less: Purchase Returns 125	5,350	By Closing stock	3,250
To Gross profit	9,690		
	18,500		**18,500**
To Advertising	568	By Gross Profit	9,690
To Insurance 1,200		By Commission 375	
Less: prepaid 100	1,100	**Less:** Received Earlier 125	250
To General expenses	782	By Provision for bad debts (3,800 – 100 = 3,700 x 5/100 = 185 – 200)	15
To Salaries 3,300			
Add: Outstanding 300	3,600		
To Outstanding interest	85		
To Bad debts (100 + 125)	225		
To Depreciation			
Buildings	375		
Furniture	64		
Vehicles	1,250		
To Net Profit	1,736		
	9,955		**9,955**

Balance Sheet as on 31-12-2006

Liabilities	**Rs.**	**Assets**	**Rs.**
Capital 12,500		**Current Assets:**	
Add: Net profit 1,736	14,236	Cash	650
Current Liabilities:		Debtors 3,800	
Bank overdraft	2,850	**Less:** Bad debts 100	
Outstanding interest	85	3,700	
Outstanding Salaries	300	**Less:** Provision for	

		Bad debts 185	3,515
Outstanding taxes	120	Prepaid insurance	100
Creditors	2,500	Closing Stock	3,250
Commission received	125	**Fixed Assets:**	
		Furniture 640	
		Less: Depreciation 64	576
		Vehicles 6,250	
		Less: Depreciation 1,250	5,000
		Buildings 7,500	
		Less: Depreciation 375	7,125
	20,216		**20,216**

Illu.4 : From the following Trial Balance of Shri Goyal, prepare Trading and Profit & Loss a/c for the year ending 31st December, 2006 and Balance Sheet As on that date:

Trial Balance as on 31st December, 2006

Debit Balance	***Rs.***	***Credit Balance***	***Rs.***
Adjusted purchases	**3,49,600**	**Sales**	**3,70,000**
Wages	**10,450**	**Capital**	**34,250**
National insurance	**150**	**Discount received**	**300**
Carriage inwards	**200**	**Commission received**	**10,000**
Carriage outwards	**250**	**Dividends received**	**150**
Lighting	**300**		
Rates and insurance	**250**		
Stock at 31-12-06	**30,625**		
Cash in Hand and at Bank	**875**		
Plant and machinery	**15,000**		
Discount allowed	**3,000**		
Furniture	**4,000**		
	4,14,700		**4,14,700**

Adjustments:

i) **Depreciate plant and machinery @ 15% and furniture 10%.**

ii) **Goods worth Rs.2, 000 given to his son at cost by Shri Goyal.**

iii) **Manager Commission 20% of profit after charging commission.**

Solution :

Trading and Profit & Loss a/c of Mr. Goyal

Dr. **For the year ending 31-12-2006** **Cr.**

Particulars		***Amount Rs.***	***Particulars***		***Amount Rs.***
To Adjusted purchases	3,49,600		By Sales		3,70,000
Less: Goods given to son	2,000	3,47,600			
To Wages		10,450			
To Carriage inwards		200			
To Gross profit (transferred to P&L a/c)		11,750			
		3,70,000			**3,70,000**
To Lighting		300	By Gross profit		11,750
To Rates and insurance		250	By Dividends received		150
To National insurance		150	By Commission received		10,000
To Carriage outwards		250	By Discount received		300
To Discount allowed		3,000			
To Depreciation on P&M					
(15,000 X 15 / 100)		2,250			
To Depreciation on Furniture					
(4,000 X 10 / 100)		400			
To Manager's commission					
(15,600 X 20 / 120)		2,600			
To Net profit transferred to Capital a/c		13,000			

		22,200			**22,200**

Balance Sheet of Mr. Goyal as on 31-12-2006

Liabilities		***Amount Rs.***	***Assets***		***Amount Rs.***
Capital	34,250		Plant and Machinery	15,000	
Add: Net profit	13,000		Less: Depreciation	2,250	12,750
	47,250		Furniture	4,000	
Less: Drawings	2,000	45,250	Less: Depreciation	400	3,600
O/s Manager's commission		2,600	Stock		30,625
			Cash in Hand		875
		47,850			**47,850**

Illu.5 : From the Trial Balance of Aditya as on 31st December 2006, prepare a Trading and Profit and Loss a/c for the year ended December 2006 and a Balance Sheet as on that date:

Particulars	**Dr. Rs.**	**Cr. Rs.**
Purchases	**1,80,000**	
Opening stock	**10,000**	
Salaries	**5,400**	
Bonus to employees	**1,200**	
Rent @ 250 per month	**2,750**	
Machinery	**29,000**	
Wages	**3,000**	
Furniture and fittings	**5,000**	
Electricity	**550**	
Trade expenses	**1,500**	
Debtors	**10,500**	
Interest on loan	**900**	

Building	**30,000**	
Commission	**200**	
Sales		**2,05,000**
Loan @ 10%		**10,000**
Creditors		**15,000**
Capital		**55,000**
Drawings	**5,000**	
	2,85,000	**2,85,000**

The following adjustments need to be considered:

(i) **Closing Stock on 31st December amounted Rs.12,000**

(ii) **Purchases include the cost of moped for Rs.5,000**

(iii) **Wages include Rs.1,000 paid for erection charge.**

(iv) **Sundry Debtors include Rs.500 which had become bad and a provision of 10% need to be maintained on doubtful debts.**

(v) **Electricity outstanding Rs.50 and**

(vi) **Provide 10% depreciation on Building.**

Solution :

Trading and Profit and Loss a/c
for the year ended 31st December, 2006

Particulars	Rs.	Rs.	Particulars	Rs.
To Opening Stock		10,000	By Sales	2,05,000
To Purchases	1,80,000		By Closing stock	12,000
Less : Cost of Moped	5,000	1,75,000		
To Wages	3,000			
Less : Erection charges	1,000	2,000		
To Gross Profit c/d		30,000		
		2,17,000		2,17,000
To Salaries		5,400	By Gross profit b/d	30,000

To Bonus to employees		1,200		
To Rent	2,750			
Add : outstanding	250	3,000		
To Electricity	550			
Add : Outstanding	50	600		
To Trade expenses		1,500		
To Interest on loan	900			
Add : Outstanding	100	1,000		
To Commission		200		
To Bad debts		500		
To Provision for bad and doubtful debts		1,000		
To Depreciation on Building		3,000		
To Net Profit transferred to capital a/c		12,600		
		30,000		30,000

Balance Sheet as on 31st December, 2006

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Creditors		15,000	Debtors	10,500	
10% Loan	10,000		Less : Bad debts	500	
Add : Outstanding	100	10,100		10,000	
Outstanding rent		250	Less : Provision for doubtful debts	1,000	9,000
Outstanding electricity		50	Closing stock		12,000
Capital	55,000		Machinery	29,000	
Add : Net Profit	12,600		Add : Erection charges	1,000	30,000
	67,600		Furniture & Fittings		5,000

Less : Drawings	5,000	62,600	Buildings	30,000	
			Less : Depreciation	3,000	27,000
			Moped		5,000
		88,000			88,000

Illu.6 : From the following Trial Balance of Rahul, prepare Trading, profit and Loss Account for the year ending 31st March, 2006 and Balance Sheet as on that date.

	Debit Rs.	Credit Rs.
Factory Rent	**4,000**	
Bills receivable	**5,300**	
Bills payable	**-**	**4,200**
Insurance	**1,200**	
Furniture	**10,000**	
Machinery	**28,000**	
Office Rent	**2,000**	
Manufacturing Wages	**21,500**	
Provisions for doubtful debts		**1,000**
Manufacturing expenses	**1,500**	
General expenses	**5,400**	
Capital		**60,000**
Drawings	**7,200**	
Stock on 1st April, 2005	**20,500**	
Purchases	**68,000**	
Carriage inwards	**1,500**	
Sales		**1,40,500**
Sundry Debtors	**23,500**	
Sundry Creditors		**14,300**
Cash in hand	**500**	
Cash at Bank	**2,200**	

Carriage outwards	**1,700**	
Salaries	**16,000**	
	2.20,000	**2,20,000**

Adjustments :

- **i.** **Write off bad debts Rs.500 and maintain the provision for doubtful debts at 5% on Sundry debtors.**
- **ii.** **Stock on 31^{st} March, 2006 Rs.27,000**
- **iii.** **Unexpired Insurance Rs.300**
- **iv.** **Depreciate Machinery by 5% and furniture by 10%**
- **v.** **On 24^{th} December, 2004 a fire broke out and destroyed the stock of the value of Rs.10,000 and the insurance company has admitted the claim to the extent of Rs.6,000**

Solution :

Trading and Profit and Loss a/c
for the year ended 31^{st} March, 2006

	Rs.	Rs.		Rs.
To Opening stock		20,500	By Sales	1,40,500
To Purchases		68,000	By Loss due to goods destroyed by fire	10,000
To Manufacturing wages		21,500	By Closing stock	27,000
To Manufacturing expenses		1,500		
To Carriage inwards		1,500		
To Factory rent		4,000		
To Gross Profit c/d		60,500		
		1,77,500		1,77,500
To Insurance	1,200		By Gross profit b/d	60,500
Less : Prepaid	300	900		

To Office rent		2,000		
To General expenses		5,400		
To Carriage outwards		1,700		
To Salaries		16,000		
To Bad debts		500		
To Provision for doubtful debts		150		
To Loss of stock destroyed by fire		4,000		
To Depreciation on				
Machinery	1,400			
Furniture	1,000	2,400		
To Net profit transferred to capital a/c		27,450		
		60,500		60,500

Balance Sheet of Rahul as on 31st March, 2006

	Rs.	Rs.		Rs.	Rs.
Sundry Creditors		14,300	Cash in hand		500
Capital	60,000		Cash at Bank		2,200
Add : Net profit	27,450		Bills receivable		5,300
	87,450		Sundry Debtors	23,500	
Less : Drawings	7,200	80,250	Less : Bad debts	500	
				23,000	
Bills payable		4,200	Less : Provision for doubtful debts	1,150	21,850
			Closing stock		27,000
			Insurance claim		6,000
			Prepaid insurance		300

			Machinery	28,000	
			Less : Depreciation	1,400	26,600
			Furniture	10,000	
			Less : Depreciation	1,000	9,000
		98,750			98,750

Illu.7 : Prepare Trading account, Profit & Loss account and balance Sheet from the following data of M/s. Anil & Co. as on 31st March, 2006 :

Particulars	**Debit Rs.**	**Particulars**	**Credit Rs.**
Drawings	**5,000**	**Capital**	**40,000**
Debtors	**10,900**	**Creditors**	**6,000**
Wages	**6,000**	**Sales**	**40,000**
Purchases	**25,000**	**Purchase returns**	**2,000**
Rent	**1,000**	**Provision for bad debts**	**2,000**
Commission	**2,000**	**Interest**	**750**
Advertising	**1,000**		
Bad debts	**1,100**		
Machinery	**10,000**		
Furniture	**10,000**		
Tools	**5,000**		
Insurance	**1,000**		
Carriage outwards	**1,000**		
Investment	**10,000**		
Salary	**1,750**		
	90,750		**90,750**

Additional information:

a) **Provide 10% depreciation on furniture and 5% depreciation on machinery.**

b) **Wages includes Rs.1,000 paid for installation of machinery.**

c) **Closing stock Rs.30,000.**

d) **Create 5% provision for doubtful debts.**

e) **Goods given as free samples Rs.500.**

Solution :

Trading and Profit & Loss a/c of M/s Anil & Co.
for the year ending 31st March, 2006

Particulars	Rs.	Rs.	Particulars		Rs.
To Opening Stock		-	By Sales		40,000
To Purchases	25,000		By Closing stock		30,000
Less : returns	2,000	23,000	By Advertising		500
To Wages	6,000				
Less : Installation charges	1,000	5,000			
To Gross profit c/d		42,500			
		70,500			70,500
To Salary		1,750	By Gross profit b/d		42,500
To Rent		1,000	By Interest		750
To Commission		2,000	By Provision for bad debts	2,000	
To Advertising	1,000		Less : 5% Provision for doubtful debts	545	1,455
Add : Free Sample	500	1,500			
To Bad debts		1,100			
To Insurance		1,000			
To Carriage outwards		1,000			
To Depreciation on					
Furniture	1,000				
Machinery	550	1,550			

To Net profit (transferred to capital a/c)		33,805			
		44,705			44,705

Balance Sheet of M/s Anil & Co. as on 31-3-2006

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	40,000		Debtors	10,900	
Add : Net profit	33,805		Less : Reserve for bad debts	545	10,355
	73,805		Machinery	11,000	
:Less : Drawings	5,000	68,805	Less : Depreciation	550	10,450
Creditors		6,000	Furniture	10,000	
			Less : Depreciation	1,000	9,000
			Tools		5,000
			Investments		10,000
			Closing stock		30,000
		74,805			**74,805**

Illu.8 : From the following Trial balance of Mr. Samsan, prepare the final accounts for the year ended 31-3-2006.

Debit balances	**Rs.**	**Credit balances**	**Rs.**
Land and buildings	**50,000**	**Returns**	**2,500**
Purchases	**1,10,000**	**Discount**	**1,200**
Stock	**40,000**	**Sales**	**2,05,000**
Returns	**1,500**	**Capital**	**1,15,000**
Wages	**10,000**	**Loan from Vijay**	**15,000**
Salaries	**9,000**	**Commission**	**1,500**
Office expenses	**2,400**	**Sundry Creditors**	**25,000**
Carriage	**1,200**	**Bills payable**	**2,350**

Carriage outwards	**2,000**		
Discount	**750**		
Bad debts	**1,200**		
Insurance	**1,500**		
Machinery	**50,000**		
Furniture	**10,000**		
Bills receivable	**20,000**		
Sundry debtors	**40,000**		
Cash in hand	**1,500**		
Cash at bank	**4,500**		
Office equipment	**12,000**		
	3,67,550		**3,67,550**

Adjustments :

(a) Closing stock Rs.60,000

(b) Outstanding wages Rs.2,000, rent Rs.3,000

(c) Depreciation on land and buildings at 5%, machinery at 10%, Office equipment by 10%

(d) Bad debts reserve 21/2% on sundry debtors.

(e) Prepaid insurance Rs.200

(f) Provide interest on capital at 5%

(g) Loan from Vijay was taken on 1-1-2006 at 8% interest.

Solution :

Trading and Profit & Loss a/c of Mr. Samsan
for the year ending 31-3-2006

Particulars	Rs.	Rs.	Particulars		Rs.
To Opening Stock		40,000	By Sales	2,05,000	
To Purchases	1,10,000		Less : Returns	1,500	2,03,500
Less : Returns	2,500	1,07,500	By Closing stock		60,000

To Wages	10,000				
Add : Outstanding wages	2,000	12,000			
To Carriage		1,200			
To Gross profit c/d		1,02,800			
		2,63,500			2,63,500
To Salaries		9,000	By Gross Profit b/d		1,02,800
To Office expenses		2,400	By Discount		1,200
To Carriage outwards		2,000	By Commission		1,500
To Discount		750			
To Bad debts		1,200			
To Insurance	1,500				
Less : Prepaid insurance	200	1,300			
To Depreciation on					
Land and buildings		2,500			
Machinery		5,000			
Office equipment		1,200			
To reserve for bad debts		1,000			
To Outstanding rent		3,000			
To Interest on capital		5,750			
To Interest on Vijay loan (for 3 months)		300			
To Net profit (transferred to balance sheet)		70,100			
		1,05,500			1,05,500

Balance Sheet of Mr. Samsan as on 31-3-2006

Liabilities	**Rs.**	**Rs.**	**Assets**	**Rs.**	**Rs.**
Capital	1,15,000		Land and Buildings	50,000	
Add : Interest	5,750		Less : Depreciation	2,500	47,500

Add : Net profit	70,100	1,90,850	Machinery	50,000	
Loan from Vijay	15,000		Less : Depreciation	5,000	45,000
Add : Outstanding interest	300	15,300	Furniture		10,000
Sundry Creditors		25,000	Bills receivable		20,000
Bills payable		2,350	Sundry debtors	40,000	
Outstanding wages		2,000	Less : Reserve for bad debts	1,000	39,000
Outstanding rent		3,000	Cash in hand		1,500
			Cash at bank		4,500
			Office equipment	12,000	
			Less : Depreciation	1,200	10,800
			Closing stock		60,000
			Prepaid Insurance		200
		2,38,500			2,38,500

Illu.9 : Prepare Trading and profit and Loss account and Balance Sheet of Rajesh as on 31-3-2006 from the following Trial balance and adjourning information:

	Rs.	Rs.
Cash in hand	**540**	
Cash at Bank	**12,630**	
Purchases	**1,40,675**	
Sales		**2,58,780**
Returns	**2,680**	**1,500**
Wages	**20,480**	
Fuel and power	**4,730**	
Carriage on sales	**3,200**	
Carriage on purchase	**2,040**	
Stock (1st April, 2005)	**25,760**	
Buildings	**50,000**	

Machinery	**20,000**	
Patents	**7,500**	
Salaries	**15,000**	
General expenses	**13,000**	
Insurance	**600**	
Drawings	**15,245**	
Capital		**82,000**
Sundry debtors and creditors	**14,500**	**6,300**
	3,48,580	**3,48,580**

Additional Information:

(a) Stock on hand on 31-3-2006 was Rs.26,800.

(b) Machinery is to be depreciated @ 10% and patents @ 20%

(c) Salaries amounting to Rs.1,500 stand unpaid.

(d) Prepaid insurance Rs.170.

(e) A provision of bad and doubtful debts be created to the extent of 5% on debtors.

Solution :

Trading, Profit & Loss a/c of Mr. Ganguli
for the year ending 31-3-2006

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		25,760	By Sales	2,58,780	
To Purchases	1,40,675		Less : Returns	2,680	2,56,100
Less : Returns	1,500	1,39,175	By Closing stock		26,800
To Wages		20,480			
To Fuel and power		4,730			
To Carriage inward		2,040			
To Gross profit c/d		90,715			
		2,82,900			2,82,900
To Salaries	15,000		By Gross profit		90,715

			b/d		
Add : Outstanding	1,500	16,500			
To Carriage on sales		3,200			
To General expenses		13,000			
To Insurance	600				
Less : Prepaid	170	430			
To Depreciation :					
Machinery		2,000			
Patents		1,500			
To Provision for bad debts		725			
To Net profit (transferred to Balance Sheet)		53,360			
		90,715			90,715

Balance Sheet of Mr. Ganguli as on 31-3-2006

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Creditors		6,300	Cash in hand		540
Outstanding salaries		1,500	Cash at bank		12,630
Capital	82,000		Closing stock		26,800
Add : Net profit	53,360		Debtors	14,500	
	1,35,360		Less : Provision	725	13,775
Less : Drawings	15,245	1,20,115	Prepaid insurance		170
			Buildings		50,000
			Machinery	20,000	
			Less : Depreciation	2,000	18,000
			Patents	7,500	
			Less : Depreciation	1,500	6,000
		1,27,915			1,27,915

Illu.10 : From the following Trial balance of Venkata Krishna as at 31st March, 2004. Prepare trading and profit and loss account for the year ended 31st March, 2004 and a Balance Sheet as on that date.

Debit balances	Rs.	Credit balances	Rs.
Stock	45,000	Capital	75,000
Plant and Machinery	75,000	Sales	4,20,750
Purchases	2,25,000	Sundry Creditors	15,000
Trade charges	10,000	Bad debts provision	200
Carriage inwards	2,500	Bills payable	2,000
Carriage outwards	1,500		
Factory rent	1,500		
Discount	350		
Insurance	700		
Sundry debtors	60,000		
Office rent	3,000		
Printing and Stationery	600		
General expenses	2,800		
Advertising	15,000		
Bills receivable	6,000		
Drawings	6,000		
Salaries	15,000		
Wages	20,000		
Furniture	7,500		
Coal and Gas	1,000		
Cash in hand	2,000		
Cash at bank	12,500		
	5,12,950		5,12,950

Adjustments :

1. **Closing stock amounted to Rs.35,000**

2. **Depreciate machinery 10% and furniture by 2%**
3. **Raise the bad debts provision to 5% on debtors**
4. **Outstanding factory rent Rs.300 and office rent Rs.600**
5. **Insurance prepaid Rs.100**

Solution :

Trading and Profit & Loss account of Venkata Krishna Reddy for the year ending 31-3-2004

Particulars	Rs.	Rs.	Particulars	Rs.
To Opening stock		45,000	By Sales	4,20,750
To Purchases		2,25,000	By Closing stock	35,000
To Wages		20,000		
To Coal and Gas		1,000		
To Carriage inwards		2,500		
To Factory rent	1,500			
Add : Outstanding	300	1,800		
To Gross profit c/d		1,60,450		
		4,55,750		4,55,750
To Salaries		15,000	By Gross profit b/d	1,60,450
To Advertising		15,000		
To General expenses		2,800		
To Printing & Stationery		600		
To Office rent	3,000			
Add : Outstanding	600	3,600		
To Insurance	700			
Less : Prepaid	100	600		
To Discount		350		
To Carriage outwards		1,500		
To Trading expenses		10,000		
To Depreciation				

Machinery	7,500			
Furniture	375	7,875		
To Provision for bad debts		2,800		
To Net profit (transferred to balance sheet)		1,00,325		
		1,60,450		1,60,450

Balance Sheet of Venkata Krishna as on 31-3-2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		15,000	Cash in hand		2,000
Bills payable		2,000	Cash at bank		12,500
Outstanding factory rent		300	Bills receivable		6,000
Outstanding office rent		600	Debtors	60,000	
Capital	75,000		Less : Reserve for bad & doubtful debts	3,000	57,000
Add : Net Profit	1,00,325		Closing stock		35,000
	1,75,325		Plant & Machinery	75,000	
Less : Drawings	6,000	1,69,325	Less : Depreciation	7,500	67,500
			Furniture	7,500	
			Less : Depreciation	375	7,125
			Prepaid insurance		100
		1,87,225			1,87,225

Illu.11 : Prepare Trading and Profit and Loss account and a Balance Sheet of Shyam Sundar as on 31-12-2005 from the following Trial Balance and Adjustments:

	Dr. Rs.	Cr. Rs.
Shyam Sundar ‘s capital		93,230
Sales		1,26,177
Sundry creditors		22,680
Purchase returns		3,172
Bills payable		6,422
Plant and Machinery	55,000	
Fixtures and fittings	1,720	
Factory fuel and power	542	
Office Salaries	3,745	
Lighting (Factory)	392	
Travelling expenses	925	
Carriage on sales	960	
Cash at bank	2,245	
Cash in hand	68	
Sundry debtors	47,800	
Purchases	83,290	
Manufacturing wages	9,915	
Rents and taxes	1,765	
Office expenses	2,778	
Carriage on purchases	897	
Discount	422	
Drawings account	6,820	
Stock on 1-4-2004	21,725	
Manufacturing expenses	2,680	
Sales returns	7,422	
Insurance	570	
	2,51,681	2,51,681

Adjustments:

(a) **Depreciation – 5% of Plant and Machinery and 10% fixtures and fittings.**

(b) Reserve bad debts 2 ½% on sundry debtors

(c) Outstanding rent Rs.150

(d) Insurance unexpired on 31st March Rs.70

(e) Outstanding wages and salaries Rs.800 and Rs.350 respectively.

(f) Stock 31st March 2005 Rs.16, 580.

Solution :

Trading, Profit and Loss Account of Shyam Sundar

Dr. **For the year ending 31-3-2005** **Cr.**

		Rs.			Rs.
To Opening stock		21,725	By Sales	1,26,177	
To Purchases	83,290		**Less:** Returns	7,422	1,18,755
Less: Returns	3,172	80,118	By Closing Stock		16,580
To Lighting (Factory)		392			
To Factory fuel & Power		542			
To Manufacturing wages	9,915				
Add : Outstanding	800	10,715			
To Carriage on purchases		897			
To Manufacturing expenses		2,680			
To Gross profit c/d		18,266			
		1,35,335			**1,35,335**
To Salaries	3,745		By Gross profit b/d		18,266
Add : Outstanding	350	4,095			
To Travelling expenses		925			
To Carriage on sale		960			
To Office expenses		2,778			

To Discount		422			
To Depreciation					
Plant	2,750				
Fixtures	172	2,922			
To Reserve for bad debts		1,195			
To Rent and Taxes	1,765				
Add : Outstanding rent	150	1,915			
To Insurance	570				
Less: unexpired	70	500			
To Net profit transferred to Balance Sheet		2,554			
		18,266			**18,266**

Balance Sheet of Shyam Sundar as on 31-3-2005

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry creditors		22,680	Cash in Hand		68
Bills Payable		6,422	Cash at Bank		2,245
Outstanding rent		150	Debtors	47,800	
Outstanding wages		800	**Less :** R. B. D.	1,195	46,605
Outstanding salaries		350	Closing stock		16,580
Capital	93,230		Unexpired Insurance		70
Add: Net profit	2,554		Fixtures and Fittings	1,720	
	95,784		**Less:** Depreciation	172	1,548
Less: Drawings	6,820	88,964	Plant and Machinery	55,000	
			Less: Depreciation	2,750	52,250
		1,19,366			**1,19,366**

Illu.12 : Prepare Trading and Profit and Loss a/c and a Balance Sheet as on 31.3.2005 from the following Trial Balance :

Debit	Rs.	Credit	Rs.
Salaries	6,000	Capital	25,000
Purchases	26,000	Sales	47,000
Trade expenses	1,000	Discount	200
Wages	7,800	Creditors	21,000
Carriage on purchases	400	Bills payable	6,800
Office expenses	500		
Commission	600		
Bad debts	1,200		
Debtors	30,000		
Furniture	3,000		
Machinery	10,000		
Bills receivable	2,000		
Insurance	400		
Opening stock	7,000		
Cash in hand	500		
Cash at bank	3,600		
	1,00,000		1,00,000

Adjustments :

(a) Closing stock Rs.11,000

(b) Outstanding wages Rs.2,000

(c) Prepaid insurance Rs.50

(d) Provide for reserve on doubtful debts 5% on debtors.

(e) Depreciate machinery and furniture @ 5%.

Solution :

Trading, Profit and Loss Account
for the year ending 31-3-2005

Dr. **Cr.**

		Rs.		Rs.
To Opening stock		7,000	By Sales	47,000
To Purchases		26,000	By Closing stock	11,000
To Wages	7,800			
Add: Outstanding	2,000	9,800		
To Carriage on Purchases		400		
To Gross profit c/d		14,800		
		58,000		**58,000**
To Salaries		6,000	By Gross profit b/d	14,800
To Trade Expenses		1,000	By Discount	200
To Office expenses		500		
To Commission		600		
To Bad debts		1,200		
To Insurance	400			
Less : Prepaid	50	350		
To Depreciation				
Machinery	500			
Furniture	150	650		
To Reserve for doubtful debts		1,500		
To Net profit transferred to Balance sheet		3,200		
		15,000		**15,000**

Balance Sheet of as on 31-3-2005

Liabilities	Rs.	Assets	Rs.
Bills payable	6,800	Cash in hand	500

Creditors		21,000	Cash at Bank		3,600
Outstanding wages		2,000	Bills receivable		2,000
Capital	25,000		Debtors	30,000	
Add : Net profit	3,200	28,200	**Less:** Reserve	1,500	28,500
			Prepaid Insurance		50
			Closing stock		11,000
			Machinery	10,000	
			Less: Depreciation	500	9,500
			Furniture	3,000	
			Less: Depreciation	150	2,850
		58,000			**58,000**

Illu.13 : From the following Trial Balance of Lakshmi Narayana on 30th June 2004 prepare Trading and Profit and Loss Account and Balance Sheet as on that date.

	Dr. Rs.	**Cr. Rs.**
Capital and drawings	**10,550**	**1,19,400**
Bills receivable	**9,500**	
Purchases and Sales	**2,56,590**	**3,56,430**
Returns inwards	**2,780**	
Opening stock	**89,680**	
Commission		**5,640**
Plant and Machinery	**28,800**	
Salaries	**11,000**	
Travelling Expenses	**1,880**	
Debtors (including Mohan for dishonoured cheque of Rs.1,000)	**62,000**	
Stationery	**2,000**	
Telephone charges	**1,370**	
Interest and Discounts	**5,870**	

Bad debts	**3,620**	
Fixture and Fittings	**8,970**	
Creditors		**56,630**
6% Loan		**23,000**
Wages	**40,970**	
Cash in hand	**530**	
Cash at Bank	**18,970**	
Insurance (including premium of Rs.300 p. a. paid up to 31st December	**400**	
Rent and taxes	**5,620**	
	5,61,100	**5,61,100**

Adjustments:

(a) Stock in trade on 30th June 2004 was Rs.1,28,960.

(b) Write off half of Mohan ‘s cheque

(c) Create provision of 5% on Debtors

(d) Manufacturing wages include Rs.1,200 for erection of machinery purchased last year.

(e) Depreciate Plant and Machinery by 5% and Fixture and Fittings by 10% per year.

(f) Commission accrued Rs.600

(g) Interest on loan for the last two months is not paid.

Solution :

Trading Profit and Loss account of Lakshmi Narayana

Dr. for the year ending 30-6-2004 Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening stock		89,680	By Sales	3,56,430	
To Purchases		2,56,590	**Less:** Returns	2,780	3,53,650
To Wages	40,970		By Closing stock		1,28,960
Less: Machine erection wages	1,200	39,770			
To Gross Profit c/d		96,570			

		4,82,610			**4,82,610**
To Salaries		11,000	By Gross profit		96,570
To Trading expenses		1,880	By Commission	5,640	
To Stationery		2,000	**Add:** Accrued commission	600	6,240
To Telephone charges		1,370			
To Interest and Discount	5,870				
Add: Outstanding interest on loan	230	6,100			
To insurance	400				
Less: Unexpired	150	250			
To Rent and taxes		5,620			
To Bad debts		4,120			
To Depreciation :					
Machinery	1,500				
Fixtures & Fittings	897	2,397			
To Provision for bad debts		3,075			
To Net profit transferred to capital a/c		64,998			
		1,02,810			**1,02,810**

Balance Sheet of Lakshmi Narayana as on 30-6-2004

Liabilities		**Rs.**	**Assets**		**Rs.**
Creditors		56,630	Cash in hand		530
6% loan	23,000		Cash at bank		18,970
Add: Interest	230	23,230	Bills receivable		9,500
Capital	1,19,400		Debtors	62,000	
Add: Net profit	64,998		**Less:** Bad debts	500	
	1,84,398			**61,500**	
Less: Drawings	10,550	1,73,848	**Less:** Provision for		

			Bad debts	3,075	58,425
			Closing stock		1,28,960
			Commission accrued		600
			Unexpired insurance		150
			Plant and Machinery	28,800	
			Add: Erection charges	1,200	
				30,000	
			Less: Depreciation	1,500	28,500
			Fixtures & Fittings	8,970	
			Less: Depreciation	897	8,073
		2,53,708			**2,53,708**

Illu.14 : The following Trial Balance has been taken from the books of Mr. Aravind as on 31st December 2000. You are required to prepare the Trading and profit and loss account for the year ended 31-12-2000 and the Balance Sheet as on that date.

Debit balances	**Rs.**	**Credit Balances**	**Rs.**
Cash in hand	**540**	**Sales**	**98,780**
Cash at Bank	**2,630**	**Return outwards**	**500**
Purchases	**40,675**	**Capital**	**62,000**
Return inwards	**680**	**Sundry creditors**	**6,300**
Wages	**8,480**	**Rent**	**9,000**
Fuel	**4,730**		
Carriage on purchases	**2,040**		
Carriage on sales	**3,200**		
Stock (1.1.2000)	**5,760**		
Buildings	**32,000**		
Land	**10,000**		
Machinery	**20,000**		

Patents	**7,500**		
Salaries	**15,000**		
General expenses	**3,000**		
Insurance	**600**		
Drawings	**5,745**		
Sundry debtors	**14,000**		
	1,76,580		**1,76,580**

Adjustments :

(a) Stock on hand on 31.12.2000, Rs.6,800

(b) Machinery is to be depreciated at the rate of 10% and patents at the rate of 20%.

(c) Outstanding salaries Rs.1,500

(d) Prepaid insurance Rs.170.

(e) Rent receivable Rs.1,000

(f) Bad debts Rs.725.

Solution :

Trading Profit & Loss a/c of Mr. Aravind

Dr. for the year ended 31-12-2000 Cr.

	Rs.	Rs.		Rs.	Rs.
To Opening stock		5,760	By Sales	98,780	
To Purchases	40,675		**Less:** Returns	680	98,100
Less: Returns	500	40,175	By Closing stock		6,800
To wages		8,480			
To Fuel		4,730			
To Carriage in purchases		2,040			
To Gross Profit c/d		43,715			
		1,04,900			**1,04,900**
To Salary	15,000		By Gross profit c/d		43,715
Add: Outstanding	1,500	16,500	By Rent	9,000	
To Carriage on sales		3,200	**Add:** Receivable	1,000	10,000

To General expenses		3,000			
To Bad debts		725			
To Insurance	600				
To prepaid	170	430			
To depreciation on Machinery	2,000				
To Patents	1,500	3,500			
To Net Profit		26,360			
		53,715			**53,715**

Balance Sheet of Mr. Aravind as on 31st December, 2000

Liabilities	**Rs.**	**Rs.**	**Assets**	**Rs.**	**Rs.**
Capital	62,000		Land		10,000
Add: Net Profit	26,360		Building		32,000
	88,360		Machinery	20,000	
Less: Drawings	5,745	82,615	Depreciation	2,000	18,000
Creditors		6,300	Patents	7,500	
Outstanding salaries		1,500	Depreciation	1,500	6,000
			Closing stock		6,800
			Debtors	14,000	
			Less: Bad debts	725	13,275
			Cash in hand		540
			Cash at bank		2,630
			Prepaid insurance		170
			Rent receivable		1,000
		90,415			**90,415**

Illu.15 : From the following Trial Balance, prepare Trading and Profit and Loss Account of Abhimanyu for the year ending 31st December 2005 and a Balance Sheet as on that date. You are also to consider the following adjustments:

(1) Stock on 31st December 2005 amounted to Rs.52, 000

(2) Provide Rs.5, 000 for outstanding wages and Rs.500 for outstanding rent

(3) Drawings amounting to Rs.10, 000 has been debited to capital account.

(4) Charge interest @ 5% p. a. on capital and Rs.300 on drawings.

(5) Goods distributed as samples amounted to Rs.2, 000.

(6) Depreciate freehold premises @ 5%.

	Dr. Balances Rs.	Cr. Balances Rs.
Stock on 1st January	23,000	
Purchases and returns	75,100	300
Cash in hand	1,700	
Bank	11,330	
Freehold property	19,300	
Printing and Stationery	820	
Trade expenses	560	
Commission received		1,650
10% investments (January 1st)	2,000	
Interest on the above		100
Sundry debtors and Creditors	18,000	14,835
Wages	12,500	
Salaries	7,000	
Capital		57,000
Income tax	800	
Discount allowed and received	3,150	2,300
Sales and returns	275	1,04,475
Bills receivable	1,600	

Office furniture	**1,525**	
Rent, rates and insurance	**2,000**	
	1,80,660	**1,80,660**

Solution :

Trading, Profit and Loss Account of Abhimanyu
for the year ending 31st December, 2005

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		23,000	By Sales	1,04,475	
To Purchases	75,100		**Less :** Returns	275	1,04,200
Less : Returns	300		Closing Stock		52,000
	74,800				
Less : Samples	2,000	72,800			
Wages	12,500				
Add : Outstanding	5,000	17,500			
Gross Profit c/d		42,900			
		1,56,200			**1,56,200**
To Salaries		7,000	By Gross Profit b/d		42,900
To Rent, Rates, insurance	2,000		By Commission received.		1,650
Add: Outstanding rent	500	2,500	By Interest on Investments	100	
To Printing & Stationery		820	**Add :** Outstanding	100	200
To Trade expenses		560	By Discount received		2,300
To Income Tax		800	By Interest on Drawings		300
To Discount allowed		3,150			
To Interest on capital		3,350			
To Samples distributed		2,000			
To Depreciation on Freehold premises		965			
To Net Profit transferred					

to Balance sheet		26,205			
		47,350			**47,350**

Balance Sheet of Abimanyu as on 31st December, 2005

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		14,835	Cash in hand		1,700
Capital	57,000		Bank		11,330
Add : Interest	3,350		Closing Stock		52,000
Add : Profit	26,205		Investments		2,000
	86,555		Sundry Debtors		18,000
Less : Interest on drawing	300	86,255	Bills receivable		1,600
Outstanding wages		5,000	Outstanding interest on Investments		100
Outstanding Rent		500	Freehold Property	19,300	
			Less : Depreciation	965	18,335
			Office Furniture		1,525
		1,06,590			**1,06,590**

Illu.16 : From the following Trial Balance, Prepare the Trading Profit and Loss Account and the Balance Sheet on 31-12-2004.

Debit Balance	Rs.	Credit Balance	Rs.
Drawings	**6,000**	**Capital**	**60,000**
Trading expenses	**2,500**	**Sundry creditors**	**43,000**
Rent	**2,000**	**Bills payable**	**4,000**
Travelling expenses	**4,700**	**Commission**	**4,000**
Returns	**1,000**	**Returns**	**1,100**
Salaries	**9,500**	**Sales**	**1,58,000**
Purchases	**80,000**	**Overdraft**	**6,000**
Duty and clearing charges	**3,500**		
Sundry debtors	**51,000**		
Bills receivable	**5,000**		

Loan to Ramu	**42,000**		
Plant and Machinery	**8,500**		
Opening stock	**47,000**		
Cash in hand	**900**		
Cash at Bank	**12,500**		
	2,76,100		**2,76,100**

Adjustments :

(i) **Closing Stock Rs.60,000**

(ii) **Allow interest on capital at 10%**

(iii) **Provide depreciation on machinery at 10% p.a.**

(iv) **Commission received in advance Rs.500**

(v) **Outstanding salaries Rs.1,600**

(vi) **Write off bad debts Rs.1,000 and provide 5% as reserve for bad debts on debtors.**

(vii) **Interest to be received Rs.200.**

Solution :

Trading Profit & Loss Account for the year ending 31-12-2004

Dr. **Cr.**

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening stock		47,000	By Sales	1,58,000	
To Purchases	80,000		**Less:** Returns	1,000	1,57,000
Less : Returns	1,100	78,900	By Closing Stock		60,000
To Duty & Clearing charges		3,500			
To Gross Profit c/d		87,600			
		2,17,000			**2,17,000**
To Salaries	9,500		By Gross Profit b/d		87,600
Add: Outstanding	1,600	11,100	By Commission	4,000	

To Trading expenses		2,500	**Less:** Received in a advance	500	3,500
To Rent		2,000	By Outstanding Interest		200
To Travelling expenses		4,700			
To Interest on capital		6,000			
To Depreciation on Machinery		850			
To Bad debts		1,000			
To Reserve for bad debts		2,500			
To Net profit transferred to balance sheet		60,650			
		91,300			**91,300**

Balance Sheet as on 31-12-2004

Liabilities	**Rs.**	**Rs.**	**Assets**	**Rs.**	**Rs.**
Bank overdraft		6,000	Cash in Hand		900
Bills payable		4,000	Cash at Banks		12,500
Sundry creditors		43,000	Debtors	51,000	
Capital	60,000		**Less:** Bad debts	1,000	
Add: Interest	6,000			50,000	
Add: Net Profit	60,650		**Less :** Provision for Bad debts	2,500	47,500
	1,26,650		Bills Receivable		5,000
Less : Drawings	6,000	1,20,650	Loan to Ramu	42,000	
Outstanding Salaries		1,600	**Add:** Outstanding Interest	200	42,200

Commission received in advance		500	Closing stock		60,000
			Plant and Machinery	8,500	
			Less: Depreciation	850	7,650
		1,75,750			**1,75,750**

Illu.17 : From the following Trial Balance, you are required to prepare final accounts for the year ended 31-12-2005 :

Particulars	**Debit Rs.**	**Credit Rs.**
Land & Buildings	**20,000**	**-**
Goodwill	**40,000**	**-**
Plant and Machinery	**30,000**	**-**
Loose Tools	**1,000**	**-**
Opening stock	**20,000**	**-**
Capital and drawings	**7,500**	**70,000**
Bills receivable and Bills payable	**7,500**	**8,000**
Purchase and sales	**30,000**	**1,15,000**
Carriage inwards	**1,000**	**-**
Salaries	**14,000**	**-**
Wages	**15,000**	**-**
Debtors and Creditors	**20,000**	**36,000**
Cash at Bank	**15,000**	**-**
Cash on hand	**2,000**	**-**
Furniture	**3,000**	**-**
Insurance	**2,000**	**-**
Returns	**750**	**1,000**
Bad debts	**1,250**	
	2,30,000	**2,30,000**

Adjustments :

(a) Depreciate Plant & Machinery by 10%.

(b) Pre-paid insurance Rs.1,500

(c) Provide 5% on debtors against bad and doubtful debts and 2% against discount on debtors.

(d) Closing stock was valued at Rs.20,000.

Solution :

Dr. Trading, Profit & Loss a/c for the year ended 31-12-2005 Cr.

		Rs.			**Rs.**
To Opening stock		20,000	By Sales	1,15,000	
To Purchases	30,000		**Less:** Returns	750	1,14,250
Less: Returns	1,000	29,000	By Closing Stock		20,000
To Wages		15,000			
To Carriage Inwards		1,000			
To Gross profit c/d		69,250			
		1,34,250			**1,34,250**
To Salaries		14,000	By Gross profit b/d		69,250
To Insurance	2,000				
Less: Prepaid	1,500	500			
To Bad debts		1,250			
To Reserve for bad debts		1,000			
To Depreciation on plant		3,000			
To Reserve for discount on debtors		380			
To Net Profit		49,120			
		69,250			**69,250**

Balance Sheet as on 31-12-2005

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		36,000	Land & Buildings		20,000
Bills payable		8,000	Loose Tools		1,000
Capital	70,000		Goodwill		40,000
Add: Net profit	49,120		Furniture		3,000
	1,19,120		Plant & Machinery	30,000	
Less: drawings	7,500	1,11,620	**Less:** Depreciation	3,000	27,000
			Debtors	20,000	
			Less: Reserve for Bad debts	1,000	
				19,000	
			Less: Reserve for discount on debtors	380	18,620
			Bills receivable		7,500
			Closing Stock		20,000
			Prepaid Insurance		1,500
			Cash at Bank		15,000
			Cash in Hand		2,000
		1,55,620			**1,55,620**

Working Notes :

1. Reserve for Bad debts (RBD) = Rs.20,000 x 5/100 = Rs.1000
2. Reserve for discount on debtors = Rs.20,000 – 1,000 = Rs.19,000 x 2/100 = Rs.380

Illu.18 : From the following balances and adjustments prepare Final Accounts as on 31-3-2005.

	Rs.		Rs.
Purchases	**65,000**	**Debtors discount Reserve**	**2,000**
Bank overdraft	**8,000**	**Sales returns**	**2,000**

Sales	**1,20,000**	**Plant and Machinery**	**20,000**
Opening stock	**15,000**	**Sundry Creditors**	**18,000**
Capital Account	**60,000**	**Land & Buildings**	**50,000**
Bad debts reserve	**2,500**	**Salaries**	**4,000**
Purchase returns	**1,500**	**Factory expenses**	**600**
Wages	**600**	**Carriage**	**800**
Bills Payable	**10,000**	**General expenses**	**400**
Insurance	**600**	**Commission**	**200**
Advertising expenses	**1,500**	**Sundry Debtors**	**15,000**
Bills Receivable	**19,000**	**Bad debts**	**400**
Cash in hand	**600**	**Discount (Dr.)**	**300**
Goodwill	**20,000**	**Creditor discount reserve**	**800**
		Drawings Account	**2,400**

(a) Closing Stock Rs.25,000

(b) Outstanding wages and salaries are Rs.800 and Rs.2,400.

(c) Prepaid insurance Rs.150.

(d) Bad debts to be written off Rs.600 and provide bad debts reserve @ 5% on Debtors.

(e) Provide 2% discount reserve on debtors and creditors.

(f) Depreciation is to be calculated 10% on Plant and Machinery, 5% on Land and Buildings.

Solution :

Trading and Profit and Loss a/c
for the year ending 31-3-05

Dr. **Cr.**

Particulars		**Amount Rs.**	**Particulars**		**Amount Rs.**
To Opening Stock		15,000	By Sales	1,20,000	

To Purchases	65,000		**Less:** Sales return	2,000	1,18,000
Less: Returns	1,500	63,500	By Closing Stock		25,000
To Wages	600				
Add: Outstanding	800	1,400			
To Factory expenses		600			
To Carriage		800			
To Gross profit c/d		61,700			
		1,43,000			**1,43,000**
To Salaries	4,000		By Gross profit b/d		61,700
Add: Outstanding salaries	2,400	6,400	By Bad debts reserve	2,500	
To Insurance	600		**Less:** New provision 5% (15,000-600) x 5/100	720	1,780
Less: Prepaid	150	450	By Discount on creditors (Rs.800 + 360)		1,160
To Advertising expenses		1,500			
To General expenses		400			
To Commission		200			
To Bad debts	400				
Add: New Reserve	600	1,000			
To Discount		300			
To Debtors discount reserves	2,000				
Add: Debtor Discount 2%	273	2,273			
To Depreciation on Plant & Machinery (Rs.20,000 x 10/100)		2,000			

To Depreciation on Land & Building (Rs.50,000 x 5/100)		2,500			
To Net Profit (Transfer to Balance sheet)		47,617			
		64,640			**64,640**

Balance Sheet of …………as at 31-3-2005

Liabilities		**Amount Rs.**	**Assets**		**Amount Rs.**
Bank overdraft		8,000	Goodwill		20,000
Bills payables		10,000	Cash in hand		600
Sundry creditors	18,000		Bills Receivables		19,000
Less: Discount 2%	360	17,640	Debtors	15,000	
Outstanding wages		800	**Less:** Bad debts	600	
Outstanding salaries		2,400		**14,400**	
Capital	60,000		**Less:** 5% Provision	720	
Add: Net Profit	47,617			**13,680**	
	1,07,617		**Less:** 2% Discount	273	13,407
Less: drawings	2,400	1,05,217	Closing stock		25,000
			Prepaid insurance		150
			Plant & Machinery	20,000	
			Less: Depreciation	2,000	18,000
			Land & Buildings	50,000	
			Less: Depreciation	2,500	47,500
			Difference in trial balance		400
		1,44,057			**1,44,057**

Trial Balance as on 31-3-2005

Debit	**Amount Rs.**	**Credit**	**Amount Rs.**
Purchases	65,000	Bank overdraft	8,000
Opening stock	15,000	Sales	1,20,000
Wages	600	Capital	60,000
Insurance	600	Bad debts reserve	2,500
Advertising expenses	1,500	Purchase returns	1,500
Bills receivable	19,000	Bills payable	10,000
Cash in hand	600	Sundry creditors	18,000
Goodwill	20,000	Discount on creditors reserve	800
Debtors discount reserve	2,000		
Sales returns	2,000		
Plant & Machinery	20,000		
Land & Buildings	50,000		
Salaries	4,000		
Factory expenses	600		
Carriage	800		
General expenses	400		
Commission	200		
Sundry debtors	15,000		
Bad debts	400		
Discount	300		
Drawings	2,400		
Difference in Trial Balance (Suspense a/c)	400		
	2,20,800		**2,20,800**

10.3 QUESTIONS

1. Explain the need for adjustments in final accounts
2. Give five journal entries for adjustments in final accounts
3. How do you treat the following in final accounts?
   (a) Outstanding expenses
   (b) Prepaid expenses
   (c) Outstanding income
   (d) Income received in advance
   (e) Depreciation on assets
   (f) Treatment of bad debt, provision for doubtful debts and provision for discount
   (g) Provision for bad debts
   (h) Provision for discount on debtors
   (i) Provision for discount on creditors
   (j) Interest on Drawings
   (k) Interest on capital
   (l) Closing Stock

10.4 EXERCISES

1. From the following Trial Balance of M/s Ram & Sons, prepare trading and profit and loss account for the year ending on 31st December, 2006 and the balance sheet as on that date.

Particulars	**Dr. Rs.**	**Cr. Rs.**
Purchase	21,750	
Discount allowed	1,300	
Wages	6,500	
Salaries	2,000	
Sales		35,000
Travelling Expenses	400	
Commission	425	
Carriage Inward	275	

Administration Expenses	105	
Trade Expenses	600	
Interest	250	
Building	5,000	
Furniture	200	
Debtors	4,250	
Capital		13,000
Creditors / Cash	7,045	2,100
	50,100	**50,100**

Stock on 31st December, 2006 was Rs.6,000. Depreciate buildings by 20%, create a provision for bad debts at 10% on debtors. Provide for outstanding wages Rs.475, salaries Rs.500 and goods used by the proprietor Rs.500.

[Ans.: Gross profit Rs.12,500, Net Profit Rs.5,495, Balance Sheet Total Rs.21,070]

2. From the following ledger balances prepare Trading and profit and Loss Account for the year ended 30th September, 2006 and a Balance Sheet as on that date.

Particulars	Rs.	Particulars	Rs.
Rama's Capital a/c	1,19,400	Cash	530
Rama's drawings a/c	10,550	Repairs & Renewals	3,370
Bills Receivable	9,500	Bank	18,970
Plant and Machinery	28,800	Interest and Discount (Dr.)	5,870
Sundry debtors (including Madan's dishonoured bill Rs.1,000)	62,000	Bad Debts	3,620
Loan a/c (Cr.) at 6%	20,000	Sundry Creditors	39,630
Wages (Manufacturing)	40,970	Fixtures & Fittings	8,970
Returns Inwards	2,780		

Purchases	2,56,590		
Sales	3,56,430		
Commission received	5,640		
Rent and Taxes	5,620		
Stock on 1st October, 2006	89,680		
Salaries	11,000		
Travelling Expenses	1,880		
Insurance (including Rs.300 p.a. paid up 31st March 2006)	400		

Stock in hand on 30th September, 2006 was Rs.1,28,960. Write off half of Madan's dishonoured bill. Depreciate Plant and Machinery by 5% and Fixtures and Fittings by 10%.

[Ans.: Gross Profit Rs.95,370; Net Profit Rs.66,563 and Balance Sheet Total Rs.2,55,043].

3. From the following Trial Balance of Mr. A, Prepare Trading and Profit & Loss Account for the year ending 31st December, 2006 and a Balance Sheet as on that date :

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	5,275	Capital	59,700
Bills Receivable	4,750	Loan at 8% on (1-1-88)	10,000
Machinery	14,400	Commission received	2,820
Debtors (including X for Dishnoured Bill of Rs.1,000)	30,000	Creditors	29,815
Wages	20,485	Sales	1,78,215
Returns inwards	2,390		
Purchases	1,28,295		
Rent	2,810		
Stock (1-1-06)	44,840		
Salaries	5,500		

Travelling Expenses	945		
Insurance	200		
Cash	9,750		
Repairs	1,685		
Interest on Loan	500		
Discount Allowed	2,435		
Bad Debts	1,810		
Furniture	4,480		
	2,80,550		**2,80,550**

The following adjustments are to be made:

(i) Stock in the shop on 31^{st} December, 2006 was Rs.64,480.

(ii) Half the amount of X's bill is irrecoverable.

(iii) Create a provision of 5% on other debtors.

(iv) Wages include Rs.600 for erection of new machinery.

(v) Depreciate Machinery by 5% and Furniture by 10%.

(vi) Commission include Rs.300 being Commission received in advance.]

[Ans.: Gross profit Rs.47,285, Net Profit Rs.30,472, Balance Sheet Total Rs.1,25,312].

4. The following are the balances of Messers Gupta & Co. as on June, 2006.

Debit Balances	Rs.	Credit Balances	Rs.
Cash in hand	540	Sales a/c	98,780
Cash at Bank	2,630	Returns outward	500
Purchases a/c	40,675	Capital Account	62,000
Returns Inwards	680	Sundry creditors	6,300
Wages Account	8,480	Rent	9,000
Fuel & power	4,730		
Carriage on Sales	3,200		

Carriage on Purchases	2,040		
Stock (1-7-06)	5,760		
Building a/c	32,000		
Freehold Land	10,000		
Machinery	20,000		
Patents	7,500		
Salaries	15,000		
General expenses	3,000		
Insurance	600		
Drawings	5,245		
Sundry debtors	14,500		
	1,76,580		**1,76,580**

Prepare Trading and Profit & Loss a/c and a Balance Sheet as on 30th June, 2006 after taking into account the following adjustments:

(i) Stock on hand as on 30th June, 2006 is Rs.6,800.

(ii) Machinery is to be depreciated at 10% and Patents at 20%.

(iii) Salaries for the month of June, 2006 amounting to Rs.1,500 were unpaid.

(iv) Insurance, includes a premium of Rs.170 on a policy expiring on 31st December, 2006.

(v) Further Bad Debts are Rs.725.

(vi) Rent Receivable Rs.1,000.

[Ans.: Gross profit Rs.43,715, Net profit Rs.26,275, Balance Sheet Total Rs.90,830].

5. The following is the Trial Balance of Amrit Raj as on 31st December, 2006:

Particulars	Dr. Rs.	Cr. Rs.
Capital		25,000
Building	30,000	

Furniture	2,640	
Scooter	4,000	
Returns inward and outward	2,300	
Stock on 1st January, 2006	8,000	
Purchases and sales	33,800	56,040
Bad debts	400	
Carriage Inward	600	
General Expenses	1,200	
Bad Debts Provision		700
Bank Loan		5,000
Interest on Bank Loan	300	
Commission		900
Insurance and Taxes	2,000	
Scooter Expenses	2,600	
Salaries	4,400	
Cash in hand	2,000	
Debtors and Creditors	3,000	8,000

You are required to prepare the final accounts for the year ending 31st December, 2006 taking into account the following adjustments:

(a) Closing Stock on 31-12-06 was valued at Rs.4,340.

(b) Insurance is prepaid to the extent of Rs.200 and carriage inward is unpaid Rs.100.

(c) Salaries have been paid for 11 months.

(d) Bank Loan has been taken at 10% p.a. interest.

(e) Depreciate building by 5% and Scooter by 15%.

(f) Write off Rs.200 as further bad debts and increase bad debts provision by 5% on book debts.

(g) Scooter is used for business as well as for private purposes equally.

[Ans.: Gross Profit Rs.17,180, Net Profit Rs.6,640, Balance Sheet Total Rs.43,740]

6. From the following Trial Balance of C.C. Lakadwala as at 31st March, 2006, you are required to prepare the Trading and Profit and Loss Account for the year ended 31st March, 2006 and Balance Sheet as at that date :

Debit Balances	Rs.	Credit Balances	Rs.
Stock	45,000	Capital	75,000
Purchases	2,25,000	Sales	4,20,750
Plant & Machinery	75,000	Sundry Creditors	15,000
Trade charges	10,000	Bad debts provision	200
Carriage Inwards	2,500	Bills Payable	2,000
Carriage outwards	1,500		
Factory Rent	1,500		
Discount	350		
Insurance	700		
Sundry Debtors	60,000		
Office Rent	3,000		
Printing and Stationery	600		
General Expenses	2,800		
Advertising	15,000		
Bills Receivable	3,000		
Drawings	6,000		
Salaries	18,000		
Manufacturing wages	20,000		
Furniture and Fixtures	7,500		
Coal, gas and Water	1,000		
Cash in hand	2,000		
Cash at Bank	12,500		
	5,12,950		**5,12,950**

The following adjustments are to be taken into consideration:

(a) Closing stock amounted to Rs.35,000

(b) Plant and Machinery and Furniture to be depreciated by 5% and 10% respectively.

(c) Bad debts provision to be raised to 21% on debtors.

(d) Provided for outstanding liabilities for Factory Rent Rs.300 and Office Rent Rs.600.

(e) Insurance include Rs.100 in respect of 2006-07.

[Ans.: Gross Profit Rs.1,56,700, Net Profit Rs.91,100, Total of Balance Sheet Rs.1,78,000].

10.5 SUGGESTED BOOKS

1. Agarwala, A.N., Amitabha Mukherjee, Mohammed Hanif, **Principles and Practice of Accountancy,** Kitab Mahal Agencies, New Delhi.
2. Basu & Das, **Practical in Accountancy, Volume – one,** Rabindra Library, Calcutta
3. Chopde, L.N., & Choudhari, D.H., **Accountancy,** Sheth Publishers, Pune
4. Jain, S.P., Narang, K.L., **Accoutancy, Part - I,** Kalyani Publishers
5. Maheswari, S.N., Maheswari, S.K., **Advanced Accountancy (Vol.I)**, Vikas Publishing House Pvt. Ltd., New Delhi, 2005
6. Pillai, R.S.N., Bagavathi, Uma, S., **Fundamentals of Advaned Accounting (Vol.I)** S. Chand & Company Ltd., New Delhi, 2006
7. Shukla, M.C., Grewal, T.S., Gupta, S.C., **Advanced Accounts (Volume I)** S. Chand & Company Limited, New Delhi, 2005
8. Tulsian, P.c., **Accountancy** Tata McGraw-Hill Publishing Company Limited, New Delhi.

Chapter – 11

Cost Accounting
Nature and Significance

Objectives :

After reading this unit we should be able to :

- Know the meaning, definition and objectives of cost accounting
- Understand the advantages of limitations of cost accounting
- Discuss the installation of cost accounting system

Synopsis:

11.1 Nature and Significance
11.2 Limitations of Financial Accounting
11.3 Importance of Cost Accounting
11.4 Limitations of Cost Accounting
11.5 Installation of Costing System
11.6 Financial Accounting Vs. Cost Accounting
11.7 Questions
11.8 Suggested Readings

11.1 NATURE AND SIGNIFICANCE

All aspects of accountancy have arisen from practical necessity. The oldest forms of accounting developed as a result of the need of commercial firms to present the resultant annual profit or loss. The emphasis of accounting is to know the profit or loss of a firm but not on other aspects like the profitability of a particular product or department; how much capital is locked up in unremunerative projects, how to control expenditure and reduce wastage etc. The main emphasis is on their ascertainment and exhibition of the profits earned or losses incurred by the business rather than on aspects of planning and control and decision making.

The cost of manufacture of products or of rendering a service is, no doubt, available in financial accounts for a division or enterprise as a whole and that too at the end of the accounting period. But if the cost of individual products or services and the profit or loss from each are required concurrently as the process of manufacture or of rendering the service proceeds, recourse has to be made to cost accounting. Cost accounting developed as an advanced phase of accounting science trying to make up the deficiencies of financial accounts and is essentially a creation of the twentieth century. Let us know the meaning of Costing, Cost Accounting and Cost Accountancy.

Costing : Costing is the technique and process of ascertaining costs. It expresses faithfully the actual cost of any particular unit of production and also discloses how such total cost is constituted.

Cost Accounting : It is a normal mechanism by means of which costs of products and services are ascertained and controlled. It embraces all accounting procedures relating to recording of all income and expenditure and the preparation of periodical statements with a view to ascertain and control costs. Thus, it includes three things : Cost Ascertainment, Cost Presentation and Cost Control.

Cost Accountancy : It is the application of costing and cost accountancy principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability. It is the science, art and practice of a cost accountant.

11.1. Cost Accounting – Definitions:

Walter W. Bigg – Cost Accounting is the provision of such analysis and classification of expenditure as it will enable the total cost of any particular unit of production to be ascertained with reasonable degree of accuracy and at the same time to disclose exactly how such total cost is constituted.

R. N. Carter – Cost Accounting is defined as a system of recording in accounts the materials used and labour employed in the manufacture of a certain commodity or on a particular job.

Wheldon – Costing is the classifying, recording and appropriate allocation of expenditure for the determination of the cost of products or services; and for the presentation of suitably arranged data for purposes of control, and guidance of the management. It includes the ascertainment of cost of every order, job, contract, process; service or unit as may be appropriate. It deals with the costs of production, selling and distribution'.

11.1.1 Objectives of Cost Accounting:

The main objectives of cost accounting are given below:

1. **Ascertainment of Costs :** It enables management to ascertain the cost of a product, job or operation in a systematic way. Expenses relating to a product are collected from diverse sources. In addition to direct expenses relating to a product, joint expenses pertaining to several products are also taken into account (dividend on some equitable basis) while ascertaining the cost of a product**.**
2. **Determination of Selling Price :** Cost Accounting provides useful cost data for fixing the selling price of a product. By dividing the expenses into fixed and variable components, it helps management to fix the price of a product in a scientific manner. For example, in times of falling prices, the manufacturer knows where to stop the production and to what extent he can cut down the prices. The margin at various levels of production can also be found out easily.
3. **Control of Inefficiencies :** Cost Accounting involves the study of various operations in an undertaking. All activities are put to a close examination, with a view to find out the sources of efficiency or inefficiency. Once the weak spots are located through such studies, rectification steps can be initiated promptly to set the things in order. A number of techniques such as standard costing, budgetary control are employed for this purpose.
4. **Facilitates Preparation of Financial Statements :** Cost accounting facilitates the preparation of daily, weekly or monthly reports regarding stock of raw materials, work-in-progress, and finished goods. It helps management to take stock of production, sales and operating results from time to time and prepare financial statements as and when required.
5. **Provides Basic for Operating Policy :** Cost accounting helps management in the planning and execution of operating policies relating to : (i) cost – volume relationship, (ii)

shutting down or operating the plant incurring losses, (iii) make or buy decisions and (iv) producing with existing plant and equipment or replacing them with improved facilities.

11.2. LIMITATIONS OF FINANCIAL ACCOUNTING

Financial Accounting is concerned with recording, classifying and summarising financial transactions pertaining to an accounting period. The basic objective is to provide a commentary to the shareholders and outside parties on the financial status of an enterprise in the form of a profit and loss account and balance sheet. The profit or loss of business operations is revealed through these statements year after year; observing the statutory requirements of the Companies Act, 1956.

Cost Accounting, on the other hand, aims at providing cost data for managerial planning, controlling and decision – making. It provides a complete explanation as to how the scarce inputs are put to use in business. The sources of efficiency or inefficiency are revealed through periodical reports. The profit or loss relating to each job, department or product can also be found out easily.

Financial Accounting provides a post-mortem examination of past events and, hence, not amenable for exercising control measures. It does not offer a running commentary on the profitability of various jobs, departments or processes in an organisation. These serious limitations have ultimately paved the way for the emergence of cost accounting. Let us now examine the limitations of financial accounting in greater detail :

1. Financial Accounting discloses only the net result of the collective activities of the business as a whole. It does not indicate the profit or loss of each department, job, process or contract.

2. Expenditure is not split up according to departments, process and products and, hence, prices of articles manufactured cannot be fixed accurately.

3. Financial accounting does not indicate the remunerative prices which may be quoted in times of depression.

4. It does not ensure proper control over materials and supplies, wages, labour and overheads.

5. Expenses are not classified as direct and indirect items and are not assigned to the product at each stage of production to show the controllable and uncontrollable items of overhead cost.
6. It does not provide any measure to judge the efficiency of the concern.
7. Financial Accounting is purely historical, since the data is summarised at the end of the accounting period. Prompt cost information on a day – to – day basis is not available.
8. It does not provide a complete analysis of losses due to idle time, idle plant and equipment.
9. It does not offer cost data for comparison with previous periods.

11.3. IMPORTANCE OF COST ACCOUNTING

Cost Accounting offers a number of benefits to management, employees, creditors, government and society in general. The importance of cost accounting can be understood after going through the following benefits derived from it.

11.3.1. Benefits to Management:

Cost Accounting helps management in carrying out its functions efficiently and effectively in the following way.

(i) **Planning :** Cost Accounting ascertains costs of different courses of action and provides a sound basis for picking up a suitable course of action. It compiles up-to-date cost data, analyses by products, operations, elements, functions and departments and presents them in a suitable form. Based on such data, management can plan its future operations in a competent way.

(ii) **Budgeting :** Cost Accounting is not a post-mortem examination of past events. It is a system of foresight. It does not merely record actual costs incurred but works out estimated and standard costs for exercising control. It prepares budgets for future operations based on past experience and likely changes in future. It helps management to make an objective assessment of organisational strengths, weaknesses, opportunities and threats (SWOT Analysis) before undertaking a project.

(iii) **Decision – Making :** Cost Accounting compels management to arrive at decisions based on cost data, in place of trial and error judgements. Valuable cost data enables management to decide issues such as: make or buy, expand or contract business activities, putting scarce inputs to effective use, evaluating the profitability of various alternatives, selling below cost price etc.

(iv) **Organising :** Cost Accounting requires that the work in an organisation must be logically divided, in the form of departments, cost centers and responsibility centres. Work is clearly earmarked for various departments such as purchasing, inspection, storage and accounting departments. An efficient system of communication is also promoted between these departments using printed forms, rulings and statements.

(v) **Controlling :** Cost Accounting serves as a means of control in the following ways:

(a) A sound system of material control in the form of buying, receiving, inspection, storage, issue of materials prevents wastage, pilferage, under-and-over stocking of materials at various levels. The fixation of stock levels and inventory control ensures regular and adequate supply of materials of right quality whenever required.

(b) A proper system of control over labour costs by job and time records helps management avoid idle time, defective work etc. and utilise human assets in the best possible way.

(c) Plant capacity and other facilities are employed in the best possible way.

(d) It provides systematic and comparative records to management, facilitating the introduction of corrective measures at the right time.

(vi) **Pricing :** Cost Accounting provides useful data for quoting appropriate prices for domestic as well as foreign markets (by employing techniques such as marginal costing, budgeting) well a head of production schedule. It also enables management to fix minimum prices during depression by dividing expenses into fixed and variable components.

(vii) **Efficient use of Resources :** Cost Accounting conducts a continuous war against wastes of all kinds. The standards for measuring efficiency are established initially. Deviations checked promptly, weak spots are identified, and remedial steps taken up earnestly. The reasons for profit or loss during a period are analysed thoroughly for future guidance. Every attempt is made to put resources to the best possible use. Unprofitable products, activities are dispensed with. Costs and revenues of two products, two periods, two departments etc., are compared from time to time with a view to improve efficiency continuously.

11.3.2. Benefits to Employees:

Cost Accounting offers a number of benefits to employees in the following ways :

i. It facilitates the introduction of various incentive schemes and bonus plans and, thus, offers adequate rewards for efficient and sincere workers.

ii. Employee performance is appraised in a scientific manner, by setting standards of efficiency, and measuring the same through time and motion studies. Job and time cards help management in finding out people who are regular, productive and, therefore, deserve promotions from time to time.

iii. Workers get continuous employment, overtime incentive, better job security and larger compensation owing to increased prosperity of industries.

11.3.3. Benefits to the Creditors:

Bankers, debenture – holders and other creditors study the data provided by cost accountants to ascertain the solvency, profitability and future prosperity of an enterprise before they lend. The reports submitted by cost accountants immensely help them in taking right decisions.

11.3.4. Benefits to the Government :

The procedures and techniques of cost accounting are useful in preparing national plans aimed at achieving economic progress. In order to decide things pertaining to taxation, import and export policies, price ceiling, granting of quotas and subsidies, Government requires cost data relating to various industries. It is also interested in seeing that corporate funds are not squandered away in uneconomical activities. Cost Audit is, therefore, made compulsory now for industries belonging to Cement, Tyres, Refrigerators, Motor Vehicles, Tractors, Vanaspathi, Cotton Textiles etc.

11.3.5. Benefits to the Society:

Costing offers innumerable benefits to the society in the following ways:

i. It wages a war against wastes of all kinds. Consumers, therefore, get quality goods at an economical price.

ii. It brings stability by improving managerial and operating efficiency.

iii. Cost saving and cost reduction efforts carried out by various firms help in curbing inflationary tendencies in the economy.

iv. Continuous employment opportunities are provided to various sections in te society when Cost Accounting procedures, methods and practices are followed in different industries.

11.4. LIMITATIONS OF COST ACCOUNTING

Cost accounting can never be an exact science because of the inherent element of judgement. There is often, no uniformity in costs ascertained by different cost accountants using the same data. Disagreements in the cost of a product usually arise owing to different procedures of cost ascertainment, allocation and apportionment followed by cost accountants. For this reason, cost results must be accepted as reasonable approach to accuracy and not as price measurements. Accuracy in cost accounting is, therefore, relative. Unless uniform principles are followed in the collection, allocation and apportionment of expenses, results are bound to be different. Also, costs have no utility in themselves. Their usefulness, to a large extent, depends on how promptly remedial steps are taken up by top management, once certain loopholes are detected and pointed out by the cost accountant.

1. **It is expensive :** The system of cost accounting involves additional expenditure to be incurred in installing and maintaining it. However, before installing it, care must be taken to ensure that the benefits derived is more than the investment made or this system of accounting.
2. **The system is more complex :** As the cost accounting system involve number of steps in ascertaining cost such as collection and classification of expenses, allocation and apportionment of expenses, it is considered to be complicated system of accounts. Moreover, the system makes use of several documents and forms in preparing the reports. This will tend to delay in the preparation of accounts.

3. **Inapplicability of same costing method and technique :** All business enterprises cannot make use of a single method and technique of costing. It all depends upon the nature of business and type of product manufactured by it. If a wrong technique and method is used, it misleads the results of business.
4. **Not suitable for small scale units :** A cost accounting system is applicable only to a large sized business but not to a small sized business but not to a small – sized one. Hence, there is limitation to its application to all types of business.
5. **Lack of accuracy :** The accuracy of cost accounting get distorted owing to the use of notional cost such as standard cost, estimated cost etc.
6. **It lacks social accounting :** Cost accounting fails to take into accounts the social obligations of the business. In other words, social accounting is outside the purview of cost accounts.

11.5. INSTALLATION OF COSTING SYSTEM

Several practical difficulties may come in the way of installing a system of cost accounting in a concern. These may be stated as follows:

1. **Lack of Support :** Many a time a system of cost accounting is introduced without adequate preparation. The Managing Director may be interested in introducing the system but not others in the top management. At other times, the management may be interested in installing the system, but not the departmental heads. This problem can be overcome if discussions are held at various levels in a proper manner, before introducing a system of cost Accounting.
2. **Resistance at lower levels :** Employees at lower levels may have certain emotional objections against the introduction of a system of cost accounting. They may label the same as another device to extract additional work. In such case, the management must try to sell the concept sincerely. They must explain as to how the system is going to work and how the employees are going to get various kinds of benefits from time to time.
3. **Shortage of Trained taff :** Cost Accounting requires sills of a special kinds for its success. Unless it is installed and implemented in a careful manner, success cannot be guaranteed. This, however, is not easy. Trained staff may not be readily available to translate the plan

into action. In such cases, it is better to train the existing hands first before installing a system of cost accounting.

4. **Cost :** To keep the costs under control, unnecessary sophistication and formalities may be dispensed with. Cost Accounting may prove to be useless if it is installed as a decorative piece. The system must be designed in such a way that the basic requirements of a concern for prompt cost information must be served in an economical manner.

11.5.1 Factors to be considered before Installing a Cost Accounting System :

The following factors are to be considered before installing a cost accounting system in any organisation.

1. **History of the organisation :** The history of an organisation implies the duration of its existence, position in the industry, the rate of growth, policy and philosophy of management. The history of business unit serves as the basis for designing the cost accounts in respect of necessity, simplicity, and investment involved in installing cost accounts.
2. **Nature of the industry :** The method of costing to be installed depends on the nature of industry. The nature of business such as manufacturing, mining, trading etc., determines the costing techniques to be applied. Similarly, the type of product manufactured also determine the determine the method of costing that is to be employed.
3. **Technical Consideration :** Technical consideration that influence the installation of cost accounts are : size and layout of the factory; existence of production and service departments, flow of production; capacity of machines and degree of mechanisation; existence of laboratories internal transport and material handling equipment's; production control techniques; inspection of testing of materials and finished goods.
4. **Organisational factors :** The organisational factors to be considered are : (a) size and the type of organisation such as line, line and staff, functional and committee organisation (b) the levels of management, viz., top level, middle level and bottom level management, (c) extent of delegation and responsibility (d) extent of centralisation and decentralisation, (e) extent of departmentation, (f) availability of modern office equipment's, and (g) number of managerial and supervisory staff.

5. **Selling and distribution method :** The chief factors to be considered with regard to distribution process are the warehousing facilities, external transport, market research and other promotional measures, terms of sale and procurement of orders from customers.
6. **Accounting aspects :** The factors to be considered in respect of accounting are: number of financial records, existing forms, registers used, and number of copies required.
7. **Area of control to be exercised :** The areas where cost control is to be exercised is to be identified so that each manager may take action relevant to his activities. If material control occupies significant area of control, it must be given top most priority for exercising control over materials.
8. **Reporting :** The cost accounting system to be installed must ensure proper reporting of cost data to all levels of management. It must also to be pointed out that duplication of reporting is to be avoided.
9. **Uniformity :** The practice of adopting uniform costing facilitates inter-firm comparison among various firms belonging to the same industry. further, it also has the benefit of adopting common costing practice if a holding company has number of subsidiaries.
10. **Use of electronic data processing :** Now a days it has become a common practice to use computers everywhere. In this situation it is essential to ensure that the computers meet the needs of the system.
11. **Practical Consideration :** The cost accounting system to be installed must be flexible in operation and must be capable of adoption to changing conditions. The system must be periodically scrutinised so as to make necessary changes owing to development in business.

11.5.2 Ideal system of Cost Accounting:

An ideal system of cost accounting when installed and handled properly will be able to offer a number of benefits to management, employees in particular and society in general. Such a system must possess the following features :

1. **Suitable :** It must be suitable. It must be devised according to the nature, conditions, requirements and size of the organisation.
2. **Simple :** It must be simple and easy to understand and implement.

3. **Flexible :** The system must be flexible enough to take note of changes that confront an organisation from time to time.
4. **Economical :** The system must be cost – effective. The benefits must outweigh the costs.
5. **Comparable :** The management must be able to make comparison of facts with the past figures, figures of other concerns or other departments of the same unit.
6. **Timely :** it must be able to provide useful cost data when required.
7. **Uniform :** All forms and proformas etc., necessary to the system should be of uniform size and quality.
8. **Labour – saving :** The system must involve minimum clerical work. Employees should feel it easy while implementing the system.
9. **Control :** It must provide for a satisfactory system of control over materials, labour and overhead costs.
10. **Reconciliation :** The system must be so devised that the financial as well as cost records are capable of easy reconciliation.

11.6 FINANCIAL ACCOUNTING VS. COST ACCOUNTING

Basis for Difference	Final Accounting	Cost Accounting
1. Objective	The objective is to find out the profitability of operations during a particular period for the benefit of owners and outsiders.	The objective here is to help management through the provision of prompt cost data and thereby improve managerial decision making.
2. Coverage	Here, the transactions are recorded for a definite period. It mainly deals with all commercial transactions.	Here the transactions are identified with cost units. Attention is focussed on transactions relating to manufacturing.
3. Analysis of Costs	In Financial accounting the expenditure is analysed item-wise, e.g., wages,	Records expenses by departments, elements, produces or processes to

	salaries, depreciation etc., hence it is not amenable for offering a commentary.	study them analytically.
4. Analysis of profits	The profitability of individual products or departments is not known.	The profits or loss relating to each job, process, operation department can be found out.
5. Material control	Material control is not ensured, as figures are not available.	A systematic procedure for purchasing, storing and issuing of materials exists.
6. Labour cost control	Wage sheets under financial accounting do not reveal labour efficiency, idle time and effective hours of work. Hence, control not possible.	Labour time records and wage sheets permit management to find out effective and idle hours and ensure control accordingly.
7. Cost Classification	Distinction between fixed (uncontrollable) and variable (controllable) costs not maintained.	Costs are classified into fixed and variable elements and attention is focussed on controllable costs, which can be reduced by suitable steps.
8. Stock Valuation	Here, stock valued at cost price or market price, whichever is less.	Here stock is valued at cost.
9. Control means	Does not provide any means to measure the efficiency and exercise control over costs.	Techniques like standard costing employed to ensure control over operations.
10. Recording	Records actual (historical) costs. It is only a post-mortem examination of	Actual facts are combined with estimated ones while recording transactions.

	events that have taken place, leaving very little room for initiative corrective steps promptly.	Transactions are recorded in an objective manner, according to the purpose for which costs have been incurred.
11. Comparison	Data here is not sufficient for drawing inter–period and inter-firm comparisons from time to time.	Detailed comparison of results of two periods or two firms in an industry possible in cost accounting.
12. Legal need	Statements prepared as per the legal requirements, i.e., as laid down by Companies Act, Income Tax Act.	Statements prepared internally as per the managerial requirements.
13. Approach	Data generated for external parties. Deals with external transactions.	Data generated for managerial decision-making. Deals with internal transactions.

11.7 QUESTIONS

A. Very short answer questions (5 lines)

1. Costing 2. Cost Accounting
3. Cost Accountancy 4. Financial Accounting

B. Short Answer questions (10 lines)

1. What is Costing ?
2. Define Costing.
3. Explain the advantage of costing
4. Explain the relationship between cost accounting and management accounting.
5. What are the characteristics of good system of costing?

6. Explain the objectives of cost accounting.
7. Define the concept of Cost Accounting.

C. Essay type questions.

1. Define Cost Accounting and discuss the nature and scope of Cost Accounting Define cost accounting and explain the advantages of it.
2. Explain the benefits and limitations of cost accounting.
3. Describe the objectives and advantages of cost accounting
4. What is the necessity of cost accounting ? What are the differences between Financial Accounting and cost accounting?
5. “A good system of costing serves as a means of control over expenditure and helps to secure economy in manufacture.” Explain.
6. Distinguish between Financial Accounting, Cost Accounting and Management Accounting.
7. Describe the relationship between cost accounting and financial accounting. What are the advantages of cost accounting.
8. Define Cost accounting. Explain the differences between cost accounting and financial accounting.
9. Explain the functions and advantages of cost accounting.
10. What essential points should be kept in view while installing a new costing system?
11. Explain the terms of Costing, Cost Accounting and Cost Accountancy.
12. State the advantages and disadvantages of maintaining cost accounts.
13. What are the functions and characteristics of a good costing system?
14. Bring out the pre – requisites for the installation of cost accounting system.

11.8 SUGGESTED READINGS

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Chapter – 12

Cost Classification and Analysis

Objectives :

After going through this unit we should be able to :

- Know the meaning of cost
- Classify the cost and the basis of time, volume, functions and controllability
- Analyse the components of total cost
- Prepare the cost sheet

Structure :

12.1 Introduction

12.2 How is ``cost '' Understood?

12.3 Cost Classification

12.4 Components of Total Cost

12.5 Cost Sheet

12.6 Questions

12.7 Exercises

12.8 Suggested Readings

12.1 INTRODUCTION

The term ``costs'' is the important component of accounting subject. There cannot be any system of accounting without the word costs. Financial Accounting, Cost Accounting and Management Accounting are mostly associated with costs. But, the most confusion causing component also is cost because, costs as such make no sense. There must be same prefix (or) suffix to this term costs, in the absence of which, one cannot make anything from it. It means that the mere word costs doesn't make any sense. If it is production costs, it makes same meaning. Similarly, if it is costs of sales, it makes some sense. Hence, it must be carefully understood.

12.2 HOW IS ``COST'' UNDERSTOOD?

``Cost cannotes different meanings to different people.

- **CIMA (Chartered Institutes of Management Accountants] of London defines cost as :** It is the amount of expenditure (Actual/Notional) incurred or attributable to a specified thing (or) activity.
- **AICPA (American Institute of Certified Public Accountants) committee on terminology defines costs as :** The amount measured in money, of cash expended (or) other property transferred, capital stock issued, services performed (or) a liability incurred in considerations of goods or services received or to be received.
- **Shilling law :** Costs is defined as the resources that must be sacrificed to attain a particular objective.

Thus, the term costs is to be understood.

12.3 COST CLASSIFICATION :

Cost Classification is grouping up of Cost having similarity. It means that all costs that are alike are grouped under one heading. This can be done on several criteria like : time, volume, functions, elements, controllability etc.

12.3.1. Cost Classification by Time :

Cost can be divided into Historical costs and pre determined costs. Historical costs are the costs that were spent or incurred for the purpose of securing some benefits. Pre-determined costs may be both Expected Costs and standard costs. Expected costs are the costs that are guessed based on past and human judgement. They may be exact (or) not. On the other hand, standard costs are costs which are very much systematically, scientifically and professionally determined by professional experts. These standard costs are used as bench marks for evaluating the performance. Standard costs are set for all elements of costs viz., material, labour and expenses.

12.3.2. Cost Classification by Volume :

Costs are divided into Fixed costs, variable costs and semi-fixed, semi-variable costs, based on the volume of output.

Fixed Costs are the costs that do not change in sympathy with changes in output. Normally, they are common for all levels of output and for a period also. In the short run, they are fixed. But beyond a particular level and time period also, these costs may vary. Fixed costs are often called period costs. Eg. : Rent, Insurance, Repairs on buildings etc.

Variable Costs : The opposite of fixed costs is variable costs. They vary in sympathy with changes in output. So, if volume varies, costs also vary. Hence, they are known as Variable Costs. Variable costs are also known as direct costs. Eg. Material cost, Labour cost etc.

Semi Variable (or) Semi Fixed Costs :

These costs are not exactly variable costs (or) fixed costs. These are variable to some extent and fixed to some extent. Eg. Maintenance of Motor Vehicles, Electricity, Telephone expenses, service Department wages. In the case of 1^{st} one, the total cost may include some fixed components towards depreciation at a flat rate and some variable component towards cost of fuel oil, which is incurred in proportion to the use of the vehicle. Thus, it is good example of semi variable (or) semi fixed cost. The 2^{nd} example also can be discussed on a similar basis.

12.3.3. Cost Classification by Functions :

It is assumed that there are three important functions to any organisation in general. They are (I) Manufacturing (2) Office and Administration and (3) Selling and Distribution. Accordingly, Cost is ascertained for these functions.

1. **Manufacturing Costs :** Manufacturing costs is a total of all direct (or) variable costs of manufacture and manufacturing overheads. So, it is an aggregate of direct material, direct labour, direct expenses and some indirect costs (Manufacturing overheads)
2. **Office/Administration Cost :** It is cost of formulating a policy, directing the organisation and controlling the operations of an undertaking which is not directly related to production, selling, distribution, research or development. Thus, it includes all office expenses, remuneration paid to managers, directors, legal expenses, depreciation of office premises.

3. **Selling and Distribution costs :** It is the cost of seeking and stimulating demand and the cost of dispatching and delivering products. Eg. Advertisement expenses, sales promotion expenses, warehouse rent, loading expenses etc.

12.3.4 Cost Classification by Controllability :

Cost Classification can also be made based on controllability. There can be two types of costs.

Controllable Costs : It is a cost which can be controlled by the business actions. Eg. Direct material, Direct labour etc.

Uncontrollable Costs : These costs are not available for control. It means that we are not able to control them by means of human action. Eg., Fixed Costs like : Rent, Insurance etc.

12.3.5 Cost Classification by Elements and Nature of Cost :

Broadly, elements of costs are three. They are : Materials, labour and expenses. Further, each of these can be divided into direct and indirect costs based on the nature of cost. Material Cost is divided into direct material cost and indirect material cost.

1. **Direct Material Cost :** It is any material cost which is directly assignable or chargeable to a product/a cost center/cost unit.

2. **Indirect Material Cost :** As in the case of direct material cost, it is not chargeable/assignable directly to a product or a cost center but charged separately. Ex. Oil, grease, printing.

3. **Direct labour Cost :** Any assignable and chargeable labour cost to a product/service/cost centre is called Direct labour cost. Eg. Wages paid to Mr.A and Mr. B on a product XYZ.

4. **Indirect Labour Cost :** It is any labour cost not directly chargeable to product but charged separately. Eg. Store keepers, inspectors, time booking, time keeping offices etc.

5. **Direct Expenses :** These are also direct but they are over and above direct material and direct labour costs. Chargeable or assignable to a product/service/cost centre. Eg. Cost of special experiment, machinery, drawings etc. for a specific product.

6. **Indirect Expenses :** These are all indirect expenses which may include anything over and above indirect material and indirect labour. Eg. Rent, Taxes etc.

7. **Direct Costs :** It is any cost that is directly chargeable to a product/cost centres.

8. **Indirect costs :** It is any cost to be charged to the product but not chargeable/assignable directly to a product.

Overheads :

This is a concept which tells that it is another general word used to signifiy all indirect cost in the organisation. So, Overhead is an aggregate of all indirect costs. It includes all indirect materials, indirect labour and indirect expenses. This overhead can be classified again on the basis of functions seen earlier. Thus, there may be manufacturing overheads, office overheads and selling distribution overheads.

12.4 COMPONENTS OF TOTAL COST

Total Cost is the sum of all costs associated with a particular unit, or process or department or batch or the entire concern. It comprises of cost of production, and selling and distribution expenses. It is also called `Cost of Sales'. It includes (1) Prime cost (2) Factory cost (3) Office Cost (4) Cost of Sales.

Components of Total Cost

Direct Materials Direct Labour Direct Expenses	**Prime Cost**
Prime Cost +Factory overheads	**Factory Cost**
Factory Cost + Office Overheads	**Office Cost**

Office Cost + Selling and Distribution overheads	**Total Cost**
Total Cost + Profit/Loss	**Sales**

Let us know explain the above chart starting with prime cost.

1. **Prime Cost :** It consists of costs as direct material, direct labour, and direct expenses. It is also known as basic, first or flat cost

2. **Factory Cost :** It comprises prime cost, in addition, works or factory overheads which include costs of indirect material, indirect labour and indirect factory expenses. This cost is also known as works cost, production or manufacturing cost.

3. **Office Cost :** It comprises of factory cost and office and administration overheads. This I also termed as total cost of production.

4. **Total Cost :** It comprises of cost of production and selling and distribution overheads. It also termed as Cost of sales.

12.4.1. Items to be included under various overheads :

A. Factory Overheads :

1. Factory rent, Insurance, Taxes	11. Consumable Stores
2. Depreciation on Plant & machinery	12. Cotton, Waste, Greece
3. Cost of Fuel and Coal	13. Workmen Compensation
4. Gas, Electricity, Steam	14. Normal Wastage of Materials
5. Salaries of works manager	15. R & D. Expenses
6. Repairs and Depreciation on Factory Buildings	16. Normal Idle Time
7. Canteen and Recreation Expenses	17. Factory Lighting, heating
8. Workers Recruitment and Training	18. Internal transport, watch and ward

expenses	
9. Drawing, Office expenses	19. Stores maintenance expenses
10. Purchase Dept. Expenses	20. Service Dept. Expenses

B. Office Overheads :

1. Office Salaries	7. Subscription to trade association
2. Counting Office salaries	8. Office Lighting & Heating
3. Rent, Depreciation of Office buildings	9. Bank expenses, Subscriptions to journals
4. Repairs, depreciation on Office furniture	10. General Manager's salary
5. Office Stationery, Postage, Telephone	11. Directors fees
6. Audit fees, legal expenses	12. Depreciation on accounting machinery

C. Selling & Distribution Overheads :

1. Advertisement expenses	9. Delivery van repairs
2. Sales staff salaries, commission	10. Sales branch expenses
3. Sales representative expenses	11. M.T.s Repairs
4. Samples, Catalogues	12. Special packing expenses
5. After sales services	13. Stock loss on transport
6. Showroom rent and lighting	14. Demonstration expenses
7. Warehouse insurance, staff salaries	15. Discount to consumers
8. Loss on stock in warehouse	16. Sales Office expenses

12.4.2 Items excluded from Cost Sheet :

The total cost of a product should include only those items of expenses which are a charge against profit. Items of expenses, which are relating to capital assets, capital losses, payments by way of distribution of profits are matters of pure finance. They should not form a part of the costs. The following are the examples of such expenses.

1. Expenses on acquisition of capital	9. Goodwill
2. Dividends on capital	10. Income tax
3. Abnormal Wastage of materials	11. Charities
4. Discount on Debentures	12. Donations, staff pension fund
5. Underwriting commission	13. Transfer of reserves
6. Preliminary expenses	14. Capital losses
7. Cost of abnormal idle time	15. Rent, interest and commission received
8. Fines and penalties	16. Compensation

12.5 COST SHEET

Cost Sheet is a statement presenting the items entering into cost of products or services. It shows the total cost components by stages and cost per unit of output during a period. It is usually prepared to meet three objectives : to prepare estimates of costs for future use; to facilitate a comparative study of costs with previous cost sheets; and to know the cost trends.

Particulars	**Total Cost Rs.**	**Cost per unit Rs.**
Direct Materials		
Opening Stock of Materials	X x x	
Add : Purchase of Materials	X x x	
	X x x	
Less : Closing stock of materials	X x x	
Direct wages		X x x
Direct expenses		X x x
Prime Cost		X x x
Add : Factory Overheads		
Factory rent, rates, taxes	X x x	
Fuel, power and water	X x x	
Lighting and heating	X x x	
Indirect wages	X x x	
Depreciation, repairs	X x x	
Salaries of works manager	X x x	
Indirect materials	X x x	
Drawing office and works office expenses	X x x	
Depreciation on Factory building	X x x	X x x
Works Cost/Factory Cost		**X x x**
Add : Office Administration overheads		
Office rent, insurance lighting	X x x	
Office salaries, telephone	X x x	
Law and audit expenses	X x x	
Director's remuneration	X x x	
General Manager's salary	X x x	
Printing and stationery	X x x	
Maintenance repairs	X x x	
Bank charges	X x x	
Miscellaneous expenses	X x x	X x x
Cost of Production		**X x x**
Add : Opening stock of finished goods	X x x	
Less : Closing stock of finished goods	X x x	
Cost of goods sold		**X x x**
Add : Selling and Distribution Overheads	X x x	X x x
Show room expenses, salesmen's salaries & Commission, warehouse rent, carriage outwards, advertising, delivery expenses, samples and free gifts etc.		

Cost of Sales	X x x	X x x
Add : Net profit (or deduct net loss)	X x x	X x x
Sales	**X x x**	**X x x**

Illu.1 : From the books of accounts of M/s Aryan Enterprises, the following details have been extracted for the year ending March 31st, 2006.

	Rs.
Stock of Materials :	
Opening Stock	**1,88,000**
Closing Stock	**2,00,000**
Materials purchased during the year	**8,32,000**
Direct wages paid	**2,38,400**
Indirect wages	**16,000**
Salaries to Administrative staff	**40,000**
Freights :	
Inward	**32,000**
Outward	**20,000**
Cash discount allowed	**14,000**
Bad debts written off	**18,800**
Repairs to Plant & Machinery	**42,400**
Rent, Rates and Taxes – Factory	**12,000**
Office	**6,400**
Travelling expenses	**12,400**
Salesmen's salaries and commission	**33,600**
Depreciation written off	
Plant & Machinery	**28,400**
Furniture	**2,400**
Directors' fees	**24,000**
Electricity charges (factory	**48,000**
Fuel (for boiler)	**64,000**
General charges	**24,800**

Manager's salary	**48,000**

The Manager's time is shared between the factory and the office in the ratio of 20:80. From the above details you are required to prepare (a) Prime Cost (b) Factory Overheads (c) Factory Cost (d) General Overheads and (e) Total Cost.

Solution :

M/s Aryan Enterprises

Cost sheet for the year ending 31-3-2006

	Rs.	**Rs.**
Direct Material Consumed		
Opening Stock	1,88,000	
Add : Purchases	8,32,000	
	10,20,000	
Add : Freight inward	32,000	
	10,52,000	
Less : Closing stock	2,00,000	8,52,000
Direct wages		2,38,400
Prime Cost (a)		**10,90,400**
Factory Overheads (b)		
Indirect wages	16,000	
Repairs to plant & machinery	42,400	
Rent, Rates and Taxes – factory	12,000	
Depreciation – Plant and Machinery	28,400	
Electricity charges	48,000	
Fuel	64,000	
Manager's salary (Rs.48,000 x 20%)	9,600	2,20,400
Factory Cost ©		**13,10,800**
General Overheads (d)		

Salaries to Administrative staff	40,000	
Freight outward	20,000	
Rent, rates and Taxes – Office	6,400	
Travelling	12,400	
Salesmen's salaries and Commission	33,600	
Depreciation – Furniture	2,400	
Bad debts	18,800	
Director's fees	24,000	
General charges	24,800	
Manager's salary (Rs.48,000 x 80%)	38,400	2,20,800
Total Cost (E)		**15,31,600**

Notes :

1. Cash discount, being a financial item, has been excluded from cost accounts. However, normal bad debts are taken as a part of selling overheads and therefore, have been included in costs.
2. General overheads include all overheads other than factory overheads.

Illu.2 : The following data have been extracted from the books of M/s Lanco Industries Ltd., for the calendar year, 2007.

	Rs.
Opening stock of Raw material	**25,000**
Purchases of Raw Material	**85,000**
Closing stock of Raw Material	**40,000**
Carriage inward	**5,000**
Wages – Direct	**75,000**
Indirect	**10,000**
Other Dividend charges	**15,000**
Rent and Rates – Factory	**5,000**
Office	**500**

Indirect consumption of material	**500**
Depreciation – Plant etc.	**1,500**
Office Furniture	**100**
Salary – Office	**2,500**
Salesman	**2,000**
Other factory expenses	**5,700**
Other office expenses	**900**
Managing Director’s Remuneration	**12,000**
Other selling expenses	**1,000**
Travelling expenses of salesman	**1,100**
Carriage and Freight outward	**1,000**
Sales	**2,50,000**
Advance income tax paid	**15,000**
Advertisement	**2,000**

Managing Director’s remuneration is to be allocated, Rs.4,000 to factory Rs.2,000 to the Office and Rs.6,000 to selling depts. From the above information prepare (a) Prime Cost (b) Works cost (c) Cost of production (d) Cost of Sales

(e) Net profit.

Solution :

M/s Lanco Industries Limited

Statement of Cost and Profit for the year 2006

	Rs.	Rs.
Material consumed		
Opening Stock	25,000	
Add : Purchases	85,000	
Add : Carriage inward	5,000	
	1,15,000	
Less : Closing stock	40,000	75,000

Wages		75,000
Other Direct wages		15,000
Prime Cost		**1,65,000**
Factory Expenses		
Indirect wages	10,000	
Rent and Rates	5,000	
Indirect material	500	
Depreciation of Plant	1,500	
Other factory expenses	5,700	
Managing Director's Remuneration	4,000	26,700
Factory Cost		**1,91,700**
Office and Administrative Expenses		
Rent and Rates	500	
Depreciation on Office Furniture	100	
Salary	2,500	
Other Office expenses	900	
Managing Director's Remuneration	2,000	6,000
Cost of Production		1,97,700
Selling & Distribution Expenses :		
Salary – Salesmen	2,000	
Managing Director's remuneration	6,000	
Other selling expenses	1,000	
Advertisement	2,000	
Travelling expenses	1,100	
Carriage and freight outward	1,000	13,100
Cost of sales		**2,10,800**
Profit		39,200
Sales		**2,50,000**

Note : Income tax is not included as it is not a cost.

Illu.3 : From the following particulars, prepare a cost sheet showing the components of total cost and the profit for the year ended 31-12-2007:

	On 1-1-2007 Rs.	On 31-12-2007 (Rs.)
Stock of raw materials	**80,000**	**1,00,000**
Work – in – progress	**30,000**	**20,000**
Stock of finished goods	**12,000**	**30,000**
Purchase of raw materials		**9,50,000**
Carriage inwards		**25,000**
Wages		**3,50,000**
Works manager's salary		**60,000**
Factory employees salary		**1,20,000**
Power expenses		**19,000**
Factory rent, taxes and insurance		**14,500**
Other production expenses		**85,000**
General expenses		**65,000**
Sales for the year		**17,20,000**
Income tax		**5,500**
Dividend		**1,000**
Debenture interest		**5,000**
Goodwill		**10,000**
Payment of Sales tax		**16,000**

Solution :

Cost Sheet for the year ended 31-12-2007

	Rs.	Rs.
Opening Stock of material	80,000	
Add: Purchases of materials	9,50,000	
Carriage inwards	25,000	

		10,55,000	
Less:	Closing stock of materials	1,00,000	
	Direct materials consumed		9,55,000
	Direct wages		3,50,000
	Prime cost		**13,05,000**
Factory Overheads:			
	Works manager's salary	60,000	
	Factory employee's salaries	1,20,000	
	Power expenses	19,000	
	Factory rent, taxes, insurance	14,500	
	Other production expenses	85,000	2,98,500
			16,03,500
Add:	Opening work-in-progress		30,000
			16,33,500
Less:	Closing work-in-progress		20,000
	Factory cost		**16,13,500**
Office & Administrative Overheads :			
	General expenses	65,000	65,000
	Cost of production		**16,78,500**
Add:	Opening finished goods		12,000
			16,90,500
Less:	Closing finished goods cost of goods sold		30,000
			16,60,500
Selling & Distribution overheads :			
	Nil		-
	Cost of sales		**16,60,500**
	Net profit		59,500
	Sales		**17,20,000**

Note : Income tax, dividend, debenture, interest, goodwill and payment of sales tax are all financial items which totally excluded from cost accountancy.

Illu.4 : Tirupathi Electronics Ltd., produces a standard product and provides you the following information for the year ending 31st March 2005 :

	Rs.
Raw Materials :	
Opening stock	**10,000**
Purchases	**85,000**
Closing stock	**4,000**
Direct wages	**20,000**
Other direct expenses	**10,000**
Factory overheads	**100% of direct wages**
Office overheads	**100% of works cost**
Selling expenses	**Rs.2 per unit sold**
Finished goods :	
Opening stock 1,000 units	**(-) 16,000**
Produced during the year	**10,000 units**
Closing stock	**2,000 units**

Prepare Cost sheet for the year ending 31st March 2005. Also ascertain the selling price per unit so as to yield a profit of 20% on the selling price.

Solution :

Cost Sheet for the year ended 31-3-2005

Particulars		**Rs.**	**Rs.**
Opening stock of materials		10,000	
Add:	Purchases of materials	85,000	
		95,000	
Less:	Closing stock of materials	4,000	
	Direct materials consumed		91,000
	Direct wages		20,000
	Other direct expenses		-

	Prime Cost		**1,11,000**
Factory Overheads :			
	100% of direct wages (20,000 x 100/100)		20,000
	Factory cost		**1,41,000**
Office overheads :			
	10% of Factory cost (1,41,000 x 10/100)		14,100
	Cost of production (10,000 units)		**1,55,100**
Add:	Opening finished stock (1000 units)		16,000
			1,71,100
Less:	Closing finished stock (2000 units) (1,55,100 / 10,000 x 2,000)		31,020
	Cost of goods sold		**1,40,080**
	Selling overheads (10,000 + 1,000 – 2,000 = 9000 units @ 2/- per unit)		18,000
	Cost of sales		**1,58,080**
Add:	Profit (1,58,080 x 20 / 80)		39,520
	Sales		**1,97,600**

$$\text{Selling Price Per unit} = \frac{1,97,600}{9,000} = 21.96$$

Illu.5 : From the following particulars, you are required to prepare a cost sheet.

	Rs.
Stock of finished goods 31-12-2006	**72,800**
Stock of raw materials 31-12-2006	**33,280**
Purchase of raw materials	**7,59,200**
Productive wages	**5,16,8801**
Sales	**15,39,200**
Stock of finished goods 31-12-2007	**78,000**

Stock of raw materials 31-12-2007	**35,360**
Works overhead charges	**1,29,220**
Office overheads	**70,000**

The company is intending to send a quotation for a large plant. The estimated material cost is Rs.52,000, Wages Rs.30,000. The quotation is to make a profit of 20% on selling price. Show what the amount of the quotation would be, if based on the above percentage.

Solution :

Cost Sheet for the year ended 31-12-2007

Particulars		**Rs.**	**Rs.**
Opening stock materials		33,280	
Add:	Purchases of materials	7,59,200	
		7,92,480	
Less:	Closing stock of materials	35,360	
	Direct materials consumed		7,57,120
	Direct wages		5,16,880
	Prime cost		**12,74,000**
	Works overheads charges		1,29,220
	Works cost		**14,03, 220**
	Office and general overhead		70,000
	Total Cost		**14,73,220**
	Net profit		65,980
	Sales		**15,39,200**

(a) Cost of materials consumed = Rs.7,57,120

(b) Prime cost = Rs.12,74,000

(c) Works cost = Rs.14,03,220

(d) Total cost = Rs.14,73,381

(e) Percentage of works overhead over productive wages :

$$\frac{1,29,220}{5,16,880} \text{ x } 100 = 25\%$$

(f) Percentage of general overhead over works cost :

$$\frac{70,000}{14,03,220} \text{ x } 100 = 5\% \text{ (Approxmately)}$$

Tender

	Rs.	Rs.
Direct materials	52,000	
Direct wages	31,200	
Prime Cost		83,200
Works overheads (Rs.31,200 x 25/100)		7,800
Works cost		**91,000**
General overheads (Rs.91,000 x 5/100)		4,550
Total cost		**95,550**
Net Profit (Rs.95,550 x 20/80)		23,888
Selling price		**1,19,438**

Illu.6 : From the following particulars prepare cost sheet, percentage of works overhead to productive wages, percentage of general overhead to works cost and the percentage of net profit on sales.

Sales Rs.12,00,000, works overhead Rs.75,000, Stock of materials on 1st July 2005 Rs.20,000, Stock of finished goods on 31st July 2005 Rs.30,000, Purchases Rs.5,50,000, Office expenses Rs.50,000, stock of finished goods 31st July 2005 Rs.25,000, productive wages Rs.2,50,000, stock of materials on 31st July 2005 Rs.70,000, work in progress 1st July 2005 Rs.10,000; work in progress on 31st July 2005 Rs.25,000.

Solution :

Cost Sheet for the month of July 2005

Particulars		Rs.	Rs.
Opening stock of materials		20,000	
Add:	Purchases of materials	5,50,000	
		5,70,000	
Less:	Closing stock of materials	70,000	
	Direct materials consumed		5,00,000
	Direct wages		2,50,000
	Prime Cost		**7,50,000**
	Works overheads :		
	Works over head expenses	75,000	75,000
			8,25,000
Add :	Opening work in progress		10,000
			8,35,000
Less:	Closing work in progress		25,000
	Works cost		**8,10,000**
	Office & Administrative overheads :		
	Office Expenses	50,000	50,000
	Cost of production		**8,60,000**
Add:	Opening finished goods		25,000
			8,85,000
Less:	Closing finished goods		30,000
	Cost of goods sold		**8,55,000**
	Selling and distribution overheads :		
	NIL	-	-
	Cost of Sales		**8,55,000**
	Net profit		3,45,000
	Sales		**12,00,000**

Percentage of works overheads to production wages :

= 75,000 / 2,50,000 x 100 = 30%

Percentage of general overheads to works cost :

= 50,000 / 8,10,000 x 1.00 = 6% (Approximately)

Percentage of net Profits to Sales :

= 3,45,000 / 12,00,000 x 100 = 28.75%

Illu.7 : From the given particulars prepare cost sheet and find out profit :

	Rs.
Direct materials	**20,000**
Direct labour	**12,000**
Chargeable expenses	**1,000**

Works overhead is 50% of prime cost and office overhead is 10% of works cost. 25% of profit on selling price is expected.

Solution :

Cost Sheet

	Rs.	**Rs.**
Direct material	20,000	
Direct labour	12,000	
Chargeable expenses	1,000	
Prime cost		33,000
Works overheads -		
@ 50% of prime cost (33,000 x 50/100)		16,500
Works cost		**49,500**
Office overheads -		
@ 10% of works cost (49,500 x 10/100)		4,950
Cost of production		**54,450**
Profit -		
@ 25% on selling price (54,450 x 25/ 75)		18,150

Selling price		**72,600**

Illu.8 : From the following particulars prepare cost sheet and show what the amount of the quotation would be if 20% on selling price.

	Rs.
Stock of finished goods at the beginning	**70,000**
Stock of raw materials at the beginning	**30,000**
Purchase and raw materials	**7,50,000**
Productive wages	**5,20,000**
Sales	**15,50,000**
Stock of finished goods at the end	**80,000**
Stock of raw materials at the end	**30,000**
Works overhead charge	**1,30,000**
Office overheads	**70,000**

The company is intending to send a quotation for a large plant. The estimated material cost is Rs.50,000, wages Rs.30,000.

Solution :

Cost Sheet

Particulars		**Rs.**	**Rs.**
Opening stock of materials		30,000	
Add:	Purchases of materials	7,50,000	
		7,80,000	
Less:	Closing stock of materials	30,000	
	Direct materials consumed		7,50,000
	Productive or direct wages		5,20,000
	Prime cost		**12,70,000**
	Works overheads charges		1,30,000
	Works cost		**14,00,000**

	Office overheads		70,000
	Cost of production		**14,70,000**
Add:	Opening stock of finished goods		70,000
			15,40,000
Less:	Closing stock of finished goods		80,000
	Cost of goods sold / cost of sales		**14,60,000**
	Net profit		90,000
	Sales		**15,50,000**

Quotation for a large plant (Tender)

	Rs.	**Rs.**
Direct material	50,000	
Direct wages	30,000	
Prime cost		80,000
Works overheads		
Percentage on direct wages 1,30,000 / 5,20,000 x 100 = 25% = 30,000 x 25/100		7,500
Works cost		**87,500**
Office overheads :		
Percentage on works cost 70,000 / 14,00,000 x 100 = 5% = 87,500 x 5/100		4,375
Cost of production / Total cost		**91,875**
Add: Profit (91,875 x 20/ 80)		22,969
Quotation		**1,14,844**

Illu.9 :Following figures relate to the manufacture of fans for three months ending 31st March 2006 :

	Rs.
Completed stock on 1st January 2006	**NIL**

Completed stock on 31st March 2006	**20,250**
Stock of raw materials on 1st January 2006	**5,000**
Stock of raw materials on 31st March 2006	**3,500**
Factory wages	**75,000**
Indirect charges	**12,500**
Materials purchased	**32,500**
Sales	**1,12,500**

The number of fans manufactured during those 3 months was 3,000. Prepare a statement showing the cost per fan and price to be quoted for 750 fans to realise the same percentage of profits as was realized during the said period, assuming same conditions.

Solution :

Cost sheet of 3000 fans

for the three months period ended 31st March 2006

		Rs.	Rs.
Opening stock of materials		5,000	
Add:	Material purchases	32,500	
		37,500	
Less:	Closing stock of materials	3,500	
	Direct materials consumed		34,000
	Direct wages (factory wages)		75,000
	Prime cost		**1,09,000**
	Overheads (Indirect charges)		12,500
	Total Cost		**1,21,500**
Add:	Opening finished stock – nil		-
			1,21,500
Less:	Closing finished stock		20,250
	Cost of Sales		**1,01,250**

Net profit		11,250
Sales		**1,12,500**

$$\text{Percentage of Profit on sales} = \frac{11,250}{1,12,500} \times 100 = 10\%$$

Statement showing Price for 750 fans and cost per fan

	Total cost	**Cost per fan**
Direct Material :		
= 34,000 / 3,000 x 750	8,500	
= 8,500 / 750		11.33
Direct wages :		
= 75,000 / 3,000 x 750	18,750	
= 18,750 / 750		25.00
Prime cost	**27,250**	**36.33**
Overheads :		
= 12,500 / 3,000 x 750	3,125	
= 3,125 / 750		4.17
Total cost	**30,375**	**40.50**
Add: Net profit		
= 30,375 x 10/ 90	3,375	
= 3,375 / 750		4.50
Quotation	**33,750**	**45.00**

Illu.10 : Prepare cost sheet showing the different elements of cost from the following information :

Opening Balances	**Rs.**	**Closing Balances**	**Rs.**
Raw materials	**25,000**	**Raw materials**	**40,000**
Work – in - progress	**1,000**	**Work – in – progress**	**500**
Finished goods	**2,000**	**Finished goods**	**1,000**

Purchase of materials	**85,000**	**Carriage in**	**5,000**
Direct wages	**75,000**	**Indirect wages**	**10,000**
Direct charges	**15,000**	**Rent and rates :**	
Indirect materials	**500**	**Factory**	**5,000**
Other factory expenses	**5,700**	**Office**	**500**
Prepaid income tax	**15,000**	**Depreciation :**	
Salaries :		**Plant and Machinery**	**1,500**
Office	**2,500**	**Furniture**	**100**
Godown	**2,000**	**Manager's Remuneration**	**12,000**
Other office expenses	**900**	**Advertisement**	**2,000**
Bad debts	**1,000**	**Carriage outwards**	**1,000**
Travelling expenses	**1,100**		
Sales	**2,50,000**		

Manager's remuneration is to be allocated Rs.4,000 to factory Rs.2,000 to office and Rs.6,000 to sales departments.

Solution :

Cost Sheet

		Rs.	Rs.
Opening stock of materials		25,000	
Add:	Purchases of materials	85,000	
Add:	Carriage inwards	5,000	
		1,15,000	
Less:	Closing stock of materials	40,000	
	Direct materials consumed		75,000
	Direct wages		75,000
	Direct charges		15,000
	Prime Cost		**1,65,000**
Factory Overheads :			
	Indirect materials	500	

Indirect wages	10,000	
Other factory expenses	5,700	
Rent, rates (Factory)	5,000	
Depreciation on Plant & Machinery	1,500	
Manager's remuneration (Factory)	4,000	26,700
Factory Cost		**1,91,700**
Office & Administrative overheads :		
Salaries (office)	2,500	
Other office expenses	900	
Rent, rates (office)	500	
Depreciation on furniture	100	
Manager's remuneration (office)	2,000	6,000
Cost of production		**1,97,700**
Selling & Distribution Overheads :		
Salaries (godown)	2,000	
Bad debts	1,000	
Travelling expenses	1,100	
Advertisement	2,000	
Carriage outwards	1,000	
Manager's remuneration (sales dept)	6,000	13,100
Total cost		**2,10,800**
Net profit		39,200
Sales		**2,50,000**

Illu.11 : From the following data, prepare cost and production statement of M/s. Karuna Coolers manufacturing company for the year 2005:

	Rs.
Stock of materials on 1-1-2005	**52,500**
Stock of materials on 31-12-2005	**7,350**

Purchases	**78,750**
Factory wages	**1,42,500**
Factory expenses	**26,250**
Establishment expenses	**15,000**
Finished stock on 1-1-2005	**NIL**
Finished stock on 31-12-2005	**52,500**
Sales	**2,88,500**

The number of coolers manufactured during the year were 6,000. The company wants to quote for a contract for the supply of 1,500 coolers during 2006. The coolers are of the same quality, but cost of materials increased by 15% and labour by 10%. Prepare a statement showing the price to be quoted to give the same percentage of profit on turnover as was realised during 2005, assuming that the cost per unit of overhead charges will be the same as in previous year.

Solution :

Cost – Sheet of M/s Karuna Coolers for the year ended 2005

	Rs.	Rs.
Opening stock of material	52,500	
Add: Purchases	78,750	
	1,31,250	
Less: Closing stock of material	7,350	
Direct material consumed		1,23,900
Direct wages		1,42,500

Prime Cost		**2,66,400**
Factory Overheads :		
Factory expenses		26,250
Factory cost		**2,92,650**
Office & Administrative overheads :		
Establishment expenses		15,000
Add: Opening finished stock		-
		2,77,650

Less: Closing finished stock		52,500
Cost of goods sold / cost of sales		**2,25,150**
Net profit		63,350
Sales		**2,88,500**

Statement Showing quotation for 1500 coolers for 2006

	Rs.	**Rs.**
Direct material :		
= 1,23,900 / 6,000 x 1500	30,975	
Add: Increase (30,975 x 15 / 100)	4,646	35,621
Direct wages :		
= 1,42,500 / 6,000 x 1,500	35,625	
Add: Increase (35,625 x 10/100)	3,563	39,188
Prime cost		**74,809**
Factory Overheads :		
= 26,250 / 6,000 x 1,500		6,563
Factory Cost		**81,372**
Office & Administrative Overheads :		
= 15,000 / 6,000 x 1500		3,750
Cost Production / Total cost		**85,122**
Add: Net Profit		

= 63,350 / 2,88,500 x 100 = 22%		
= 85,122 x 22 / 78		24,009
Quotation		**1,09,131**

Illu.12 : From the following particulars, you are required to prepare a cost sheet. Calculate percentage of works on cost to wages, percentage of office overheads to works cost :

	Rs.
Stock of finished goods 31-12-2000	**1,45,600**
Stock of raw materials 31-12-2000	**66,560**
Purchase of raw materials	**15,18,400**
Productive wages	**10,33,760**
Sales	**30,78,400**
Stock of finished goods 31-12-2001	**1,56,000**
Stock of raw materials 31-12-2001	**70,720**
Works overhead charges	**2,58,440**
Office overheads	**1,40,322**

The company is intending to send a quotation for a large plant. The estimated material cost is Rs.1,04,000 and wages Rs.62,400. The quotation is to make a profit of 20% on selling price. Show what the amount of quotation would be, if based on the above percentage.

Solution :

Cost Sheet

	Rs.	**Rs.**
Opening stock materials	66,560	
Add: Purchases of materials	15,18,400	
	15,84,960	

Less: Closing stock of materials	70,720	
Direct materials consumed		15,14,240
Direct wages		10,33,760
Prime cost		**25,48,000**
Works overheads charges		2,58,440
Works cost		**28,06,440**
Office and general overhead		1,40,322
Total cost		**29,46,762**
Net profit		1,31,638
Sales		**30,78,400**

(a) Cost of materials consumed = Rs.15,14,240

(b) Prime cost = Rs.25,48,000

(c) Works cost = Rs.28,06,440

(d) Total cost = Rs.29,46,762

(e) Percentage of works overhead over productive wages :

2,58,440 / 10,33,760 x 100 = 25%

(f) Percentage of general overhead over works cost

1,40,322 / 28,06,440 x 100 = 5%

Statement showing the amount of Quotation

	Rs.	**Rs.**
Direct materials	1,04,000	
Direct wages	62,400	

Prime cost		1,66,400
Works overheads (62,400 x 25/100)		15,600
Works cost		**1,82,000**
General overheads (1,82,000 x 5/100)		9,100
Total cost		**1,91,100**
Net profit (1,91,100 x 20/80)		47,775
Selling price		**2,38,875**

Illu.13 : Bharat Engineering Company Limited manufactured and sold 1000 Radio sets in 2004. The following are particulars regarding the Radios sold and manufactured by them:

	Rs.
Cost of Material	**80,000**
Wages paid	**1,20,000**
Manufacturing expenses	**50,000**
Salaries	**60,000**
Rent and Rates	**10,000**
Selling expenses	**30,000**
General expenses	**20,000**
Sales	**4,00,000**

The company desires to supply 200 Radio sets to a commercial concern. You are required to prepare a statement showing the price at which Radios should be sold so as to show a profit of 10% on the selling price. The following additional information is supplied to you:

(a) The price of Material will rise by 20% on the previous year level

(b) Wages will rise by 5%

(c) Manufacturing expenses will rise by 10%

(d) **Office and selling expenses per unit will remain same.**

Solution :

Cost Sheet of M/s Bharath Engineering Company Limited

Particulars		**Amount Rs.**	**Cost per Unit**
Materials		80,000	80
Wages		1,20,000	120
Prime cost		**2,00,000**	**200**
Manufacturing expenses		50,000	50
Works cost		**2,50,000**	**250**
Salaries	60,000		
Rent	10,000		
General expenses	20,000	90,000	90
Cost of production		**3,40,000**	**340**
Add: Selling expenses		30,000	30
Total cost		**3,70,000**	**370**
Add: Profit		30,000	30
Sales		**4,00,000**	**400**

Absorption of overheads :

(a) Materials = 80 + (80 x 20/100) = 96

(b) Wages = 120 + (120 x 5/100) = 126

(c) Manufacturing expenses = 50 + (50 x 10/100) = 55

Quotation for 20 Radios

Particulars	Amount Rs.
Materials (200 x 96)	**19,200**
Wages (200 x 126)	**25,200**
Prime cost	44,400
Add: **Manufacturing expenses (200 x 55)**	**11,000**
Works cost	55,400
Add: **office expenses (200 x 90)**	**18,000**

Cost of production	73,400
Add: **Selling expenses (200 x 30)**	**6,000**
Total cost	79,400
Add: **Profit (90 – 10)** **79,400 - ?**	**8,822**
Sales	88,222

Illu.14 : A factory uses a Job costing system. The following data are available from the books at the ending 31st March 2005.

Direct Material Rs.9,00,000

Direct Wages Rs.7,50,000

Profit Rs.6,09,000

Selling and Distribution overhead Rs.5,25,000

Administrative overhead Rs.4,20,000

Factory overhead Rs.4,50,000.

Required : Prepare a cost sheet indicating the prime cost, works cost, production cost, cost of sale and sales value.

Solution :

Cost Sheet for the year ended 31st March, 2005

Particulars	**Amount Rs.**
Direct materials	9,00,000
Direct wages	7,50,000
Prime cost	**16,50,000**
Add: Factory overhead	4,50,000
Works Cost	**21,00,000**

Add : Administrative overhead	4,20,000
Cost of production	**25,20,000**
Add: Selling & Distribution overhead	5,25,000
Total cost	**30,45,000**
Add: Profit	6,09,000
Sales	**36,54,000**

12.6.QUESTIONS

A. Short Answer Questions

1. What is meant by classification of overheads on time basis?
2. What are the items not to be included in costing?
3. What are the advantages of cost sheet?

B. Essay Type Questions :

1. Explain the various methods of costing.
2. How do you classify costs? State various methods
3. Explain elaborately the parts of total cost and components to be included therein.
4. Explain similarities and differences between cost centre, and cost unit.
5. Discuss the basis for the classification of costs.
6. Define cost. State the items of cost.
7. Explain with examples of fixed and variable expenses.

12.7.EXERCISES

1. The all India Water proof Manufactures Ltd., manufactured and sold 850 water proofs in the year ending 31st March 2003. The summarised Trading and Profit and Loss Account is as follows:

	Rs.		**Rs.**
To Materials	64,000	By Sales	3,20,000
To Direct wages	96,000		
To Manufacturing expenses	40,000		
To Gross profit	1,20,000		
	3,20,000		**3,20,000**
To Office Salaries	48,000	By Gross profit	1,20,000
To Rent, Rates and Taxes	8,000		
To Selling Expenses	16,000		
To General Expenses	24,000		
To Net Profit	24,000		
	1,20,000		**1,20,000**

For the year ending 31st March 2004, it has been estimated that:

(a) Output and sales will be 1,000 waterproofs.

(b) Price of materials will rise by 25% on the previous year's level.

(c) Wages will rise by 12.5%

(d) Manufacturing cost will rise in proportion to the combined cost of materials and wages.

(e) Selling cost per unit will remain unchanged.

(f) Other expenses will remain unaffected by the raise in output.

Prepare a cost statement, showing the price at which the waterproofs would be marketed so as to show a profit at 12% on the selling price.

[Ans.: Prime Cost Rs.2,21,177; Factory Cost Rs.2,76,472; Cost of Production Rs.3,56,472; Total Cost Rs.3,75,296; Selling Price Rs.4,26,473]

2. From the books of M/s. Swamy Associates Ltd., the following balances extracted for the calendar year 2007:

Stock of materials on 1st Jan. 2007 Rs.20,000

Purchases of raw materials Rs.5, 50,000 and returns Rs.11, 000

Stock of finished goods as on 1st Jan. 2007 Rs.25,000

Sale of scrap during the year 2007 Rs.4, 000

Productive wages Rs.2,50,000

Finished goods sold Rs.12,00,000

Works overhead charges Rs.75,000

Office and general expenses Rs.50,000

Stock of materials on 31st December 2007 Rs.70, 000

Stock of finished goods on 31st December 2007 –30,000

Ascertain:

(a) Prime cost

(b) Works cost

(c) Cost of production

(d) Cost of goods sold

(e) Profit / Loss by preparing cost sheet.

[Ans.: Prime Cost Rs.7,39,000; Works cost Rs.8,10,000; Cost of Production Rs.8,60,000; Cost of goods sold Rs.8,55,000; Net Profit Rs.3,45,000]

3. Prepare cost sheet from the following particulars:

Opening materials Rs.30,850

Opening work in progress Rs.60,850

Purchase of materials Rs.1,43,250

Direct wages Rs.1,78,500

Works overheads Rs.1,42,800

Office overheads Rs.1,12,700

Closing material Rs.37,700

Closing work in progress Rs.67,750

Sales for the year Rs.8,60,625.

[Ans.: Prime Cost Rs.3,14,900; Works cost Rs.4,50,800; Cost of Production Rs.5,63,500; Net profit Rs.2,97,125]

4. The following extract of costing information relates to commodity for the half year 30th June, 2005.

	Rs.
Stock on 1st January 2005:	
Raw materials	22,000
Finished product (1,600 tonnes)	17,600
Purchase of raw materials	1,32,000
Direct wages	1,10,000
Rent, rates, insurance and works on cost	44,000
Carriage inward	1,584
Stock on 30th June, 2005:	
Raw materials	24,464
Finished product (3,200 tonnes)	35,200
Work in progress – 1st January 2005	5,280
30th June 2005	17,600
Cost of factory supervision	8,800
Sales – finished goods	3,30,000

Advertising, discount allowed and selling cost 75 paise per tonne sold. 25,600 tonnes of commodity was produced during the period:

You are required to ascertain:

(a) Value of raw materials used

(b) Cost of output for the period

(c) Cost of sales

(d) Net profit for the period and

(e) Net profit per tonne.

[Ans.: Prime Cost Rs.2,41,120; Factory Cost Rs.2,81,600; Cost of production Rs.2,81,600; Cost of goods sold Rs.2,64,000; Net profit Rs.48,000]

5. Prepare Cost Sheet showing the different elements of cost from the following information:

Opening Balances	***Rs.***	***Closing Balances***	***Rs.***
Raw materials	25,000	Raw materials	40,000

Work-in-progress	1,000	Work-in-progress	500
Finished goods	2,000	Finished goods	1,000
Purchase of materials	85,000	Carriage in	5,000
Direct wages	75,000	Indirect wages	10,000
Direct charges	15,000	Rent & Rates:	
Indirect materials	500	Factory	5,000
Other factory expenses	5,700	Office	500
Prepaid income tax	15,000	Depreciation:	
Salaries:		Plant & Machinery	1,500
Office	2,500	Furniture	100
God own	2,000	Manager's remuneration	12,000
Other office expenses	900	Advertisement	2,000
Bad debts	1,000	Carriage out	1,000
Travelling expenses	1,100		
Sales	2,50,000		

Manager's remuneration is to be allocated Rs.4, 000 to Factory, Rs.2, 000 to Office and Rs.6, 000 to Sales departments.

[Ans.: Prime Cost Rs.1,65,000; Net works cost Rs.1,92,200; Cost of Production Rs.2,00,200; Net profit Rs.38,700]

6. From the following particulars, prepare Cost Sheet showing the different elements of cost for the year ending 31-12-2007.

Materials purchased Rs.1,25,000; Works overheads Rs.45,000; Direct wages Rs.1,00,000; Opening materials Rs.23,400; Carriage inwards Rs.1,600; Opening work-in-progress Rs.15,000; Closing materials Rs.20,000; Opening finished goods (2000 tonnes) Rs.30,000; Closing work-in-progress Rs.4,800; Closing finished goods (3000tonnes) Rs.46,000.

Selling and distribution expenses Rs.1.50 per Tonne sold. During the above period 16000 tonnes of units were produced.

[Ans.: Material consumed Rs.1,30,000; Prime Cost Rs.2,30,000; Gross works cost Rs.2,75,000; Net works cost Rs.2,85,000; Cost of goods sold Rs.2,69,200; Total Cost Rs.2,91,700]

7. The following information has been obtained from the records of ABC Corporation for the Period from June 1 to 30, 2007:

	On June 1, 2002	***On June 30, 2002***
	Rs.	***Rs.***
Cost of raw materials	60,000	50,000
Cost of work-in-progress	12,000	15,000
Cost of stock of finished goods	90,000	1,10,000
Purchase of raw materials during June, 2002		4,80,000
Wages paid		2,40,000
Factory overheads		1,00,000
Administration overheads		50,000
Selling and distribution overheads		25,000
Sales		10,00,000

Prepare a statement giving the following information:

(a) Raw materials consumed

(b) Prime cost

(c) Factory cost

(d) Cost of goods sold and

(e) Net profit.

[Ans.: Prime cost Rs.7,30,000; Factory cost Rs.8,27,000; Cost of goods sold Rs.8,57,000; Net Profit Rs.1,18,000]

12.8. SUGGESTED READINGS

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Chapter – 13

Budget – Budgetary Control

Objectives :

This lesson helps you in

- Understanding the meaning of Budget and Budgetary control
- Know the essentials of effective budgeting
- Discuss the advantages and limitations of budgeting
- Know the procedure and preparation of various types of budgets.
- Understand the meaning and preparation of flexible budget

Structure :

13.1 Introduction

13.2 Budgetary Control

13.3 Objectives of Budgetary Control

13.4 Budgeting Vs. Budgetary Control

13.5 Essentials of Effective Budgeting

13.6 Advantages of Budgetary Control

13.7 Limitations of Budgeting

13.8 Procedure for Budgeting

13.9 Types of Budgets

13.10 Fixed & Flexible Budgets

13.11 Questions

13.12 Exercises

13.13 Suggested Readings

13.1. INTRODUCTION :

A budget is simply a financial forecast for a future period. It is prepared in advance and is based on a future plan of action. Budgets are prepared for many different purposes and the period of future forecasting varies, but the most usual type of budget is the one prepared annually to estimate and control the activities of a company for its next financial period. Just as an individual will plan his approximate income and expenditure for future periods so does an organisation whether it is a government department, a local authority a hospital or a school.

13.2. BUDGETARY CONTROL :

Budgetary control is the establishment of budgets relating to the responsibilities of executives of a policy and the continuous comparison of actual with budgeted results, either to secure by individual action in the objectives of that policy or to provide a basis for its revision. Budgetary control is not a type of costing but is extensively used in all types of industries, business Government departments as a system of control through responsible persons such as executives, departmental heads of the management control. It refers to the establishment of budgets relating the responsibilities of executives to the requirements of a policy and the continuous comparison of actual with budgeted results. A comparison of budgeted and actual performance shows whether the performance is satisfactory or not. This may enable the management either to secure by individual action the objectives of the policy or to revise the policy itself. It ensures control over the performances and costs in the different sections of the business.

13.3. OBJECTIVES OF BUDGETARY CONTROL :

The following are the objectives of Budgetary Control.

1. Budgetary control aims at maximisation of profits through effective planning and control of income and expenditure directing capital and resources to the best and most profitable channel.
2. It provides a clear definition of the objectives and policies of the concern and a tool for subjecting these policies to periodic examination.

3. There is a planned approach to expenditure and financing of the business so that economy is effected in the utilisation of funds to the optimum benefit of the concerns and industries have the budget approach. This provides a basis for stable employment in the country, makes economic use of limited resources of the nation, and prevent wastage.
4. The function and performances of the various branches and spheres of the organisation are closely co-ordinates in a well-knit pattern. This results in closer co-operation between the various members of the organisation.
5. Deviations from budgets point out the weak spots and inefficiencies so that proper remedial measures can be taken. Efforts are concentrated only over a small part portion of the expenditure, which is not in conformity with the norm, leaving out the bulk which being within the budget needs no attention, and thus, reports are furnished under the principles of management or control by exception.
6. It makes each level of management aware of its task and fully conscious of best way to perform it. This maximises the effective utilisation of men, material and resources.
7. It provides a motivating force urging all concerned to work efficiently. As budgets are set for each item of expenditure against departments and against each executive, motivate persons to show maximum efficiency.
8. It creates in the management the habit of thinking ahead-making careful study of the problems in advance before taking decisions.
9. A budgetary control system assists in delegation of authority and is a powerful tool fo responsibility accounting.
10. It stabilises the conditions in industries, which are subject to seasonal or cyclic fluctuations.
11. Budgets help standard costing by creating conditions necessary for setting up of standard costs.
12. Budgetary control system provides a means for continuous appraisal of departmental performance and supplies a basis for internal audit.

13.4. BUDGETING VS. BUDGETARY CONTROL :

Budgeting and budgetary control are accounting exercises which act as a tool of management at all level. Budgeting differs from budgetary control in the following respect.

	Budgeting	Budgetary Control
1.	Budgeting is the preparation in advance of the quantitative as well as financial statements to indicate the intention of the management in respect of the various aspects of the business.	Budgetary control is a system by which budgets are used as a means of planning and controlling all the aspects of a business
2.	Budget is a statement showing the probable items of work to be carried out by the various departments specifying the quantities and monetary values	Budgetary control is a means of control by which the actual position is compared with that planned for to enable the management to take appropriate action if there are any deviations.
3.	Budget is a plan of operations expressed in monetary terms	Budgetary control is the very essence of financial control
4.	It is an overall statement in financial terms of the plan of operations. It includes the sales to be made, the expenses to be incurred and the income to be received during the budget period.	Its main objective is to control all aspects of production and selling. The results revealed by the budgets If found unsatisfactory indicates a need for change in policy itself.
5.	Budget should be prepared by the department to which it relates	Budgetary control in complied by a budget committee or controller.

13.5 ESSENTIALS OF EFFECTIVE BUDGETING :

A budgetary control system can prove successful only when certain conditions and attitudes exist, absence of which will negate to a large extent the value of a budget system in any business. Such conditions and attitudes, which are essential for effective budgeting, are as follows.

1. **Support of top management :** If the budget system is to be successful, it must be fully supported by every member of the management and the impetus and direction must come from the very top management. No control system can be effective unless the organisation is convinced that the top management considers the system to be important.
2. **Participation by responsible executives :** Those entrusted with the performance of the budgets should participate in the process of setting the budget figures. This will ensure proper implementation of budget programmes.
3. **Reasonable goals :** The budget figures should be realistic and represent reasonably attainable goals. The responsible executives should agree that the budget goals are reasonable and attainable.
4. **Clearly defined organisation :** In order to derive maximum benefits from the budget system, well defined responsibility centres should be built within the organisation. The controllable costs for each responsibility centres should be separately shown.
5. **Continuous budget education :** The best way to ensure the active interest of the responsible supervisors is continuous budget education in respect of objectives, potentials and techniques of budgeting. This may be accomplished through written manuals, meetings etc. whereby preparation of budgets, actual results achieved etc., may be discussed.
6. **Adequate accounting system :** There is a close relationship between budgeting and accounting. For the preparation of budgets, one has to depend on the accounting department for reliable historical data which primarily forms the basis for many estimates. The accounting system should be so designed so as to set up accounts in terms of areas of managerial responsibility. In other words, responsibility accounting is essential for successful budgetary control.
7. **Constant vigilance :** Reports comparing budget and actual results should be promptly prepared and special attention focussed on significant exception i.e., figures that are significantly different from those expected.
8. **Maximum profits :** The ultimate object of realising the maximum profit should always be kept uppermost.
9. **Cost of the system :** The budget system should not cost more than it is worth. Since it is not practicable to calculate exactly what a budget system is worth, it only implies a caution against adding expensive refinements unless their value clearly justifies them.

10. **Integration with standard costing system :** When standard costing system is also used, it should be completely integrated with the budget programme, in respect of both budget preparation and variance analysis.

13.6 ADVANTAGES OF BUDGETARY CONTROL :

The advantages of budgetary control may be summarises as follows.

1. The preparation of budgets emphasises and causes to be clarified the responsibilities of each executive. It forces early consideration of basic policies. In addition, it focuses attention in the contribution made by each market and product, on the capital and methods employed and on costs, and does so in such a manner that any further opportunities for profit making are revealed
2. Budgets provide a means of controlling in detail the income and expenditure of a business; they regulate the spending of money, and show up losses, waste, and inefficiency , thus making it possible for corrective action to be taken promptly. Furthermore, they tend to bring managers ``down to earth'' by compelling them to express their intentions in cold figures.
3. Budgetary control provides a means of ensuring that capital employed is kept at a minimum level consistent with the level of activity planned and that it is usefully employed; at the same time it ensures that adequate liquid resources are always available.
4. It enables management to decentralise responsibility without losing control of the business, since it pinpoints inefficiency :
5. It provides for the coordination of sales, production, and other activities of the business. It forces members of the management team to plan in harmons and emphasises the need for careful and adequate consideration of all relevant factors before coming to a decision. It is, therefore, a valuable aid in the fixing of selling prices;
6. Cost consciousness is increased and there is introduced an attitude of mind in which waste and inefficiency cannot thrive. The existence of a system of budgets does much to make clear to lower levels in the organisation the basic policies of top management.

13.7 LIMITATIONS OF BUDGETING :

Budgeting is not a fool proof tool. Those who consider using budgetary control must be fully aware of its limitations. The principal limitations are as follows.

1. The budget plan is based on estimates. Though there are numerous statistical and other techniques, which may give reasonable satisfactory results, yet forecasting cannot be an exact science. The strength or weakness of a budgetary control system depends to a large extent on the accuracy with which estimates are made.
2. A budgetary programme must be continuously adopted to fit changing circumstances. Various technique must be tried, improved, or discarded and replaced with others. Normally, it takes several years to attain a reasonably good system of budgetary control.
3. Execution of a budget will not occur automatically. Sometimes it is assumed that the introduction of a budget programme is alone sufficient to ensure its success. All levels of management must participate enthusiastically in the programme for the realisation of budgetary goals.
4. No budgetary system will eliminate the necessity for superior executive ability in every major business decision. In other words, budgeting does not take the place of management, but rather it is a tool of management.

13.8 PROCEDURE FOR BUDGETING :

The procedure for construction of a budget varies between organisations . Each responsible individual, from the lowest level, may construct his own budget and submit it through the next highest person, for incorporation in a total or master budget. Alternatively, all the detailed individual budgets and the master budgets may be constructed by the accountant or another executive, and passed downwards for comment at all levels. Whichever procedure is adopted, there should be a budget committee under the chairmanship of an executive powerful enough to ensure prompt action and co-operation. This is essential not only to demonstrate to all the importance with which budgeting is viewed, but also to ensure that all take maximum care and that there is a final arbiter of the disputes, which are bound to arise. When the forecasts of all sections have been considered, someone must decide what the budget will, be and this normally is the chairman of the budget committee.

The following steps may be taken in the preparation of the budget of an industrial concern.

1. **Establishment of Budget Centres :** A budget centre is a section of the organisation of an undertaking for the purpose of budgetary control. Budget centres or departments should be established, for each of which budget will be set with the help of the head of the department concerned.
2. **Introduction of Adequate Accounting Records :** A pre-requisite to the establishment of a budgetary control system is that accounting system should be able to record an analyse the information required. A chart of accounts corresponding with the budget centres should be maintained.
3. **Preparation of an Organisation chart :** Organisation chart defines the functions and responsibilities of each members of management and ensure that each one known his position in the organisation and his relationship to other members.
4. **Preparation of Budget Manual :** Budget manual is ``a document which sets out, the responsibility of the persons engaged in the routing of and the forms and records requires for budgetary control.'' It is usually in loose leaf form and an index is provided so that information can be quickly located.
5. **Fixation of Budget period :** Budget period may be defined as ``the period for which a budget is prepared and employed. There is no right period for any budget. Budget periods vary between short term and long term. Short term budgeting is usually costly to prepare and operate while long term budgeting may be considerably affected by unforeseen conditions.
6. **Determining of Key Factor :** Key factor means ``the factor the extent of whose influence must first be assessed in order to ensure that functional budgets are reasonably capable of fulfillment'' The key factor is also known as ``limiting'' or ``governing'' or ``principal budget'' factor. Key factor is of vital importance since it determines priorities in functional budgets. Sales is most often the key factor in industry.

13.9 TYPES OF BUDGETS :

Budgets may be classified into :

(a) Functional budgets, and

(b) Fixed and Flexible budgets.

Let us know first discuss about functional budgets.

Functional Budget :

There are several types of budgets depending upon the functions and sub-functions they serve, the regularity with which they are established and the time horizon they serve. In terms of functions they perform, budgets are classified operating budgets financial budgets, and capital budgets. The operating budget may have selling and production as two main sub-functions. Thus we may have the following functional budgets.

1. **Sales budget :** In most of the firms, sales budget is the commencement of budgeting. This is the most difficult functional budget to prepare because it is not so easy to estimate consumers' future demands. A sales budget shows what products will be sold in what quantities and at what prices. The responsibility for making sales budget lies with the sales manager two takes into account the following factors for preparing the sales budget.

   (i) Past sales figures and trends

   (ii) Salesmen's estimates;

   (iii) General economic conditions;

   (iv) Orders on hand;

   (v) Seasonal fluctuations

   (vi) Competition; and

   (vii) Government's control and policy.

   Preparation of sales budget is the key factor in any business enterprises. All other budgets are based on the sales budgets. Sales budget sets tone for production, finance and personnel budgets.

2. **Production Budget :** The production budget will be based upon the anticipated volume of sales by the sales budget. While preparing the production budget, the production manager will take into account the physical facilities like plant, powers, factory space, materials and labour

available for the period. This budget may be expressed in terms of quantities (weights, units, etc.,) or money or both. Production may be computed as follows.

Units to be produced =

Desired closing stock of finished goods + Budgeted sales –
Beginning stock of finished goods

It would be seen that the production budget is affected by both sale budget and stock levels. In fact the production budget will consist of the total of the purchases budget, direct labour budget and factory overhead budget.

3. **Material Purchase Budget :** The Purchase budget sets out the quantity and volume of different types of materials to be purchased during the budget period, taking into consideration the levels of production activity and the inventory levels. While preparing the materials budget, the following factors must be taken into account.
   (i) The quantities of materials to be required for the production budget.
   (ii) The probable dates by which materials required must be available.
   (iii) Storage facilities available
   (iv) Availability of credit facilities and other financial resources
   (v) Price trends in the market
   (vi) The anticipated cost of purchases to be made
   (vii) Nature of the materials, i.e., seasonal or otherwise.
4. **Labour Budget :** It is essential that the management should determine in advance personnel requirements for various jobs in the enterprises. This budget may be classified into labour requirement budget and labour requirement budget. The labour requirement budget in the various job categories such as un-skilled, semi-skilled, skilled and supervisory is determined with the help of various department heads. The labour requirement is made keeping in view the requirement of the job and its specifications, the degree of skilled and experience requirement and the rates of pay.
5. **Cash Budget :** Cash budgets constructed under different sets of assumption provide the financial manager with details of the extra cash available or requirement under either adverse of favourable circumstances. As a result, the financial manager should have more confidence in his decisions regarding the minimum cash balance that the company should maintain, and other questions of cash management. The cash budget prepared by the accounting

department is prepared using the best estimates of the cash receipts and disbursements in the coming months. In order to take account of possible deviations from the most likely cash flow, additional cash budgets may be constructed, based upon different sets of assumptions. For example, the company may wish to desire to additional cash budgets, one assuming a pessimistic forecast of the likely level of activity and the other assuming an optimistic forecast of the likely level of business activity. The generation of a set of budgets under various assumptions maybe facilitate by using simulation technique.

6. **Master Budget :** The master budget in also called the operating budget. It provides the basic plan for operations during the period when all detail budgets have been completed. A master budget become a governing document for the operations of the business during the period it covers. In fast, budgets have to be revised several times before the position disclosed by the summary budget is accepted. Truly speaking a master budget is a statement of the targets, which must be attained during the period by each member of the organisation of the business. Thus a master budget is :

   (i) A statement of company's operating policy for the budget period, and

   (ii) A budgeted profit and loss account for the budget period and a balance sheet as at the end of the period.

   The importance of the budgetary control system lies in the fact that it enables a concern to secure control over performance and costs in different parts of a business. It brings a closer cooperation among the various persons in the organisation. The firm can maximise its profits by effective planning and control of income and expenditure. A planned approach to expenditure and financing of the business results in the optimum utilisation of resources. If all the concerns in the economy adopt budgetary control system, this benefit would ultimately be extended to the national economy. This would provide a basis for stable employment in the country and prevent wastage of national resources.

13.10 FIXED & FLEXIBLE BUDGETS :

Fixed budget :

A fixed budget is one which prepared keeping in mind one level of output. It is defined as a budget ``which is designed to remain unchanged irrespective of the level of activity attained.'' If actual output differs from budgeted level of output, variances will arise. Fixed budget is prepared on the assumption that output and sales can be estimated with a fair degree of accuracy. This means that in those situations where sales and output cannot be accurately estimated, fixed budget does not suit.

Flexible Budget :

In contrast to a fixed budget, a flexible budget is one ``which is designed to change in relation to the level of activity attained.'' The underlying principle of flexible budget is that a budget is of little use unless cost and revenue and related to the actual volume of production. Flexible budgeting has been developed with the objective of changing the budget figures to correspond with the actual output achieved. Thus a budget might be prepared for various levels of activity, say, 70%, 80%, 90% and 100% capacity utilisation. Then whatever the level of output actually reached, it can be compared with an appropriate level.

Flexible budgets are prepared in those companies where it is extremely difficult to forecast output and sales. Such a situation may arise in the following cases.

1. Where nature of business is such that sales are, difficult to predict e.g., demand for luxury goods is quite unpredictable.
2. Where sales are affected by weather conditions e.g., soft drink industry, woolen garments etc.
3. Where sales are affected by changes in fashion e.g., ready made garments.
4. Where Company frequently introduces new products.
5. Where large part of output is intended for export.

13.10.1 Use of Flexible Budgets :

The figures in flexible budgets are adaptable to any given set of operating conditions. It is, therefore, more realistic than a fixed budget which is true only in one set of operating conditions.

Flexible budgets are also useful from the control point of view. Actual performance of an executive should be compared with what he should have achieved in the actual circumstances and not with what he should have achieved under quite different circumstances.

In briefly, flexible budgets are more realistic, practical and useful. Fixed budgets on the other hand, have a limited application and are suited only for items like fixed costs.

13.10.2 Preparation of Flexible Budgets :

Preparation of flexible budgets involves measurement of the sensitivity of various cost items to output. It is obvious that all costs do not be have in identical manner as the level of output changes. Some times, like the salary of the managing director, would be totally fixed despite consider, considerable changes in the output or volume of activity. Some items, like raw material costs, are fully sensitive to changes in the level of output. Most other items are semi-variable, they change in the same direction as the volume of activity but not by the same margin. It is necessary to establish the extent of change in each semi-variable expenses for a given change in the volume of activity. This distinction between the treatment of fixed, semi-fixed and variable costs is very importation in preparation of flexible budgets.

Flexible budgets are an extremely useful devices for planning. Due to various economic, social and political uncertainties, it is often difficult to predict the actual level of output. Through the technique of flexible budgeting estimates can be quickly altered to conform to actual conditions. Thus, if a budget is drawn up on the basis of an estimated sale of 50,000 units and the actual sales are only 40,000 units, the estimates can be quickly adjusted and the actual figures can then be profitably compared with the budgets so adjusted.

Illu.1 : The following overhead expenses are given at 60% of plant capacity:

(i)	***Variable overheads:***		
	Indirect Labour	**Rs.**	**15,000**
	Stores and spares	**Rs.**	**6,000**
(ii)	***Semi – variable overheads:***		
	Power (60% variable)	**Rs.**	**20,000**
	Repairs and Maintenance	**Rs.**	**6,000**
(iii)	***Fixed Overheads:***		
	Depreciation	**Rs.**	**12,000**
	Insurance	**Rs.**	**5,000**
	Salaries	**Rs.**	**25,000**

Estimated direct Labour hours 1,20,000 hours

You are required to prepare flexible budget for overhead expenses at 70% and 80% of plant capacity and determine overhead recovery rate:

Solution :

Particulars	**60% capacity (Rs.)**	**70% capacity (Rs.)**	**80% (Rs.)**
Variable overheads:			
Indirect labour	15,000	17,500	20,000
Stores and spares	6,000	7,000	8,000
Semi – variable overheads:			
Power	20,000	22,000	24,000
Repairs and maintenance	6,000	6,400	6,800
Fixed overheads:			
Depreciation	12,000	12,000	12,000
Insurance	5,000	5,000	5,000
Salaries	25,000	25,000	25,000
Total Overheads	89,000	94,900	1,00,800
Estimated direct labour hours	1,20,000	1,40,000	1,60,000
Overhead rate	**0.74**	**0.67**	**0.63**

Working Notes:

1) **Power:** Power amount to Rs.20,000 at 60% capacity. Out of this 40% (i.e. Rs.8,000) is fixed and 60% (i.e., Rs.12,000) is variable. Rs.8,000 will remain the same at all the capacities while variable part will vary. Variable part at 70% capacity will be (12,000 x 70/60) Rs.14,000 and at 80% capacity will be (12,000 x 80/60) Rs.16,000. The total on power will be Rs.22,000 and Rs.24,000.
2) **Repairs and Maintenance:** Repairs and maintenance amount to Rs.6,000. Out of this 60% is fixed i.e., Rs.3,600 and 40% is variable i. e, Rs.2,400. At 70% capacity variable cost will be (70 / 60 x 2,400) Rs.2,800 and at 80% capacity (i.e., 70/ 60 x 2,400) Rs.3,200.

   The total expenditure at 70% is Rs.6,400 and at 80% = Rs.6,800

Illu.2 : The following information relates to a flexible budget at 60% capacity: Find out the overhead costs at 50% and 70% capacity and also determine the overheads rates:

	Expenses at 60% Capacity Rs.
Variable overheads:	
Indirect Laour	**10,500**
Indirect Material	**8,400**
Semi variable overheads:	
Repairs and Maintenance (70% fixed, 30% variable)	**7,000**
Electricity (50% fixed, 50% variable)	**25,200**
Fixed overheads:	
Office expenses including salaries	**70,000**
Insurance	**4,000**
Depreciation	**20,000**
Estimated direct labour hours	**1,20,000**

Solution :

Flexible Budget and Overhead rates

Particulars	50% capacity (Rs.)	60% Capacity (Rs.)	70% Capacity (Rs.)
Variable overheads:			
Indirect labour	8,750	10,500	12,550
Indirect materials	7,000	8,400	9,800
Semi variable overheads:			
Repairs and Maintenance	6,650	7,000	7,350
Electricity	23,100	25,200	27,300
Fixed overheads:			
Office expenses inclusive Salaries	70,000	70,000	70,000

Insurance	4,000	4,000	4,000
Depreciation	20,000	20,000	20,000
Total overheads	**1,39,500**	**1,45,100**	**1,50,700**
Estimated Direct labour hours	1,00,000	1,20,000	1,40,000
Overhead rate	**1.395**	**1.21**	**1.077**

Working Notes:

1. Repairs and maintenance amount to Rs.7,000 at 60% capacity. Out of this 70% (i.e., Rs.4,900) is fixed and 30% (i.e., Rs.2,100) is variable. Rs.4,900 will remain the same at all the capacities while variable part will vary. Variable cost at 50% capacity will be (2,100 / 60 x 50) Rs.1,750 and 70% capacity (2,100/ 60 x 70) Rs.2,450. So, total expenditure at 50% capacity is 4,900 + 1,750 = Rs.6,650 and at 70% 4,900 + 2,450 = Rs.7,350.
2. Electricity at 50% capacity is Rs.25,200 of which 50% is fixed (i.e. 12,600). Rs.12,600 will remain the same at all the capacities. But variable will be at 50% capacity (12,600 / 60 x 50) i.e., Rs.10,500 and at 70% capacity (12,600 / 60 x 70) Rs.14,700. Total electricity cost will be at 50% capacity 12,600 + 10,500 = Rs.23,100. At 70% capacity 12,600 + 14,700 = Rs.27,300.

Illu.3 : The expenses for the production of 5000 units in a factory are given as follows:

	Per unit Rs.
Material	**50**
Labour	**20**
Variable overhead	**15**
Fixed overhead (Rs.50,000)	**10**
Administrative expenses (5% variable)	**10**
Selling expenses (20% fixed)	**6**
Distribution expenses	**5**
Total cost of sales per unit	**116**

You are required to prepare a budget for the production of 7000 units.

Solution :

Working Notes:

(a) Administrated expenses = (5,000 units x 20) = Rs.50,000

5% variable = 50,000 x 5% = **Rs.2,500**

Variable administrative expenses per unit = Rs.2,500 / 5,000 = 0.5

95% Fixed = 50,000 x 95% = **Rs.47,500**

(b) Selling expenses = 5,000 units x Rs.6 = Rs.30,000

20% Fixed = Rs.30,000 x 20% = **Rs.6,000**

80% Variable = Rs.30,000 x 80% = **Rs.24,000**

Variable selling expenses per unit = Rs.24,000/ 5,000 units = Rs.4.80

(c) Distribution expenses = 5,000 units x Rs.5 = Rs.25,000

10% Fixed = 25,000 x 10% = Rs.2,500

90% variable = 25,000 x 90% = Rs.22,500

variable distribution expenses per unit = 22,500/5,000 = Rs.4.50

Flexible Budget

Particulars	**5,000 units**		**7,000 units**	
	Amount	**Per unit**	**Amount**	**Per unit**
Variable expenses:	**Rs.**	**Rs.**	**Rs.**	**Rs.**
Material	2,50,000	50.000	3,50,000	50.00
Labour	1,00,000	20.00	1,40,000	20.00
Variable Overhead	75,000	15.00	1,05,000	15.00
Administrative expenses	2,500	0.50	3,500	0.50
Selling expenses	24,000	4.80	33,600	4.80
Distribution expenses	22,500	4.50	31,500	4.50
Total Variable cost (A)	**4,72,000**	**94.80**	**6,63,600**	**94.80**
Fixed Expenses:				
Fixed overhead	50,000	10.00	50,000	7.14
Administrative Expenses	47,500	7.50	47,500	6.79

Selling expenses	6,000	1.20	6,000	0.86
Distribution expenses	2,500	0.50	2,500	0.34
Total Fixed Cost (B)	**1,06,000**	**21.20**	**1,06,000**	**15.13**
Total cost (A) – (B)	**5,88,000**	**116.00**	**7,69,600**	**109.93**

Illu.4 : A department of Company X attains sales of Rs.6,00,000 at 80% of production capacity. Draw up a flexible budget at 90%, 100% and 110% of production capacity from the following particulars:

Administration Cost:

	Rs.
Office Salaries	**90,000**
General Expenses	**2% of the sales**
Depreciation	**7,500**
Rates and Taxes	**8,750**

Selling Cost:

Salaries	**8% of the sales**
Travelling expenses	**2% of the sales**
Sales Expenses	**1% of the sales**
General expenses	**1% of the sales**

Distribution cost:

Wages	**15,000**
Rent	**1% of the sales**
Other expenses	**4% of the sales**

Solution :

Company – X

Flexible Budget

Items	**Basis**	**80% (Rs.)**	**90% (Rs.)**	**100% (Rs.)**	**110% (Rs.)**
Sales		6,00,000	6,75,000	7,50,000	8,25,000
Administration cost:					
Office salary	Fixed	90,000	90,000	90,000	90,000
General Expenses	2% of sale	12,000	13,500	15,000	16,500
Depreciation	Fixed	7,500	7,500	7,500	7,500
Rates and taxes	Fixed	8,750	8,750	8,750	8,750
Total Administration costs		**1,18,250**	**1,19,750**	**1,21,250**	**1,22,750**
Selling Cost					
Salary	8% of sale	48,000	54,000	60,000	66,000
Travelling expenses	2% of sale	12,000	13,500	15,000	16,500
Sales office expenses	1% of sale	6,000	6,750	7,500	8,250
General expenses	1% of sale	6,000	6,750	7,500	8,250
Total selling cost		**72,000**	**81,000**	**90,000**	**99,000**
Distribution cost					
Wages	Fixed	15,000	15,000	15,000	15,000
Rent	1% of sale	6,000	6,750	7,500	8,250
Other expenses	4% of sale	24,000	27,000	30,000	33,000
Total distribution costs		**45,000**	**48,750**	**52,500**	**56,250**
Total Administration selling and distribution costs		**2,35,250**	**2,49,500**	**2,63,750**	**2,78,000**

Note: In the absence of information it has been assumed that office salaries, depreciation, rates and taxes and wages remain the same at 110% level of activity also. However, in practice some of these costs may change if present capacity is exceeded.

Illu.5 : Prepare a flexible budget for the products of 80% and 100% activity on the basis of the following information:

Production at 50% capacity – 5000 units

Raw materials – Rs.80 per unit

Direct labour – Rs.50 per unit

Direct expenses – Rs.15 per unit

Factory expenses – Rs.50,000 (50% fixed)

Administration expenses – Rs.60,000 (60% variable)

Solution :

Flexible Budget

		80% Capacity **8000 units** **Rs.**	**100% capacity** **10,000 units** **Rs.**
Raw Materials	8,000 x 80	6,40,000	
	10,000 x 80		8,00,000
Direct Labour	8,000 x 50	4,00,000	
	10,000 x 50		5,00,000
Direct Expenses	8,000 x 15	1,20,000	
	10,000 x 15		1,50,000
Factory expenses		65,000	75,000
Administration expenses		81,600	96,000
		13,06,000	**16,21,000**
Cost per unit		16.33	16.21

Working Notes:

(1) Factory Expenses:

$$\text{Fixed} = 50{,}000 \text{ x } \frac{50}{100} = \text{Rs.}25{,}000$$

At 80% capacity = 8,000 x 5 + 25,000 = 40,000 + 25,000 = **Rs.65,000**

$$\text{Variable} = 50{,}000 \text{ x } \frac{50}{100} = \text{Rs.}25{,}000 / 5{,}000 \text{ units} = \text{Rs.}5 \text{ per unit}$$

At 100% capacity = 10,000 x 5 + 25,000 = 50,000 + 25,000 = **Rs.75,000**

(2) Administration Expenses:

$$\text{Variable} = 60{,}000 \text{ x } \frac{60}{100} = \text{Rs.}36{,}000 / 5{,}000 = \text{Rs.}7.20$$

Fixed = 60,000 – 36,000 = Rs.24,000

At 80% Capacity = 8,000 x 7.20 + 24,000 = **Rs.81,600**

At 100% capacity = 10,000 x 7.20 + 24,000 = **Rs.96,000**

Illu.7 : An umbrella manufacturer makes an average net profit of Rs.2.50 per piece on a selling price of Rs.14.30 by producing and selling 6,000 pieces or 60% of the potential capacity. His cost of sales is:

	Rs.
Direct materials	**3.50**
Direct wages	**1.25**
Works overhead	**6.25 (50% fixed)**
Sales overheads	**0.80 (25% varying)**

During the current year, he anticipates that his fixed charges will go up by 10% while rate or direct labour and direct materials will increase by 8% and 6% respectively. But he has no option of increasing the selling price. Under this situation, he obtains an offer for usage of a further 20% capacity. What maximum price will you recommend for acceptance of offer to ensure the manufacturer an overall profit of Rs.16,730?

Solution :

Existing production @ 60% of capacity =	6,000 units
New order for 20% of capacity = 6,000 /60 x 20 =	2,000 units

Required production	8,000 units

Sales proceeds on 6,000 units @ Rs.14.30 each = Rs.85,800

	Rs.	**Rs.**	**Total Cost Rs.**
Direct Materials	3.50		
Add: Increase @ 6%	0.21	3.71	29,680
Direct wages	1.25		
Add: increase @ 8%	0.10	1.35	10,800
Works overheads			
Fixed (50% of Rs.6.25)	3.125		
Add: Increase @ 10%	0.312	3.44	27,520
Variable		3.125	25,000
Sales overheads			
Fixed (75% of Rs.0.80)	0.60		
Add: Increase @ 10%	0.06	0.66	5,280
Variable		0.20	1,600
Total cost of production			**99,880**
Add: Desired profit would be			16,730
Total sales price will be for 8,000 units			1,66,610
Less: Sales price of existing production of 6,000 units			85,800
increase in the sales for 20,000 units			**30,810**

Sale price per unit of fresh order = 30,810 / 20,000 = Rs.15.40

Illu.8 : The account of a manufacturing company for a year are as follows:

	Rs.		**Rs.**
Direct materials	**8,75,000**	**Other variable costs**	**4,00,000**

Direct wages	**5,00,000**	**Other fixed costs**	**4,00,000**
Variable factory overheads	**5,00,000**	**Profit**	**5,75,000**
Fixed factory overheads	**5,00,000**	**Sales**	**37,50,000**

The products X and Y are manufactured during the year and costs were as follows:

	X Rs.	Y Rs.
Out put (units)	**1,00,000**	**50,000**
Selling price per unit	**20**	**35**
Direct materials per unit	**5**	**7.50**
Direct wages per unit	**2.50**	**5**

Factory overheads are absorbed as a percentage on direct wages, other overheads half fixed, half variable have been computed to amount to Rs.2.50 per unit of product X and Rs.3.00 per unit for Y. During the coming year, it is expected that demand for product X will fall by 25% and for product Y by 50%; it is decided to manufactured a further product Z; the costs etc; for which are estimated as follows:

Output (unit)	**1,00,000**
	Rs.
Selling price per unit	**17.50**
Direct materials per unit	**5.00**
Direct wages per unit	**2.50**

It is anticipated that the other variable costs per unit will be the same as that of Product X. Compute a budget to present to management, showing the current position and the anticipated result for the coming year.

Solution :

Estimated Sales (in no. of units):

	X	**Y**	**Z**	**Total**
Current Year	1,00,000	50,000		1,50,000
Increase Decrease	- 25,000	+ 25,000	+ 1,00,000	
Sales for next year	75,000	75,000	1,00,000	2,50,000

Estimated Budget

	Product		**Rs.**	**For Next year**	**For Current Year Rs.**
Direct Materials:	X	75,000 x 5.00	3,75,000		8,75,000
	Y	75,000 x 7.50	5,62,500		
	Z	1,00,000 x 5.00	5,00,000	14,37,500	
Direct wages:	X	75,000 x 2.50	1,75,000		
	Y	75,000 x 5.00	3,75,000		5,00,000
	Z	1,00,000 x 2.50	2,50,000	8,00,000	
Variable factory overheads:	X		1,75,000		5,00,000
	Y		3,75,000		
	Z		2,50,000	8,00,000	
Fixed factory overheads				5,00,000	5,00,000
(5) Other variable costs	X	75,000 x 2.50	1,75,000		4,00,000
	Y	75,000 x 3.00	2,25,000		
	Z	1,00,000 x 2.50	2,50,000	6,50,000	

				4,00,000	4,00,000
(6) Other fixed costs				45,87,500	31,75,000
Profit for the year (Bal. Fig)				12,87,500	5,75,000
Sales	X	75,000 x 20	15,00,000		
	Y	75,000 x 35	26,25,000		
	Z	1,00,000 x 17.50	17,50,000	58,75,000	37,50,000

Illu.9 : The cost of an article at the capacity of 5000 units is given below. For variation of 25% in capacity above or below this level, the individual expenses vary as per details given against each cost.

	Rs.	
Material Cost	**25,000**	**100% variable**
Labour Cost	**15,000**	**100% Variable**
Power	**1,250**	**80% variable**
Repairs	**2,000**	**75% variable**
Stores	**1,000**	**100% variable**
Inspection	**500**	**20% variable**
Depreciation	**10,000**	**100% Fixed**
Administrative Overheads	**5,000**	**25% variable**
Selling overheads	**3,000**	**50% Variable**
Total	**62,750**	

Cost per unit Rs.12.55

Prepare the flexible budget at 4,000 and 6,000 units and find out unit cost.

Solution :

Flexible Budget

Particulars	Out put: 4,000 units		Out put: 6,000 units	
	Per unit (Rs.)	**Amount (Rs.)**	**Per unit (Rs.)**	**Amount (Rs.)**
Materials	5.00	20,000	5.00	30,000
Labour cost	3.00	12,000	3.00	18,000
Stores	0.20	800	0.20	1,200
Prime cost	**8.20**	**32,800**	**8.20**	**49,200**
Works overheads:				
Power (Fixed)	0.06	250	0.04	250
Power (Variable)	0.20	800	0.20	1,200
Repairs (Fixed)	0.13	500	0.08	500
Repairs (Variable)	0.40	1,600	0.40	2,400
Inspection (Fixed)	0.10	400	0.07	400
Inspection (Variable)	0.02	80	0.02	120
Depreciation (Fixed)	2.50	10,000	1.67	10,000
Works Cost	**11.61**	**46,430**	**10.68**	**64,070**
Administrative overheads:				
Fixed	0.94	3,750	0.63	3,750
Variable	0.25	1,000	0.25	1,500
Cost of Production	**12.80**	**51,180**	**11.56**	**69,320**
Selling overheads:				
Fixed	0.38	1,500	0.25	1,500
Variable	0.30	1,200	0.30	1,800
Cost of sales	**13.48**	**53,880**	**12.11**	**72,620**

∴Cost per unit at 4,000 and 6,000 units are Rs.13.48 andRs.12.11 respectively.

Illu.10 : From the following information prepare a Cash Budget from 1st September 2002 to 31st December 2002:

Months	Credit purchases Rs.	Credit Sales Rs.	Wages Rs.	Selling expenses Rs.	Overheads Rs.
July	**85,000**	**1,60,000**	**32,000**	**8,000**	**10,000**
August	**92,000**	**1,85,000**	**37,000**	**9,500**	**11,500**
September	**1,00,000**	**2,10,000**	**42,000**	**10,500**	**13,000**
October	**1,20,000**	**2,45,000**	**49,000**	**12,500**	**14,500**
November	**90,000**	**1,78,000**	**35,500**	**8,900**	**10,500**
December	**98,000**	**1,82,000**	**36,000**	**9,000**	**11,000**

Additional information:

- **(a) Expected cash balance on 1st September 2002 Rs.10,500**
- **(b) Period of credit allowed to debtors – 2 months**
- **(c) Period of credit allowed by creditors – 1 month**
- **(d) Lag in payment for wages, selling expenses and overheads 1 month.**
- **(e) Selling commission @ 2% on sales is payable one month after sales.**
- **(f) Expenditure on machinery worth Rs.50,000 is payable in October 2002.**
- **(g) Expected cash sales per month Rs.15,000. No commission is payable on cash sales.**

Solution :

Cash Budget for September to December 2002

Particulars	September (Rs.)	October (Rs.)	November (Rs.)	December (Rs.)
Receipts				
Balance b/d	10,500	31,800	62,100	86,200

Cash realised from debtors	1,60,000	1,85,000	2,10,000	2,45,000
Cash sales (Expected)	15,000	15,000	15,000	15,000
	1,85,500	**2,31,800**	**2,87,100**	**3,46,200**
Payments:				
Cash paid to creditors	92,000	1,00,000	1,20,000	90,000
Payment of wages	37,000	42,000	49,000	35,500
Payment of selling expenses	9,500	10,500	12,500	8,900
Payment of overheads	11,500	13,000	14,500	10,500
Selling commission	3,700	4,200	4,900	3,560
	1,53,700	**1,69,700**	**2,00,900**	**1,48,460**
Closing balance	**31,800**	**62,100**	**86,200**	**1,97,740**

Illu.12 : From the following figures prepare raw material purchase budget for January 2002.

	A	**B**	**C**	**D**	**E**	**F**
Estimated stock on Jan 1:	**16,000**	**6,000**	**24,000**	**2,000**	**14,000**	**28,000**
Estimated stock on Jan 31:	**20,000**	**8,000**	**28,000**	**4,000**	**16,000**	**32,000**
Estimated consumption:	**1,20,000**	**44,000**	**1,32,000**	**36,000**	**88,000**	**1,72,000**
Standard price per unit:	**Rs.2.50**	**Rs.0.50**	**Rs.1.50**	**Rs.1.00**	**Rs.2.00**	**Rs.3.00**

Solution :

Raw Material Purchase Budget, January 2002

	A **Rs.**	**B** **Rs.**	**C** **Rs.**	**D** **Rs.**	**E** **Rs.**	**F** **Rs.**
Estimated consumption	1,20,000	44,000	1,32,000	36,000	88,000	1,72,000

Add: Estimated stock Jan 31	20,000	8,000	28,000	4,000	16,000	32,000
	1,40,000	**52,000**	**1,60,000**	**40,000**	**1,04,000**	**2,04,000**
Less: Estimated stock on Jan 1	16,000	6,000	24,000	2,000	14,000	28,000
Rate per unit 1	X 2.50	X 0.50	X 1.50	X 1.00	X 2.00	X 3.00
Estimated purchases (Rs.)	**3,10,000**	**23,000**	**2,04,000**	**38,000**	**1,80,000**	**5,28,000**

Illu.13 : A company manufacturers two products A and B. A forecast of the number of units to be sold in the first six months of the year is given below.

	Product A	**Product B**
January	**1,500**	**3,000**
February	**1,700**	**3,000**
March	**2,100**	**2,600**
April	**2,500**	**2,200**
May	**2,900**	**1,800**
June	**2,900**	**2,000**

It is anticipated that (a) there will be no work – in progress at the end of any month, (b) Finished units equal to half the sales for next month will be in stock at the end of each month (including previous December)

Budgeted production and production costs for the whole year are as follows:

	Product A	**Product B**
Production units	**25,000**	**26,000**
Per unit: Direct material	**Rs.13.00**	**Rs.18.50**
Direct Labour	**Rs.5.50**	**Rs.8.00**
Total factory over head for the year	**75,000**	**1,04,000**

Prepare for five months ending May 31, a production budget for each month and a summarised cost budget.

Solution :

Production Budget (for five months ending May, 31)

	Jan Units	**Feb Units**	**March Units**	**April Units**	**May units**
Production A					
Sales	1,500	1,700	2,100	2,500	2,900
Add: Opening stock (half the sale for next month)	850	1,050	1,250	1,450	1,450
	2,350	**2,750**	**3,350**	**3,950**	**4,350**
Less: Opening Stock (half the sales current month)	750	850	1,050	1,250	1,450
Budgeted production	**1,600**	**1,900**	**2,300**	**2,700**	**2,900**
Production B					
Sales	3,000	3,000	2,600	2,200	1,800
Add: closing stock (half the sales for current month)	1,500	1,300	1,100	900	1,000
	4,500	**4,300**	**3,700**	**3,100**	**2,800**
Less: Opening stock (half the sales for current month)	1,500	1,500	1,300	1,100	900
Budgeted Production	**3,000**	**2,800**	**2,400**	**2,000**	**1,900**

Total Budgeted production of Product A

= 1,600 + 1,900 + 2,300 + 2,700 + 2,900 = 11,400

Total Budgeted production of Product B

= 3,000 + 2,800 + 2,400 + 2,000 + 1,900 = 12,100

Summarised Production Cost Budget

(for five months ending 31 May)

	Product A (11,400 Units)		**Product B (12,100 Units)**	
	Per unit Rs.	**Amount Rs.**	**Per unit Rs.**	**Amount Rs.**
Direct Materials	13.00	1,48,200	18.50	2,23,850
Direct Labour	5.50	62,700	8.00	96,800
Prime cost	**18.50**	**2,10,900**	**26.50**	**3,20,650**
Factory overheads	3.00	34,200	4.00	48,400
Cost of production	**21.50**	**2,45,100**	**30.50**	**3,69,050**

Working Notes:

$$\text{Factory Overheads per unit} = \frac{\text{Annual Overhead}}{\text{Annual output}}$$

$$\text{Product A} = \frac{\text{Rs.}75{,}000}{25{,}000} = \text{Rs.}3$$

$$\text{Product B} = \frac{\text{Rs.}1{,}04{,}000}{26{,}000} = \text{Rs.}4$$

Illu.14 : You are required to prepare a sales overhead Budget from the estimates given below:

	Rs.
Advertisement	**2,500**
Salaries of the sales department	**5,000**
Expenses of sales department	**1,500**
Counter Salesman ‘s salaries and dearness allowance	**6,000**

Commission to counter salesmen at 1% on their sales and expenses at 5% on their sales.

Sales during the period were estimated as follows:

Counter Sales	Travelling Salesman 's
Rs.	**Rs.**
80,000	**10,000**
1,20,000	**15,000**
1,40,000	**20,000**

Solution :

Sales overhead Budget

	Estimates Sales		
	Rs.	**Rs.**	**Rs.**
Fixed Overheads:	90,000	1,35,000	1,60,000
Advertisement	2,500	2,500	2,500
Salaries of sales department	5,000	5,000	5,000
Expenses of sales department	1,500	1,500	1,500
Counter salesmen's salaries & D. A.	6,000	6,000	6,000
	15,000	**15,000**	**15,000**
Variable overheads:			
Counter salesman 's commission @ 1% on sales	800	1,200	1,400
Travelling salesmen 's commission @ 10%	1,000	1,500	2,000
Expenses @ 5%	500	750	1,000
	2,300	**3,450**	**4,400**
Total Sales overheads	**17,300**	**18,450**	**19,400**

13.11 QUESTIONS

A. Short Answer Questions.

1. Limitations of Budgets
2. Zero base budgeting
3. Master Budget
4. Flexible Budget
5. Revision of Budget
6. Functional Budget
7. Write short note on Budget period
8. What is a production budget?

B. Essay type Questions

1. Define Budget and budgetary control. Give a description of two important budgets.
2. What do you understand by budgetary control? Explain the mechanism that would lead to effective control.
3. Discuss briefly the objectives and limitations of budgetary control.
4. Define budget and budgetary control. Give description of two important budgets.
5. What are functional budgets? Which functional budgets are most commonly used by management.
6. Define flexible budget and explain its importance as a budgeting technique and tool of control.
7. Differentiate between Fixed Budget and Flexible Budgeting.
8. Enumerate the steps involved in budgetary control.

13.12 EXERCISES

1. The income and expenditure forecasts for months of March to August 2003 are given below.

Month	Sales (Credit)	Purchases (Credit)`	Wages	Manufacturing expenses	Office expenses	Selling expenses
March	60,000	36,000	9,000	3,500	2,000	4,000
April	62,000	38,000	8,000	3,750	1,500	5,000
May	64,000	33,000	10,000	4,000	2,500	4,500

June	58,000	35,000	8,500	3,750	2,000	3,500
July	56,000	39,000	9,500	5,000	1,000	3,500
August	60,000	34,000	8,000	5,200	1,500	4,500

You are given the following further information.

a. Plant costing Rs.16,000 is due for delivery in July payable 10% on delivery and the balance after 3 months.
b. Advance tax of Rs.8,000 is payable in March and June each.
c. Creditors allow 2 months credit and debtors are paying one month late.
d. Opening balance of cash Rs.8,000 on May 1st.
e. Lag in payment of expenses one month.

Prepare cash budget for the month May to July.

[Ans.: Cash Budget : May Rs.15,750; June Rs.12,750; July Rs.18,400]

2. Prepare production cost budget from the following:
   No. of units to be produced 1,500
   Raw materials required 5 kgs per unit at a cost of Rs.20 per kg
   Labour required 10 hours per unit at a wage rate of Rs.15 per hour
   Other overhead expenses are 50 percent of labour.

   [Ans.: Production Cost Budget Per unit Rs.325; Amount Rs.4,87,500]

3. A company is presently operating at 60% of its capacity, producing 6000 units per annum. The expenses are as follows:
   Materials Rs.100 per unit
   Labour Rs.60 per unit
   Expenses Rs.20 per unit
   Factory overheads Rs.40,000 (40% fixed)
   Administrative overheads Rs.30,000 (60% fixed)
   Selling overheads Rs.20,000 (50% fixed)
   You are required to prepare flexible budget for 80% and 100% capacity.

   [Ans.: Flexible Budget : 80% Capacity : per unit Rs.193.17 Total Cost

Rs.15,45,360; 100% Capacity : Per unit Rs.192.07; Total Cost Rs.19,20,700]

4. The budget expenses for the production of 10,000 units in a factory are furnished below :

	Per Unit (Rs.)
Materials	70
Labour	25
Variable overheads	20
Fixed overheads (Rs.1,00,000)	10
Direct variable overheads	5
Selling expenses (15% fixed)	13
Distribution expenses (20% fixed)	7
Administrative expenses (Rs.50,000)	5
Total	155

Prepare a budget for the production 8,000 units

[Ans.: Production budget : 8,000 units Rs.12,76,700]

13.13 SUGGESTED READINGS

1. Bhattacharyya, S.K., John Dearden, Costing for Management, Vikas Publishing House Pvt. Ltd., 2002
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Chapter - 14

FINANCIAL MANAGEMENT NATURE & SIGNIFICANCE

Objectives :

After studying this lesson we may be able to

- Understand the nature and significance of financial management
- Know the role and functions of a financial manager
- Evaluate the various techniques of financial management

Structure :

14.1 Introduction

14.2 Importance of Financial Management

14.3 Scope of Financial Management

14.4 Role of Finance Manager

14.5 Techniques of Financial Management

14.6 Questions

14.7 Suggested Readings

14.1 INTRODUCTION :

The dimensions of business finance have undergone phenomenal transformation during the last few decades. Until the recent past, business finance was considered as an economic activity, concerned with procurement of funds for business purposes and the finance manager was considered as keeper of books of accounts and provider of capital needed by the enterprise. However, manager has now become an integral part of the enterprise and is involved in the problems and decisions pertaining to the management of the assets of the enterprise. Role of finance managers has increased further in recent years following tectonic policy reforms in economic system the world over leading to liberalization and globalization of business and enhanced competition. Hence comprehensive understanding of various concepts, principles, tools and techniques of finance have become inescapable.

Finance Management is a goal-oriented activity. It has been described as the blend of art and science through which the important decisions of what to invest in, how to finance it, and how to combine the two in order to maximize some appropriate objective, are taken. The broad and dynamic filed of finance affects the financial lives of virtually every business – financial and non-financial, private and public, large and small, profit-seeking and nonprofit. The performance of the firm is measured in financial terms; the success of the firm depends on how it is perceived by, and reacts to, external economic markets. The field of finance is much more complicated and faster faced today. New technologies and relaxed regulation are changing the institutional setting. Financial markets are volatile, interest rates can move sharply up or down in a very short-term period. Important and swift development in the filed of finance and application of new theories in decision-making environment yield new challenges and opportunities for financial managers. Knowledge of all these developments and their impact is necessary for the effective management and financial viability of the modern business firms. Financial managers need to know how effective decisions can be made, and ineffective ones be avoided. This chapter provides an introduction to the financial management by showing how it relates to the overall management and achievement of appropriate objectives of the business enterprises.

Financial Management is very important even in case of non-profit making organizations. A non-profit making organization may not be keen in earning the profit, but it needs to cut down its cost and use the funds in the most beneficial manner. A sound sense of financial management has to be cultivated among the engineers, administrators, educationists, bureaucrats and public at large in order to stop the wastage of capital resources.

Business Finance : According to J.H. Bonneville and Lloyd Ellis Dewey, "Business must be understood to embrace every human activity, usually activated by the hope of profits, whereby man's wants are supplied. Lumbering, mining, fishing, farming, manufacturing, trading, transporting, shipping, building, merchandising and many other activities are businesses that help to supply material wants. The practices of law, medicine, dentistry, teaching, accounting, nursing, entertaining represent a few of the types of the business activities that supply desired services." Thus, business can be categorized into three groups: Commerce, Industry and Service.

The dictionary meaning of finance is the money affairs or revenue, especially of a ruler or states i.e., the art of managing or administering the public money (Government funds). But in practice, finance refers to both public finance and private finance such as sole trader, partnership and corporate organizations and recently developed joint ventures. Business finance may be defined as the process of raising, providing and managing of all the money to be used in connection with business activities. Other definitions are given below :

"Business Finance can be broadly defined as the activity concerned with planning, raising, controlling and administering of funds used in the business." **Guthmann & Dongall.**

"Business Finance deals primarily with raising, administering and disbursing funds by privately owned business with operating in non-financial fields of industry." **Prather & Wert.**

"The finance function is the process of acquiring and utilizing funds of a business." **R.C. Osborn.**

14.2 IMPORTANCE OF FINANCIAL MANAGEMENT :

Financial Management is one of the most private functional areas of management, as the effectiveness of a business enterprise largely depends on the efficient utilization of its financial resources. In fact, sound financial management is a key to successful business operations, and thereby to the growth and success of business undertakings. The importance of financial management has enormously enhanced during the last decade due to a number of factors including persistent inflation, labour agitation for increase in wages and bonus, governmental regulation of business, technological change requiring high capital intensity in business operations, increasing competition and growing concern for social responsibility. The importance of financial management may be discussed under the following heads :

1. **Importance to Business Executives :** Financial Management is one of the most significant functional areas of management. The subject is of prime importance to the business executives for the efficient functioning of their enterprises. Financial management helps the business executives in making all the strategic managerial decisions. It assists the managers in determining the financial needs of the enterprise and allocation of funds to

specific capital projects. Financial management also plays an important role in the determination of dividend policy, merger and acquisition decisions, credit policy, etc. The modern tools and techniques of financial management enable business managers to effectively manage the working capital of the firm. Budgets serve as chief instruments of financial planning and control in the hands of business executives. Managers are the trustees of shareholders' funds. They provide capital to a company with the expectation of earning a competitive rate of return from their investment. In order to attract and retain the share capital, it is necessary for the managers to fulfil the expectation of shareholders by distributing reasonable dividends to them. This is only possible when business executives have full knowledge of the principles of financial management. The dominant objective of every business enterprise is to maximize the profits by maximizing the production at the least cost. Financial management leads the mangers in achieving this objective, and helps them in discharging their obligations to different parties. Financial management is, therefore, of pivotal significance to the business executives not only in co-ordinating various functional activities and smooth functioning of an enterprise but also in effective decision making for the successful and efficient functioning of the undertaking.

2. **Importance to Potential Investors :** Investors of different classes are also benefited by the subject of financial management. Investors generally arrange to invest their savings through security dealers and financial brokers. But it is not expected that they would always take rational decisions regarding the selection of company as well as securities. Thus, the investors having knowledge of the principles of financial management can themselves take a satisfactory decision on this subject, and can safety earn regular income on their accumulated capital. Speculator investors can also avail the advantage of the knowledge of financial management. Besides this, corporations are also able to earn maximum profits with the help of efficient financial management. Consequently, the investors get maximum rate of return on their investment.
3. **Importance to Shareholders :** The knowledge of financial management is equally useful to shareholders. Although shareholders are the owners of a company, but the management of corporations is left on the elected board of directors. It is, therefore, necessary for the shareholders to appraise that to what extent the managers / directors are discharging their duties in the interest of shareholders. If shareholders are well acquainted with the principles

of financial management, they can safeguard their interest in the company by suitably appraising its financial position. If the managers / directors of the corporation do anything against their interest, the shareholders can make them to follow a suitable financial policy. Thus, the knowledge of financial management is inevitable for the shareholders in order to preserve and protect their inherent interest in the company. The shareholders can lead the company to earn more profits by persuading and forcing the managers / directors of the company to follow a suitable financial policy, and consequently they can receive higher dividends on their investments.

4. **Importance to Financial Institutions :** The existence of financial institutions absolutely depends on effective financial management. Thus, it is indispensable for them to be well versed with every aspect of financial management for the profitable employment of their funds. Investment banks, under writers, trustee companies, commercial banks and other financial institutions must have full knowledge of financial management. Otherwise, they would remain unsuccessful in achieving their goals and in providing guidance to their customers willing to invest their savings.
5. **Importance to Employees :** The main objective of employees is to maximize their financial and non-financial benefits. On the basis of sound financial management, the managers of an enterprise can protect their interests by raising the productivity and efficiency of the employees. Thus, employees are also benefited by sound financial management.
6. **Importance to Government :** It is also essential for the government to have full knowledge of every aspect of financial management. Government attempts to effectively utilize the funds collected from the public in the form of taxes. In the absence of full knowledge of financial management, it becomes impossible for the government to attain maximum social welfare out of the public expenditure. Thus, the economic and social revolution of any country largely hinges upon sound financial management by its government.
7. **Importance to Other Parties:** All such parties as economists, students of commerce and management, politicians, sociologists etc., having interest in the economic problems of the country, are also benefited by the knowledge of financial management. In the absence of full knowledge of the principles of financial management, it is difficult to undertake reliable studies on economic problems of a country.

It is clear from the above discussion that the importance of financial management has enormously increased during recent years due to a number of factors including persistent inflation, dear money policy of the government, rapid technological changes, severe competition, governmental regulation of business and growing concern for social responsibility. It is not only useful to managers, shareholders, potential investors, financial institutions, employees and the Government, but also equally important for economists, sociologists, politicians etc., having, interest in the economic problems of the country.

14.3 SCOPE OF FINANCIAL MANAGEMENT :

In order to understand more clearly the meaning of business finance it is worth while to highlight the scope of business finance. At the outset, it may be pointed out that business finance is concerned with finances of profit-seeing organizations only and is an important segment of private finance.

Finance as such is but one facet of broader economic activity of mobilizing savings and directing them in investments. Finance includes both public and private finance. Public finance is the study of principles and practices pertaining to the acquisition of funds, meeting the requirements of government bodies and administration of funds, meeting the requirements of government bodies and administration of these funds by the government. Contrary to this, private finance concerns with procuring money for private organizations and management of the money by individuals, voluntary associations and corporations. Private finance, therefore, comprises personal finance, business finance and finance of non-profit organizations. Personal finance seeks to analyze the principles and practices of managing one’s own daily affairs. Study of practices, procedures and problems concerning financial management of profit-making organization in the field of industry, trade and service and mining is undertaken in business finance. The finance of non-profit organization deals with the practices, procedures and problems involved in financial management of educational, charitable and religious and the like organizations.

14.4 ROLE OF FINANCE MANAGER :

The traditional role of the finance manger is to confine to the raising of funds in order to meet operating requirements of the business. This traditional approach has been criticized by modern scholars on the following grounds. It was prevalent till the mid-1950's.

(1) The traditional approach of raising funds alone is too narrow and thus it is outsider-looking-in approach.

(2) It viewed finance as a staff specialty.

(3) It has little concern how the funds are utilized.

(4) It over-emphasized episodic events and non-recurring problems like the securities and its markets, incorporation, merger, consolidation, reorganization, re-capitalization and liquidation etc.

(5) It ignored the importance of working capital management.

(6) It concentrated on corporate finance only and ignore the financial problems of sole trader and partnership firms.

(7) Traditional approach concentrated on the problems of long-term financing and ignored the problems of short-term financing.

There was a change from traditional approach to the modern concept of finance function since the mid-1950's. The industrialization, technological innovations and inventions and a change in economic and environment factors since the mid-1950's necessitated the efficient and effective utilization of financial resources. Since then, finance has been viewed as an integral part of the management. The finance manager is therefore concerned with all financial activities of planning, raising, allocating and controlling the funds in an efficient manner. In addition, profit planning is another important function of the finance manager. This can be done by decision-making in respect of the following areas :

(1) Investment Decisions for obtaining-maximum profitability after taking the time value of the money into account.

(2) Financing decisions through a balanced capital structure of Debt Equity ratio, sources of finance, EBIT / EPS computations and interest coverage ratio etc.

(3) Dividend decisions, issue of Bonus Shares and retention of profits with objective of maximization of market value of the equity share.

(4) Best utilization of fixed assets.

(5) Efficient working capital management (inventory, debtors, cash marketable securities and current liabilities).

(6) Talking the cost of capital, risk, return and control aspects into account.

(7) Tax administration and tax planning.

(8) Pricing, volume of output, product mix and cost-volume-profit analysis (CVP Analysis)

(9) Cost Control.

14.4.1 Functions of Financial Controller :

The important functions of a financial controller in a large business firm consist of the following :

Provision of capital -	To establish and execute programmes for the provision of capital required by the business.
Investor relations -	To establish and maintain an adequate market for the company's securities and to maintain adequate liaison with investment bankers, financial analysts and shareholders.
Short-term financing -	To maintain adequate sources for company's current borrowing from commercial banks and other lending institutions.
Banking and custody -	To maintain banking arrangement, to receive, have custody of and disburse the company's monies and securities.
Credit and collections -	To direct the granting of credit and the collection of accounts due to the company, including the supervision of required special arrangements for financing sales, such as time payment and leasing plans.
Investments -	To achieve the company's funds required, and to establish policies for investment in pension and other similar trusts.

Insurance -	To provide insurance coverage as required.
Planning for control -	To establish, co-ordinate and administer an adequate plan for the control of operations.
Reporting & interpreting -	To compare performance with operating plans and standards, and to report and interpret the results of operations to all levels of management and to the owners of the business.
Evaluation & consulting -	To consult with all segments of management responsible for policy or action concerning any phase of the operation of the business as it relates to the attainment of objectives and the effectiveness of policies, organization structure and procedures.
Tax administration -	To establish and administer tax policies and procedures.
Government reporting -	To supervise or co-ordinate the preparation of reports to government agencies.
Protection of assets -	To ensure protection of assets for the business through internal control, internal auditing and proper insurance coverage.
Economic appraisal -	To appraise continuously economic, social forces and government influences, and to interpret their effect upon the business.
Managing fund -	To maintain sufficient funds to meet the financial obligations.
Measuring of return -	To determine required rate of return for investment proposals.
Cost control -	To facilitate cost control and cost reduction by establishment of budgets and standards.
Price setting -	To supply necessary information for setting of prices of products and services of the concern.
Forecasting profits -	To collect relevant data to make forecast of future profit levels.

Forecast cash flow - To forecast the sources of cash and its probable payments and to maintain necessary liquidity of concern.

14.5 Techniques of Financial Management :

The important techniques of Financial Management are summarized as follows :

(a) Common size statements : The common size financial statements are those in which figures reported are converted into percentage to some common base. Common size balance sheet and income statement are prepared for vertical analysis and interpretation is done for identification of causes for changes taken place over a period of time. The items in the financial statements are presented as percentages or ratios to total of items and a common base for comparison is provided. Each percentage shows the relation of the individual item to its respective total.

(b) Trend Ratios : Trend ratios are the index numbers of the movements of financial figures reported in the financial statements for more than one accounting period. It is a statistical technique adopted to reveal the tend of financial items which are used in analysis of behaviour of financial items and for preparation of projected financial statements. In preparation of trend ratios, the base accounting period should be selected and the financial figures of that base period should be given the index number of 100. The trend ratios are calculated for the subsequent accounting periods taking the base period trend ratio as 100. The trend percentages are calculated for select major financial items in the financial statements to arrive at the conclusions for important changes.

(c) Cash flow Analysis : The preparation of cash flow statements has been made mandatory. A statement of cash flow reports the ash receipts and cash payments and net changes in cash resulting from operations, investing and financing activities of an enterprise during the period. The cash flow statement reconciles the opening and closing balances of cash and cash equivalents for the reported accounting period. It reports a net cash inflow or outflow for each activity and for the overall business.

(d) Funds Flow Analysis : The funds flow analysis gives the details of changes in financial position of a concern between two balance sheet dates. It is based on net working capital concept, which is termed as ‘Fund’. The funds flow statement contains the details of financial resources, which have become available during the accounting period and the ways in which those resources have been used up. The flow of funds refers to movement of funds, which cause a change in working capital of the organization. The net increase or decrease in working capital will be further analyzed through preparation of statement of changes in working capital position. Funds flow statement is a parameter for testing of the effective use of working capital. The analysis is particularly useful for long range planning where projections of liquid resources are vital.

(e) Ratio Analysis : Ratio analysis is used as an important tool in analysis of financial statements. Ratios are used as an index or yardstick for evaluating the financial position and performance of a firm. Ratio is the expression of one figure in terms of another. It is the expression of the relationship between mutually independent figures. Ratio analysis used financial report and data and summarizes the key relationship in order to appraise financial performance. It helps the analysts to make quantitative judgement about the financial position and performance of the firm. There are various ratios, which are used by different parties for different purposes and can be calculated from the information given in financial statements. The comparison of past ratios with future ratios shows the firm's relative strength and weaknesses.

(f) Capital Budgeting Techniques : Investment in long-term assets for increasing the revenue of firm is called as 'capital budgeting'. It is a decision to invest funds in long-term activities for future benefits that increase the wealth of the firm thereby increase the wealth of owners. Capital budgeting refers to long-term planning for proposed capital outlays and their financing. The future growth of a firm depends on capital expenditure decisions. Capital budgeting involves large amount of funds, risk and uncertainty and they are of an irreversible nature. Estimation of cash flow is very important for evaluating the investment proposals. Capital budgeting results the exchange of current fund for future benefits which will occur over a series of years to come. The important techniques used in capital investment appraisal are as follows :

- Payback period method
- Accounting rate of return method
- Net present value method
- Internal rate of return method

- Profitability index method
- Discounted payback period method etc.

(g) Working Capital Management : In the efficient working capital management some of the techniques like economic order quantity, ABC analysis, fixation of inventory levels, cash management models are adopted.

(h) Capital Structure : The finance manager has to decide an optimum capital structure to maximize the wealth of shareholders. In capital structure decisions – analysis of operating and financial leverages, cost of different components of capital, EPS – EBIT analysis ascertainment of EPS of different financing alternatives, determination of financial break-even point, indifference point analysis and other mathematical models are used.

14.6 QUESTIONS

A. Short Answer questions

1. Business finance
2. Scope of financial management
3. Definition of finance

B. Essay Questions

1. ``Finance is the study of money management.'' Comment.
2. Discuss the nature and scope of finance
3. Define the scope of financial management, and explain the role of financial management
4. Discuss the importance of financial management
5. Explain the role of finance manager in an organisation
6. What are the functions of a financial controller.
7. Briefly explain the techniques of financial management

14.7 SUGGESTED READINGS

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Chapter - 15

FINANCE FUNCTION

Objectives :

This lesson helps you in

- Understanding the meaning of finance function
- Know various approaches to the study of finance function
- Find out the components of finance function
- Preparing a model for the organisation of finance function.

Structure :

15.1 Meaning of Finance Function

15.2 Approaches to Finance Function

15.3 Finance Function

15.4 Organization of Finance Function

15.5 Questions

15.6 Suggested Readings

15.1 Meaning of Finance Function :

Financial Management is concerned with the determination of financial needs of the firm, procurement of funds, allocation of financial resources, control of financial activities and performance as well as with the development of financial data for decision-making. It has traversed a long course before becoming a co-ordination and decision-making function.

Originally, the finance function was concerned with the procurement of funds and legalistic matters relating thereto. The discipline of financial management at this stage concentrated heavily on the description of financial markets, types of securities, and techniques of raising funds. The financial manager was not involved in the process of decision-making pertaining to critical financial matters. During the depression of 1930's, the focus of financial management shifted to mergers, reorganizations, financial liquidity etc., but financial management as a discipline continued as descriptive subject until early 1950's. major focus was on 'outsider's view' rather than 'insider's view' of finance function. The approach was to look at finance from the point of view of an outsider such as creditors and shareholders, rather than focus on financial decision making.

Significant developments took place in the field of financial management during the second half of 1950's. the focus shifted from the 'outsider's view' of the finance function to the to the 'insider's view', and financial decision-making occupied the prime place in the studies of corporate finance. Greater attention was paid to the administrative aspects of financial management such as – cash budgeting and forecasting, management of accounts receivables, management of inventories, management of assets, control of expenses etc. Capital budgeting decisions involving allocation of funds to individual investment projects on the basis of rational appropriate acceptance criteria, became one of the major responsibilities of the financial executive. Mathematical models were developed and applied to the management of cash and inventory management. Concepts and techniques of capital budgeting and cost of capital were developed to help the financial executive in decision-making. Theory of capital structure and dividend along with these developments led to the emergence of an integrated theory of financial management. It has now developed from descriptive discipline to an analytical and prescriptive one. It now deals with rigorous analysis of the totality of the finance function, and provides practical guidance to decision-makers. Along with the procurement of funds, finance function is now also concerned with capital budgeting, management of fixed and current assets, valuation of firm and dividend policy. It focuses on financial decision-making within the firm.

It is going through a process of further change and development. Electronic data processing systems and further application of the tools of operations research will lead to its greater refinement and sophistication. Thus, it is right to say that the concept of finance function has substantially changed, and still it is going through a process of further change and development along with the evolution of the content of finance as a management activity.

15.2 Approaches to Finance Function :

Business firms are generally profit-seeking organizations. Accordingly, their objectives are usually expressed in financial terms. From this standpoint, two well-known and widely discussed objectives of the firm are :

- Profit maximization
- Value maximization

15.2.1 Profit maximization :

Microeconomic theory on how the firm should and does behave is based on profit maximization as a decision criterion. Actions that increase the firm's profit are undertaken and those that decrease profit are avoided. To maximize profit, the firm must maximize output for a given set of scarce inputs, or, equivalently, minimize the cost of producing a given output. In other words, the firm must be efficient in its use of scare resources.

It is argued that under conditions of perfect competition (where prices reflect true values and all the consumers are well informed), the profit maximization objective leads to an efficient allocation of resources and maximum social welfare in that goods and services desired by society are produced in the greatest quantity possible, given the available stock of productive resources. But it suffers from a number of shortcomings.

The first objection (ethical but not economic) is that is leads to a serious inequality of income and wealth among different groups. But the counter argument is that society as a whole is benefited because of the economic efficiency of the firm.

The second objection is that it does not take care of uncertainty. So when future profits are uncertain, the profit maximization objective loses its significance, for it is no longer clear what is to be maximized. Should actions be taken to maximize the likelihood of favourable outcomes, or to minimize the likelihood of unfavourable outcomes?

Another shortcoming of the profit maximization criterion is that it does not take into consideration the timing of future benefits (profits) from investment. In practice, most investment decisions involve complex patterns of cash flows over time. The fact that money has a time value has to be recognized in the decision-making process. But the profit maximization criterion does not take into account the differences in timing of cash flows and thus the time value of money.

Ambiguity is often said to be another shortcoming of the profit maximization criterion. Profit figures may way vary widely depending upon the accounting conventions used. This may render the measurement of profits ambiguous.

It is because of the above shortcomings that profit maximization has been replaced by value or wealth maximization as the operational criterion for financial management decisions.

15.2.2. Value (or wealth) maximization :

The value maximization objective refers to maximizing value for its shareholders. Value is represented by the market price of the firm's equity / ordinary shares. This, in turn, is a function of the firm's investment, financing and dividend decisions. In other words, the firm acquires assets and invests in new products and services where the expected returns exceed their cost, finances with those instruments where there is tax or other advantage, and undertakes a meaningful dividend policy for its shareholders. All these functions are expected to create value for its shareholders. The market price of a company's share represents the value that market participants place on the company. The share price involves risk and expected return. The market price serves

$$\text{Market value per share} = \frac{\text{Average annual future maintainable profits after tax}}{\text{Expected shareholder's return}}$$

as a performance index or report card of the firm's progress; it indicates how well the management is performing on behalf of the shareholders. Value maximization objective is also called the wealth maximization objective of the firm. How can one estimate the market value of shares based on firm-oriented variables? The current value of the equity shares of a firm is expressed as a function of future earnings and required return.

Thus, the market value per share tends to increase when profitability increases, other factors remaining constant. Value maximization is based on the general principle of profit maximization, i.e., optimization with respect to owner interests.

15.2.3 Maximization of wealth :

Wealth maximization objective is a widely recognized criterion with which the performance of a business enterprise is evaluated. The word wealth refers to the net present worth of the firm. Therefore, wealth maximization is also stated as net present worth. Net present worth is the difference between gross present worth and the amount of capital investment required to achieve the benefits. gross present worth represents the present value of expected cash benefits discounted at a rate which reflects their certainty or uncertainty. Thus, wealth maximization objective as decisional criterion suggests that any financial action which creates wealth or which has a net present value above zero is desirable one and should be accepted and that which does not satisfy this test should be rejected.

Algebraically, net present value or worth can be expressed as follows, using Ezra Solomon's symbols and models.

$$W = \frac{A_1}{(1+K)} + \frac{A_2}{(1+K)} + ... + \frac{A_n}{(1+K)^n} - C$$

$$= \sum_{t=1}^{n} \frac{At}{(1+K)^t} - C$$

Where W = net present worth

A_1, A_2 …A_n = the stream of benefits expected to occur from a course of action over a period of time.

K = appropriate discount rate to measure risk and timing.

C = initial outlay required to acquire the asset.

The wealth maximization objective when used as decisional criterion serves as a very useful guideline in taking investment decisions. This is because the concept of wealth is very clear. It represents present value of the benefits minus the cost of the investment. The concept of cash flow is more precise in connotation than that of accounting profit. Thus, cash benefits of a project with higher risk exposure is discounted at a higher discount rate (cost of capital), while lower discount rate is applied to discount expected cash benefits of a less risky project. In this way, discount rate used to determine present value of future streams of cash earnings reflects both the time and risk.

In view of the above reasons, wealth maximization objective is considered superior to profit maximization objective. It may be noted here that value maximization objective is imply the extension of profit maximization to real life situations. Where the time period is short and magnitude of uncertainty is not great, value maximization and profit maximization amount to almost the same thing.

15.3 Finance Function :

The functions of financial management have undergone significant changes over the years. Until about the middle of this century, it was generally defined to include only matters pertaining to the left side of the balance sheet – it was restricted to procurement of funds. Needless to mention, this function of procurement of funds was necessary during major events, such as promotion, expansion, merger, reorganization, etc., in the life of a firm. This was known as the traditional function of financial management. The traditional approach looked at the matter from the investors' (i.e., outsiders') point of view – the finance manager had no concern with decisions concerning allocation of funds; he was required to procure the funds from the right sources at the right time.

But beginning in the 1950s, a broader definition of financial management began to emerge. It came to be considered an integral part of general management rather than a staff specially concerned only with administering sources of funds. It was now also concerned with decisions pertaining to uses of funds and those to the payment of dividend. The former determines the nature of the firm's business and is known as investment decisions. This is nothing but employment of fund in profitable opportunities in the form of long-term and short-term assets to generate surplus. To what extent this 'surplus' can distributed to the shareholders as dividend depends on the consideration of a host of factors and alternatives. So, dividend decision also becomes an important part and parcel of the proper financial management of the firm. Accordingly, the modern approach is to consider the following as the important functions of financial management :

(a) Investment decisions,

(b) Financing decisions, and

(c) Dividend decisions.

The major financial decisions of the Financial Manager can be seen vividly from the following chart.

Financial Management

Maximization of Market Value of Share

Financial decisions

Capital Budgeting Decisions | Working Capital Management | Financing Decisions | Dividend Decisions

Maximum Return | Trade off | Minimum Risk

Let us now discuss the financial decisions of a Finance Manager.

15. 3.1 Investment Decision :

The investment decision relates to the selection of assets in which funds will be invested by a firm. The assets which can be acquired fall into two broad groups : (I) long-term assets which will yield a return over a period of time in future. (ii) Short-term current assets defined as those assets which in the normal course of business are convertible into cash, usually within a year. Accordingly, the asset selection decision of a firm is of two types. The first of these involving the first category of assets is popularly known in the financial literature as capital budgeting. The aspect of financial decision-making with reference to current assets or short-term assets is popularly designated as working capital management.

(i) **Capital Budgeting :** Capital budgeting means the long-term investment decision of a firm. It is probably the moist crucial financial decision of a firm. It relates to the selection of an investment proposal whose benefits are likely to be available in future over the life-time of the project. The long-term assets can be either new or old / existing ones. The main elements of the capital budgeting decision are :

(i) the total assets and their composition;

(ii) the business risk complexion of the firm, and;

(iii) concept and measurement of cost of capital.

(a) **Evaluation Methods :** The first aspect of the capital budgeting decision relates to the choice of the new asset out of the alternatives available. Whether an asset will be accepted or not will depend upon the relative benefits and returns associated with it. The measurement of the worth of the investment proposals is, therefore, a major element in the capital budgeting exercise. This implies a discussion of the methods of appraising investment proposals viz., Payback period method, Accounting Rate of Return method and Discounted Cash Flow Methods.

(b) **Risk and Uncertainty :** The second element of the capital budgeting decision is the analysis of risk and uncertainty. Since the benefits from the investment proposals extend into the future, their accrual is uncertain. They have to be estimated under various assumptions of the physical volume of sale and the level of prices. An element of risk in the sense of uncertainty of future benefits, is thus, involved in the exercise. The return from the capital budgeting decision should, therefore, be evaluated in relation to the risk associated with it.

(c) **Cost of Capital :** Finally, the evaluation of the worth of a long-term project implies a certain norm or standard against which the benefits are to be judged. The requisite norm is known by different names such as cut-off rate, hurdle rate, required rate, minimum rate of return and so on. This standard is broadly expressed in terms of cost of capital. The concept and measurement of cost of capital, is thus, another major aspect of the capital budgeting decision.

(ii) **Working Capital Management :** Working capital management is concerned with the management of the current assets viz., Cash, Receivables and Inventory. It is an important and integral part of financial management as short-term survival is a pre-requisite to long-term success. One aspect of the working capital management is the trade-off between profitability and risk (liquidity). There is a conflict between profitability and liquidity. If a firm does not have adequate working capital, i.e., it does not invest sufficient funds in current assets, it may become liquid. Consequently, the firm may not have the ability to meet its current obligations and thus invite the risk of bankruptcy. If the current assets are too large, the profitability is adversely affected.

The key strategies and considerations in ensuring a trade-off between profitability and liquidity is one major dimension of working capital management. In addition, the individual current assets should be efficiently managed so that neither they are inadequate nor unnecessarily funds are locked up. To summarize, the management of working capital has two basic ingredients, namely (1) an overview of working capital management as a whole, and (2) efficient management of the individual current assets. Thus, the investment decision is broadly concerned with the asset-mix or the composition of the assets of a firm.

15. 3.2 Financing Decision :

The second major decision involved in financial management is the financing decision. The concern of the financial decision is with the financing-mix or capital structure or leverage of a firm. The term capital structure refers to the proportion of equity and debt (fixed interest or bearing funds) in the total capital. The financing decision of a firm relates to the choice of the proportion of these sources to finance the investment requirements.

15.4 Organization Finance Function :

With the development of the management science, the concept of finance function has also changed considerably, and keeps changing along with the evolution of the content of finance as a dynamic management activity. Generally, the finance functions are the same in every business enterprise, but the organization of these functions is not standardized and widely differs from one enterprise to another depending upon its size, nature of business, prevailing customs etc. Thus, in case of proprietary form of business, the owner himself performs the finance functions. In case of partnership, all partners or some of them perform the finance functions. Similarly, in a typical large company, the financial manager performs these functions with the help of other finance experts.

'Organization of finance function' refers to the division and classification of various functions to be performed by the finance department. Financial Management is the most pivotal functional areas of management, as the effectiveness of a business enterprise significantly depends on the efficient utilization of its financial resources. Financial decisions do not only affect wage policy, inventory policy, labour policy etc. but also the existence of the business concern. Thus, the finance function cannot be decentralized like other functional areas of management such as marketing, personnel, production etc. the administration and control of finance should, therefore, rest with the top management. Such administrative and controlling powers must vest in the Board of Directors or in the Finance Committee.

As stated above, the organization structure of finance function generally depends on the size and nature of business, and so differs from one enterprise to another.

In large companies, management is separated from ownership because of widely-held shares with the result that the shareholders exercise very little control over the operations of the company. The ordinary shareholders of the company, therefore, control its operation by electing the Board of Directors to whom the management is responsible. With a view to help the Board of Directors in the execution of policies, a managing director is appointed. The managing director are appointed the production, personnel, marketing and financial managers. Each of them is an expert of his filed, and has many sub-departments working for him.

It is clear from the above discussion that the organization of finance function or a finance department is determined by the size and nature of the business. The external factors such as state intervention in the industrial finance, corporate taxation policies etc., also affect the organization of finance function. In small firm, the owner himself performs all financial functions. In medium scale enterprises, the financial manager with the help of a small staff performs these functions. In a typical large company, the finance function is performed by the financial manager with the help of the controller of finance and the treasurer who supervise the executives incharge for different financial functions. The above organization charge of the financial department of a large company may not necessarily be an ideal one. The organization of the financial department will be ideal only when it is capable of effective financial planning and control, and quick reporting for the strategic financial decisions.

15.5 QUESTIONS :

1. What is finance function?
2. Explain the scope and significance of investment and financing decisions
3. ``The concept of finance function has changed and keeps on changing along with the evolution of finance as a management activity''. Elaborate this statement. Also state in brief the dimensions of modern finance function.

4. Discuss the concepts of modern finance functions. In what respects are these functions wider than the traditional functions in their scope?
5. Examine the nature and content of finance function in a multi-plant enterprise.

15.6 SUGGESTED READINGS :

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Chapter – 16

Financial Analysis

Objectives :

After going through this unit we should be able to :

- Understand the meaning of financial statements
- Know the objectives of analysis of financial statements
- Explain the types and formats of financial statements
- Know the methods of financial analysis

Structure :

16.1 Introduction

16.2 Meaning of Financial Statements

16.3 Objectives of Analysis of Financial Statements

16.4 Types of Financial Statements

16.5 Formats of Financial Statements

16.6 Limitations of Financial statement Analysis

16.7 Types of Financial Analysis

16.8 Methods of Financial Analysis

16.9 Questions

16.10 Exercises

16.11 Suggested Readings

16.1 INTRODUCTION :

Accounting process involves recording, classifying and summarising various business transactions. The daily transactions of a business are recorded in different subsidiary books. These transactions are posted into various ledger accounts and the balances are taken out at the end of a financial period. The aim of maintaining various records is to determine profitability of enterprise from operations of the business and also to find out its financial position. The term analysis of financial statements is applied to almost every kind of detail inquiry into financial data. A financial executive has to evaluate the past performance, present financial position, liquidity situation, enquire into profitability of the concern and to plan for future operations. The analysis of financial statements is an attempt to determine the significance and meaning of the financial statements data so that the forecast may be made of the future prospects for earnings, ability to pay interest and debt maturities and profitability.

16.2 MEANING OF FINANCIAL STATEMENTS :

According to Himpton John, ``A financial statement is an organised collection of data according to logical and consistent accounting procedures. Its purpose is to covey an understanding of some financial aspects of a business firm. It may show a position at a moment of 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.'' On the basis of the information provided in the financial statements, management makes a review of the progress of the company and decides the future course of action. The annual reports constitute one of the major vehicles of corporate financial reporting to shareholders. It is, therefore, essential that these reports are elaborate, standardised in terms of accounting treatment and provides details for analysis and understanding of corporate performance by the shareholders. In India, the Institute of Chartered Accountants of India have for long been spearheading the process of standadisation in accounting treatment and enhancing disclosure requirements to shareholders. All companies are now required to state whether their accounts are prepared with applicable accounting standards and give particulars of any material departures from those standards and the reasons therefore. The trend in the area of corporate financial reporting in India, may be observed from the greater disclosure norms set at every stage and personal accountability of both directors and auditors. With the introduction of corporate governance concept.

16.3 OBJECTIVES OF ANALYSIS OF FINANCIAL STATEMENTS :

The following are the main objectives of the analysis of financial statements.

1. To estimate the earning capacity of the firm
2. To judge the financial position and financial performance of the firm.
3. To determine the long term liquidity of the funds as well as solvency
4. To determine the debt capacity of the firm
5. To decide about the future prospects of the firm.

As a matter of fact, the objectives of analysis of these statements, depend to a large extent on the point of view of the analyst, the degree of interest in the company and the need for depth of enquiry and finally on the amount and quality of the data available.

16.4 TYPES OF FINANCIAL STATEMENTS :

1. **Income Statement :** The income statement or profit and loss account is considered as a very useful statement of all financial statements. It depicts the expenses incurred on production, sales and distribution and sales revenue and the net profit or loss for a particular period. It shows whether the operations of the firm resulted in profit or loss at the end of a particular period.
2. **Balance Sheet :** Balance Sheet is a statement which shows the financial position of a business as on a particular date. It represents the assets owned by the business and the claims of the owners and creditors against the assets in the form of liabilities as on the date of the statement.
3. **Statement of Retained Earnings :** The statement of retained earnings is also called the profit and loss appropriation account. It is a link between the income statement and the balance sheet. Retained earnings are the accumulated excess of earnings over loses and dividends. The balance shown by the income statement is transferred to the balance sheet through this statement after making the necessary appropriations.
4. **Funds Flow Statements :** According to Anthony, ``The funds flow statement described the sources from which additional funds were derived and the use to which these funds were put.'' Funds Flow statement helps the financial analyst in having a more detailed analysis and understanding the changes in the distribution of resources between two balance sheet

periods. The statement reveals the sources of funds and their application for different purposes.

5. **Cash Flow Statement :** A cash flow statement depicts the changes in cash position from one period to another. It shows the inflow and outflow of cash and helps the management in making plans for immediate future. An estimated cash flow statement enables the management to ascertain the availability of cash to met business obligations. This statement is useful for short-term planning by the management.
6. **Schedules :** These are the statements which explain the items given in income statement and balance sheet. Schedules are part of financial statements which give detailed information about the financial position of a business organisation.

16.5 FORMATS OF FINANCIAL STATEMENTS :

The two main financial statements viz., the income statement and the balance sheet, can either to presented in the horizontal form or the vertical form. Where statutory provisions are applicable, the statement has to be prepared in accordance with such provisions.

16.5.1 Income Statement :

There is no legal format for the profit and loss account. Therefore, it can be presented in the traditional `T' form, or vertically in statement form. An example of the two formats given as under.

(i) Horizontal Forms

Manufacturing, Trading and Profit & Loss account

…… for the year ending………

Dr. **Cr.**

Particulars	**Rs.**	**Rs.**	**Particulars**	**Rs.**	**Rs.**
To Opening Stock :			By Cost of finished goods c/d		X x x
Raw materials	X x x		By Closing stock		
Work in progress	X x x	Xx x	Raw materials	X x x	

To Purchases of raw materials		X x x	Work in progress	X x x	X x x
To Manufacturing wages		X x x			
To Carriage inwards		X x x			
To other factory expenses		X x x			
		X x x			**X x x**
To Opening stock of finished goods		X x x	By Sales		X x x
To cost of finished goods b/d		X x x	By Closing stock of finished goods		X x x
To Gross profit c/d		X x x	By Gross loss c/d		X x x
		X x x			**X x x**
To Gross loss b/d		X x x	By gross profit b/d		X x x
To Office and administration expenses		X x x	By Miscellaneous receipts		X x x
To Selling and distribution expenses		X x x	By Net loss c/d		X x x
To Interest and financial expenses		X x x			
To Provision for income tax		X x x			
To Net profit c/d		X x x			
		X x x			**X x x**
To Net loss b/d		X x x	By Balance b/d (from previous year)		X x x
To General reserve		X x x	By Net profit b/d		X x x
To Dividend		X x x			
To Balance c/d		X x x			
		X x x			**X x x**

(ii) Vertical Form :

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

Particulars		**Rs.**	**Rs.**
Sales			X x x
Less : Sales returns		X x x	
Sales tax/Excise Duty	(1)	X x x	X x x
Net Sales			**X x x**
Cost of goods sold			
Materials consumed			X x x
Direct labour			X x x
Manufacturing expenses			X x x
Add /Less : Adjustment for change in stock			X x x
	(2)		X x x
Gross Profit	**(1) - (2)**		**X x x**
Less : Operating expenses		X x x	
Office and administration expenses		X x x	
Selling and distribution expenses		X x x	X x x
Operating profit			**X x x**
Add : Non-Operating income			X x x
			X x x
Less : Non-operating expenses (including interest)			X x x
Profit before interest and tax			X x x
Less : Interest			X x x
Profit before tax			X x x
Less : Tax			X x x
Profit after tax			**X x x**

Appropriations			
Transfer to reserves			X x x
Dividends declared/paid			X x x
Surplus carried to Balance Sheet			X x x
			X x x

16.5.2 Balance Sheet :

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

(i) Horizontal Form :

Balance Sheet of …….. as on ……….

Liabilities	Rs.	Assets	Rs.
Share capital (with all particulars of authorised, issued, subscribed capital)	X x x	**Fixed Assets**	
Called up capital	X x x	1. Goodwill	X x x
Less : Calls in arrears	X x x	2. Land & Buildings	X x x
Add : Forfeited shares	X x x	3. Leasehold property	X x x
Reserves and Surplus		4. Plant and machinery	X x x
1. Capital reserves	X x x	5. Furniture & Fittings	X x x
2. Capital redemption reserve	X x x	6. Patents and trade marks	X x x
3. Share premium	X x x	7. Vehicles	X x x
4. Other reserves	X x x	**Investments**	
Less : Debit balances of profit & loss a/c (If any)	X x x	**Current Assets, Loans and Advances**	
5. Profit & loss appropriation a/c	X x x	**(a) Current assets**	

6. Sinking fund	X x x	1. Interest accrued on investments	X x x
Secured Loans		2. Loose tools	X x x
Debentures	X x x	3. Stock in trade	X x x
Add : outstanding interest	X x x	4. Sundry debtors	X x x
Loans from banks	X x x	Less : Provision for doubtful debts	X x x
Unsecured Loans		5. Cash in hand	X x x
Fixed deposits	X x x	6. Cash at bank	X x x
Short term loans and advances	X x x	**(b) Loans and Advances**	
Current Liabilities & Provisions		7. Advances to subsidiaries	X x x
(a) Current Liabilities		8. Bills receivable	X x x
1. Bills payable	X x x	9. Prepaid expenses	X x x
2. Sundry creditors	X x x	**Miscellaneous expenditure** (to the extent not written off or adjusted)	
3. Income received in advance	X x x	1. Preliminary expenses	X x x
4. Unclaimed dividends	X x x	2. Discount on issue of shares and debentures	X x x
5. Other liabilities	X x x	3. Underwriting commission	X x x
(b) Provisions		Profit and loss account (Loss), if any	X x x
6, Provision for taxation	X x x		
7. Proposed dividends	X x x		
8. Provident fund & pension fund			
Contingent liabilities not provided for	X x x		
	X x x		**X x x**

(ii) Vertical Form :

Balance Sheet of …. As on ….

	Particulars	**Schedule No.**	**Current Year**	**Previous Year**
1.	**Sources of funds**			
	1. Shareholder's funds			
	(a) Capital		X x x	X x x
	(b) Reserves and surplus		X x x	X x x
	2. Loan Funds			
	(a) Secured Loans		X x x	X x x
	(b) Unsecured loans		X x x	X x x
	Total		**X x x**	**X x x**
II.	**Application of Funds**			
	1. Fixed assets			
	(a) Gross Block		X x x	X x x
	(b) Less : Depreciation		X x x	X x x
	© Net block		X x x	X x x
	(d) Capital work in progress		X x x	X x x
	2. Investments			
	3. Current Assets, Loans and advances			
	a. Inventories		X x x	X x x
	b. Sundry debtors		X x x	X x x
	c. Cash and bank balances		X x x	X x x
	d. Other current assets		X x x	X x x
	e. Loans and advances		X x x	X x x
			X x x	X x x
	Less : Current Liabilities and Provisions			
	(a) Current Liabilities		X x x	X x x
	(b) Provisions		X x x	X x x
	Net Current Assets		X x x	X x x

	4. (a) Miscellaneous expenditure to the extent not written off or adjusted		X x x	X x x
	(b) Profit & Loss a/c (debit)		X x x	X x x
	Total		**X x x**	**X x x**

(iii) Vertical Form for Analysis :

Balance Sheet of …….. as on …………….

	Particulars		**Rs.**
	Assets		
1.	**Current Assets**		
	Cash and bank balances		X x x
	Debtors		X x x
	Stock		X x x
	Other current assets		X x x
2.	**Fixed Assets**		**X x x**
	Less : Depreciation		X x x
3.	**Investments**		**X x x**
			X x x
	Total Assets	**(1 + 2 + 3)**	**X x x**
	Liabilities		
(a).	**Current Liabilities**		
	Bills payable		X x x
	Creditors		X x x
	Other Current liabilities		X x x
			X x x
(b)	**Long term debt**		
	Debentures		X x x
	Other long term debts		X x x

			X x x
©	**Capital and Reserves**		
	Share capital		X x x
	Reserves and Surplus		X x x
	Total Liabilities	**(a + b + c)**	**X x x**

16.5.3. Statement of Retained Earnings

The preparation of Statement of Retained Earnings is a common feature in corporate accounting practice, to show how the balance in Profit and Loss account is appropriated for various purposes like provision for dividend, transfer to reserve a/c

Profit & Loss appropriation account

Particulars	Rs.	Particulars	Rs.
To Transfers to reserves	X x x	By Last year's balance	X x x
To Dividends paid (interim or final)	X x x	By Current year's net profit (transferred from profit & loss a/c)	X x x
To dividends proposed	X x x	By Excess provisions (which are no longer required)	X x x
To Surplus carried to balance sheet	X x x	By Reserves withdrawn (if any)	X x x
	X x x		**X x x**

16.6 LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS :

The analysis of financial statements has certain limitations also. Hence any person using this technique must keep in mind those limitations. Main limitations are as follows.

1. The analysis of financial statements is only a means to reach conclusions and no conclusion in itself. So, it cannot work as a substitute for sound judgement. The judgement ultimately, will depend upon the intelligence and skill of the analyst.
2. The figures drawn from one year statements have limited use and value. So, it will be dangerous to depend upon them only.
3. The basic nature of financial statements is historic. Past can never be hundred per centre presentative of the future. Hence, future course of business events should be forecast and interpreted in the context.
4. The results of the analysis of financial statements should not taken as an indication of good or bad management. The ratios or other figures explain only probable state events.
5. Any change, in the method or procedure of accounting mass the utility of such analysis The figures of different financial statements lose the characteristic of comparability.
6. The figures of one firm are seldom fully comparable with those of the other because there is difference in the nature of products, procedure in accounting, cost of plant and machinery, nature and pattern of financing, etc. But analysis generally ignores these facts and make an objective comparison of two business firms. The results will be naturally misleading.
7. The repaid changes in the value of money also reduce the validity of such analysis and no useful conclusions can be drawn from a comparative study fo the financial statements of different years.
8. An analyst should also be cautions from window dressing in the accounts.

16.7 TYPES OF FINANCIAL ANALYSIS :

Two types of analysis are undertaken to interpret the position of an enterprise. They are : (1) Vertical Analysis (2) Horizontal analysis. The Companies Act, 1956 permits the companies to present the financial statements in vertical as well as horizontal form.

(i) **Vertical Analysis :** It is the analysis of relationship as between different individual components. It is also the analysis between these components and their totals for a given period of time. Such an analysis examines only the relationship as between different components for a given point of time. It does not focus light on changing behaviour of the above relationships. It is also regarded as static analysis. Comparison of current assets to current liabilities or comparison of debt to equity for one point of time are the examples of vertical analysis. Thus, the vertical analysis can be made in the following ways.

1. By preparation of common size statements of the two similar units
2. By preparing common size statement of different years of the same business unit.

(ii) **Horizontal Analysis :** It is the analysis of changes in different components of the financial statements over different periods with the help of a series of statements. Such an analysis makes it possible to study periodic fluctuations in different components of the financial statements. Study of trends in debt or share capital or their relationship over the past ten year period or study of profitability trends for a period of five or ten years are examples of horizontal type of analysis. Horizontal analysis is also known as `dynamic analysis' since this reflects changes in financial position of the company over a long period of time. It comprises :

1. Comparison of the Financial Statements of different years of the same business unit.
2. Comparison of Financial Statement of a particular year of different business units.

16.8 METHODS OF FINANCIAL ANALYSIS :

A number of methods or devices are used to study the relationship between different statements. An effort is made to use those devices which clearly analyse the position of the enterprise. The following methods of analysis are generally used.

1. Comparative statements
2. Trend analysis
3. Common size statements;
4. Funds Flow analysis;
5. Cash flow analysis
6. Ratio analysis
7. Cost-Volume-Profit analysis.

16.8.1 Comparative Statement Analysis :

Comparative financial statements are those statements, which are designed to provide time perspective to the consideration of various elements of financial position embodied in such statements. In these statements figures for two or more periods are shown side by side to facilitate comparison. Both the income statement and balance sheet can be prepared in the form of comparative financial statements.

(i) **Comparative Income Statement :** The income statement discloses net profit or net loss on account of operations. A comparative income statement will show the absolute figures for two or more periods, the absolute change from one period to another and if desired the change in terms of percentages. Since the figures for two or more periods are shown side by side, the reader can quickly ascertain whether sales have increased or decreased, whether cost of sales has increased or decreased etc. Thus, only a reading of data included in comparative income statement will be helpful in deriving meaningful conclusions.

(ii) **Comparative Balance Sheet :** Comparative balance sheet as on two or more different dates can be used for comparing assets and liabilities and finding out any increase or decrease in those items. Thus, while in a single balance sheet the emphasis is on present position, it is on change in the comparative balance sheet. Such a balance sheet is very useful in studying the trends in an enterprise.

(iii) Comparative financial statements can be prepared for more than two periods or on more than two dates. However, it becomes very cumbersome to study the trend with more than tow periods data. Trend percentages are more useful in such cases.

(iv) According to American Institute of Certified Public Accountants ``the presentation of comparative financial statements in annual and other reports enhances the usefulness of such reports and brings out more clearly the nature and trend of current changes affecting the enterprise. Such presentation emphasises the fact that statements for a series of periods are far more significant than those of a single period and that the accounts of one period are but an installment of what is essentially a continuous history. In any one year, it is ordinarily desired that the balance sheet, the income statement and the surplus statement be given for one more proceeding year as well as for the current year.''

Illu.1 : The income statements of a company are given for the years ending on 30th June, 2003 and 30th June 2004. Rearrange the figures in a comparative form and study the profitability position of the company:

	2003 (Rs.'000)	2004 (Rs.'000)
Net Sales	**785**	**900**
Cost of goods sold	**450**	**500**
Opening Expenses:		
General and administrative expenses	**70**	**72**
Selling expenses	**80**	**90**
Non – Operating expenses:		
Interest paid	**25**	**30**
Income – Tax	**70**	**80**

Solution :

Comparative Income Statement for the year 2003 & 2004

	Rs.'000			
Particulars	**2003**	**2004**	**Change in Rs.**	**Change in %**
Net Sales	785	900	115	14.65
(-) Cost of goods sold	450	500	50	11.11
Gross profit (1)	**335**	**400**	**65**	**19.40**
Less: Operating expenses: General and administrative expenses	70	72	2	2.86
Selling Expenses	80	90	10	12.50
Total operating expenses(2)	**150**	**162**	**12**	**8.00**
Operating profit (1-2) (3)	**185**	**238**	**53**	**8.65**
(-) Non – operating expenses interest paid	25	30	5	20.00
Total Non-Operating expenses (4)	**25**	**30**	**5**	**20.00**

Profit before Taxes (3-4) (5)	160	208	48	30.00
(-) Income Tax Paid	70	80	10	14.28
Profit after Taxes (6)	**90**	**128**	**38**	**42.22**

Profitability position of a company: As there is raise in the sales revenue, but raise in the expenditure pattern is lesser than that of the raise in sales revenue, the overall profitability is said to be good.

Illu.2 : From the following income statement of Y Ltd., prepare a comparative income statement.

(Amount in Lakhs rupees)

For the ear ended 31 March

		2003		***2004***
		Rs.		***Rs.***
Net Sales		**1,370**		**1,442**
Cost of goods sold		**838**		**926**
Gross Profit		**532**		**516**
Operating expenses:				
Administration expenses	**94**		**92**	
Selling expenses	**188**	**282**	**182**	**274**
Operating profit		**250**		**242**
Add: Other incomes - dividend		**44**		**50**
		294		**292**
Less: Other deductions -				
Interest paid		**44**		**44**
Et profit before tax		**250**		**248**
Income tax		**124**		**124**
Net profit after tax		**126**		**124**

Solution :

Comparative Income Statement of Y Ltd.

Particulars	***2003***	***2004***	***Increase/ Decrease Rs.***	***Increase/ Decrease %***
Net Sales	1,370	1,442	(+) 72	(+) 5.26%
Less: Cost of goods sold	838	926	(+) 88	(+)10.50%
Gross Profit (A)	**532**	**516**	**(-) 16**	**(-) 3.01%**
Less: Operating expenses:				
Administration expenses	94	92	(-) 2	(-) 2.13%
Selling Expenses	188	182	(-) 6	(-) 3.18%
Total operating expenses (B)	**282**	**274**	**(-) 8**	**(-) 2.84 %**
	250	242	(-) 8	(-) 3.2%
Add: Operating incomes	-	-	-	-
Operating profit before interest and tax	**250**	**242**	**(-) 8**	**(-) 3.2%**
Add: Non – operating income dividend	44	50	(+) 6	(+)13.64%
Earnings before interest and taxes	**294**	**292**	**(-) 2**	**(-) 0.68%**
Less: Interest paid	44	44	NIL	NIL
Earnings before tax	**250**	**248**	**(-) 2**	**(-) 0.8%**
Less: Income Tax	124	124	NIL	NIL
Earnings After Taxes	**126**	**124**	**(-) 2**	**(-) 1.59%**

Illu.2 : From the following income statements extracted from the books of Aravind works for the year 2003 and 2004 prepare comparative income statement and interpret the results of the business.

Income Statement (Rs.000)

	2003	**2004**		**2003**	**2004**
To Opening Stock	**40.0**	**92.3**	**By Sales**	**501.0**	**725.0**

To Purchases	**210.0**	**280.0**	**By Closing Stock**	**98.5**	**105.0**
To Wages	**25.0**	**32.0**	**By Discount**	**5.0**	**-**
To Salaries	**20.5**	**22.0**	**By Interest on investments**	**5.5**	**8.0**
To Rent, rates and taxes	**17.8**	**18.1**	**By Interest on bank deposit**	**5.0**	**7.2**
To Selling expenses	**5.8**	**6.1**			
To Distribution expenses	**3.2**	**3.9**			
To Loss on sale of investment	**-**	**10.0**			
To Interest paid	**7.0**	**7.5**			
To Depreciation	**35.0**	**40.0**			
To Net Profit	**250.7**	**333.30**			
	615.0	**845.2**		**615.0**	**845.2**

Solution :

Comparative income statement of Aravind works

for the year ended 31st, December 2003 and 2004

Particulars	2003 Rs.	2004 Rs.	Change in Rs.	Change in %
Sales	501.0	725.0	224.0	44.7
Less: Cost of goods sold	176.5	299.3	122.8	69.6
Gross Profit	324.5	425.7	101.2	31.2
Less : Operating Expenses	82.3	90.1	7.8	9.5
	242.2	335.6	93.4	38.6
Add : Operating Income				
Discount	5.0	-	5.0	100.0
Operating profit	247.2	335.6	88.4	35.8

Less : Non Operating expenses				
Interest paid and loss on sale of investments	7.0	17.5	10.5	150.0
	240.2	318.1	77.9	32.4
Add : Non-Operating Incomes				
Interest on Investments	5.5	8.0	2.5	45.5
Interest on bank deposits	5.0	7.2	2.2	44.0
Profit before tax	250.7	333.3	82.6	32.9
Less : Taxes @ 50%	125.3	166.6	41.3	32.9
Profit after Tax (PAT)	125.4	166.7	41.3	32.9

Working Notes :

1. Cost of goods sold	2003 Rs.	2004 Rs.
Opening stock	40.0	92.3
Add : Purchases	210.0	280.0
Wages	25.0	32.0
	275.0	**404.3**
Less : Closing Stock	98.5	105.0
Cost of good sold	**76.5**	**299.3**
2. Operating expenses :		
Salaries	20.5	22.0
Rent, Rates & Taxes	17.8	18.1
Selling expenses	5.8	6.1
Distribution expenses	3.2	3.9
Depreciation	35.0	40.0
Operating expenses	**82.3**	**90.1**

Interpretation of results :

The financial analysis of Aravind Works company for the years 2003 and 2004 reveals the following.

1. The sales of the company increased by 42% during 2004 over the year 2003. On other hand, the cost of the goods sold increased by 70% reducing the profit margin to 27% during the same period. There is substantial increase in the non profit expenses during the period.
2. The profit before taxes of the company increased by 30%.. The PAT also remained the same during the year.
3. On the whole, the financial position of the company from profitability point of view is satisfactory.

Illu.3 : Prepare the comparative Income Statement from the following:

Income statement

Particulars	2000 Rs.	2001 Rs.	Particulars	2000 Rs.	2001 Rs.
To Cost of goods sold	**1,00,000**	**1,00,000**	**By Sales**	**2,50,000**	**3,00,000**
To Operational expenses	**75,000**	**1,10,000**			
To Iterest	**25,000**	**20,000**			
To Tax	**25,000**	**30,000**			
To Net profit	**25,000**	**40,000**			
	2,50,000	**3,00,000**		**2,50,000**	**3,00,000**

Solution :

Comparative income statement for the years ended 31st, December 2000 and 2001

Particulars	2000	2001	Change in Rs.	Chang in %
Sales	2,50,000	3,00,000	(+) 50,000	(+) 20.00
Less: Cost of goods sold	1,00,000	1,00,000	-	-

Gross Profit (1)	**1,50,000**	**2,00,000**	**(+) 50,000**	**(+) 33.33**
Less: Operating expenses :				
Operational expenses	75,000	1,10,000	(+) 35,000	(+) 46.67
Total operating expenses (2)	**75,000**	**1,10,000**	**(+) 35,000**	**(+) 46.67**
Operating profit (1 – 2) (3)	**75,000**	**90,000**	**(+) 15,000**	**(+) 20.00**
Less: Non-operating expenses				
Interest	25,000	20,000	(-) 5,000	(-) 20.00
Total Non-operating expenses (4)	25,000	20,000	(-) 5,000	(-) 20.00
Profit before taxes (3 – 4) (5)	**50,000**	**70,000**	**(+) 20,000**	**(+) 40.00**
Less : Tax	25,000	30,000	(-) 5,000	(+) 20.00
Profit after tax	**25,000**	**40,000**	**(+) 15,000**	**(+) 60.00**

Illu.4 : The comparative income statement of Shankar Industries Limited are given for 2003 and 2004. Analyses and interpret the significance of changes in these statements:

	31-12-2003 Rs.	**31-12-2004 Rs.**
Sales	**14,73,600**	**10,91,475**
Less: Discounts	**19,890**	**17,625**
Net Sales	**14,53,710**	**10,73,850**
Less: Cost of goods sold	**9,23,190**	**6,53,460**
Gross Profit	**5,30,520**	**4,20,390**
Less: General charges	**1,06,050**	**78,323**
Less: Selling expenses	**2,67,375**	**2,43,660**
Net Operating Profit	**1,57,095**	**98,407**
Less: Interest on loans	**28,823**	**32,400**
Net profit before tax	**1,28,272**	**66,007**
Less: Corporate tax	**48,150**	**24,000**
Net profit	**80,122**	**42,007**

Solution :

The Comparative income statement of Shankar Industries Ltd.

for the years 2003 and 2004

Particulars	2003	2004	Change in Rs.	Chang in %
Net Sales	14,53,710	10,73,850	(-) 3,79,860	(-) 26.13
Less: Cost of goods sold	9,23,190	6,53,460	2,69,730	(-) 29.22
Gross Profit (1)	**5,30,520**	**4,20,390**	**(-) 1,10,130**	**(-) 20.76**
Less: Operating expenses :				
General expenses	1,06,050	78,323	(-) 27,727	(-) 26.15
Selling expenses	2,67,375	2,43,660	(-) 23,715	(-) 8.87
Total operating expenses (2)	**3,73,425**	**3,21,983**	**(-) 51,442**	**(-) 3.78**
Operating profit (1 – 2) (3)	**1,57,095**	**98,407**	**(-) 58,688**	**(-) 37.36**
Less: Non-operating expenses				
Interest on loans	28,823	32,400	(+) 3,577	(+) 12.41
Total Non-operating expenses (4)	**28,823**	**32,400**	**(+) 3,577**	**(+) 12.41**
Net Profit before taxes (3 – 4) (5)	**1,28,272**	**66,007**	**(-) 62,265**	**(-) 48.54**
Less : Corporate Tax	48,150	24,000	(-) 24,150	(-) 50.16
Net Profit after taxes	**80,122**	**42,007**	**(-) 38,115**	**(-) 47.57**

Comment :

The analysis reveals that the company's financial position is very much worst. The sales, the cost of goods sold as well as the gross margin decline during 2004 over the year 2003. It seems the company is sinking and there is an urgent need on the part of the management of the company to revive the company through different strategies.

Illu.5 : The income statements of Star Co. are given for the years ending 30th September 2004 and 30th September 2005. Rearrange them in a comparative form and study the profitability of the company :

	2004 (Rs.'000)	2005 (Rs.'000)
Net sales	**1,570**	**1,800**
Cost of goods sold	**900**	**1,000**
Operating expenses :		
General and Administration expenses	**140**	**144**
Selling expenses	**160**	**180**
Non-operating expenses :		
Interest paid	**50**	**60**
Income – tax	**140**	**160**

Solution :

Comparative income statement of Star Company

for the year ended 30th September 2004 and 2005 (Rs.'000)

Particulars	2004	2005	Change in Rs.	Chang in %
Net Sales	1570	1800	+ 230	+ 14.65
Less: Cost of goods sold	900	1000	+ 100	+ 11.11
Gross Profit (1)	**670**	**800**	**+ 130**	**+ 19.40**
Less: Operating expenses :				
General and Administrative expenses	140	144	+ 4	+ 2.86
Selling expenses	160	180	+ 20	+ 12.50
Total operating expenses (2)	**300**	**324**	**+ 24**	**+ 8.00**
Operating profit (1 – 2) (3)	**370**	**476**	**+ 106**	**+ 28.65**
Less: Non-operating expenses				
Interest paid	50	60	+ 10	+ 20.00
Total Non-operating expenses (4)	**50**	**60**	**+ 10**	**+ 20.00**
Profit before taxes (3 – 4) (5)	**320**	**416**	**+ 96**	**+ 30.00**
Income tax paid	140	160	+ 20	+ 14.28
Profit after taxes (6)	**180**	**256**	**+ 76**	**+ 42.22**

Profitability position of a company :

The analysis reveals that the company’s operational efficiency is satisfactory. The company is able to maintain growth rate of 19% in the gross margin and 42% in net margin.

Illu.6 : From the following information, prepare a vertical income statement:

Sales Rs.60, 000; Cost of goods sold Rs.35, 000; Operating expenses Rs.12, 000; Non operating expenses Rs.4, 000; Rate of tax 50%.

Solution :

Vertical Income Statement

Particulars	Amount Rs.	Percentage
Sales	**60,000**	**100.00**
Less: **Cost of goods sold**	**35,000**	**58.00**
Gross profit	25,000	42.00
Less: **Operating expenses**	**12,000**	**20.00**
Operating profit	13,000	22.00
Less: **Non-operating expenses**	**4,000**	**7.00**
Net profit	9,000	15.00
Less: **Taxes 50%**	**4,500**	**7.5.00**
Profit after taxes	4,500	7.5.00

Illu.7 : The following are the particulars of income of a business unit for the year ended 31.12.2004 and 31.12.2005. Prepare comparative income statement and comment on profitability.

Particulars	**2004 (Rs.’000)**	**2005 (Rs.’000)**
Net sales	**785**	**900**
Cost of sales	**450**	**500**
Operating expenses :		
General Expenses	**70**	**72**

Selling expenses	**80**	**90**
Non – operating expenses :		
Interest paid	**25**	**30**
Income tax	**70**	**80**

Solution :

Comparative Income Statement for the years ending December 31, 2004 and 2005

Particulars	31st December		Increase / Decrease Rs.	Increase/ Decrease Rs.
	2004 Rs.	2005 Rs.		
Net Sales	785	900	+ 115	+ 14.65
Less: Cost of sales	450	500	+ 50	+ 11.00
Gross profit (1)	**335**	**400**	**+ 65**	**+ 19.4**
Less: Operating expenses :				
General expenses	70	72	+ 2	+ 2.8
Selling expenses	80	90	+ 10	+ 12.5
Total operating expenses	**150**	**162**	**+ 12**	**+ 8.0**
Operating profit (1 – 2)	185	238	+ 53	+ 28.6
Less: Interest paid	25	30	+ 5	+ 20.0
Tax paid before profit	**160**	**208**	**+ 48**	**+ 30.0**
Less: Income tax	70	80	+ 10	+ 14.3
Net profit after tax	**90**	**128**	**+ 38**	**+ 42.2**

Illu.8 : The following are the balance sheets of a company for the years 2003 and 2004. Prepare a comparative balance sheet and study the financial position of the company:

Balance Sheet as on 30th June 2003 and 2004.

Liabilities	***2003***	***2004***
	Rs.	***Rs.***
Equity share capital	**6,00,000**	**8,00,000**
Reserves and Surplus	**3,30,000**	**2,22,000**
Debentures	**2,00,000**	**3,00,000**

Long term loans	**1,50,000**	**2,00,000**
Bills payable	**50,000**	**45,000**
Sundry Creditors	**1,00,000**	**1,20,000**
Other current liabilities	**5,000**	**10,000**
	14,35,000	**16,97,000**
Assets	***2003***	***2004***
	Rs.	***Rs.***
Land & Buildings	**3,70,000**	**2,70,000**
Plant & Machinery	**4,00,000**	**6,00,000**
Fixtures & Fittings	**45,000**	**55,000**
Cash in hand & at Bank	**20,000**	**80,000**
Bills receivables	**1,50,000**	**90,000**
Sundry Debtors	**2,00,000**	**2,50,000**
Stock	**2,50,000**	**3,50,000**
Prepaid expenses	**-**	**2,000**
	14,35,000	**16,97,000**

Solution :

Comparative Balance Sheet of a company
for the year 2003 & 2004

	Year ending 31st December		**Increase/ Decrease (Amounts)**	**Increase/ Decrease (Percentage)**
	2003	**2004**		
Assets	**Rs.**	**Rs.**	**Rs.**	**Rs.**
Current Assets:				
Cash in hand and Bank	20,000	80,000	+60,000	+ 300.00
Bills receivable	1,50,000	90,000	-60,000	- 40.00
Sundry Debtors	2,00,000	2,50,000	+50,000	+ 25.00
Stock	2,50,000	3,50,000	+1,00,000	+ 40.00
Prepaid expenses	-	2,000	+2,000	- 100.00

Total Current Assets (1)	**6,20,000**	**7,72,000**	**+1,52,000**	**+ 24.52**
Fixed Assets:				
Land & Buildings	3,70,000	2,70,000	-1,00,000	- 27.03
Plant & Machinery	4,00,000	6,00,000	+2,00,000	+ 50.00
Fixture & Fittings	45,000	55,000	+ 10,000	+ 22.22
Total Fixed Assets (2)	**8,15,000**	**9,25,000**	**+1,10,000**	**+ 13.49**
Total Assets (1 + 2)	**14,35,000**	**16,97,000**	**+2,62,000**	**+ 18.26**
Liabilities & Capital	**Rs.**	**Rs.**	**Rs.**	**Rs.**
Current Liabilities:				
Bills Payable	50,000	45,000	-5,000	- 10.00
Sundry Creditors	1,00,000	1,20,000	+20,000	+ 20.00
Other current liabilities	5,000	10,000	+5,000	+ 100.00
Total Current Liabilities (1)	**1,55,000**	**1,75,000**	**+20,000**	**+ 12.90**
Liabilities:				
Long term loans:				
Debentures	2,00,000	3,00,000	+1,00,000	+ 50.00
Long-term loan on Mortgage	1,50,000	2,00,000	+50,000	+ 33.33
Total Long Term loans (2)	**3,50,000**	**5,00,000**	**+1,50,000**	**+ 42.86**
Share holders funds:				
Equity Share Capital	6,00,000	8,00,000	+2,00,000	+ 33.33
Reserve & Surplus	3,30,000	2,22,000	-1,08,000	- 32.73
Total Share holders Funds (3)	**9,30,000**	**10,22,000**	**+92,000**	**+ 9.90**
Total Liabilities (1+2+3)	**14,35,000**	**16,97,000**	**+2,62,000**	**+ 18.26**

Interpretation:

1. The comparative balance sheet of the company reveals that during 2004 their has been an increase in fixed assets of 1,10,000 i.e., 13.49% while long-term liabilities to outsiders have relatively increased by Rs.1, 50,000 and equity share capital has increased by Rs.2 lakhs. This fact depicts that the policy of the company is to purchase fixed assets from the long-term sources of finance thereby not affecting the working capital.

2. The current assets have increased by Rs.1, 52,000 i.e., 24.52% and cash has increased by Rs.60, 000. On the other hand, there has been an increase in inventories amounting to Rs.1 lakh. The current liabilities have increased only by Rs.20, 000 i.e., 12.9%. This further confirms that the company has raised long-term finances even for the current assets resulting in to an improvement in the liquidity position of the company.
3. Reserved and surplus have decreased from Rs.3, 30,000 to Rs.2, 22,000 i.e., 32.73% which shows that the company has utilized reserves and surpluses for the payment of dividends to shareholders either in cash or by the issue of bonus shares.
4. The overall financial position of the company is satisfactory.

Illu.9 : The following are the Balance Sheets of Vidhi Ltd., for the years ended 31.3.2001 and 31.3.2002:

Liabilities	***31.3.01 Rs.***	***31.3.02 Rs.***	***Assets***	***31.3.01 Rs.***	***31.3.02 Rs.***
Equity Capital	**1,00,000**	**1,65,000**	**Fixed Assets (Net)**	**1,20,000**	**1,75,000**
Preference capital	**50,000**	**75,000**	**Inventory**	**20,000**	**25,000**
Reserves	**27,500**	**25,000**	**Debtors**	**50,000**	**62,500**
Overdraft	**25,000**	**25,000**	**Bills receivable**	**10,000**	**30,000**
Creditors	**20,000**	**25,000**	**Prepaid expenses**	**5,000**	**6,000**
Provision for tax	**17,500**	**25,000**	**Cash in Bank**	**20,000**	**26,500**
			Cash in hand	**5,000**	**15,000**
	2,30,000	**3,40,000**		**2,30,000**	**3,40,000**

Prepare a comparative Balance Sheet and comment.

Solution :

Comparative Balance Sheet of Vidhi Ltd. for the year ended 31-3-01

Particulars	***31-3-01***	***31-3-02***	***Increase/ decrease Rs.***	***Increase/ decrease Rs.***
Current Assets:				
Inventory	20,000	25,000	(+) 5,000	(+) 25%
Debtors	50,000	62,500	(+) 12,500	(+) 25%
Bills receivable	10,000	30,000	(+) 20,000	(+) 200%
Prepaid expenses	5,000	6,000	(+) 1,000	(+) 20%
Cash in bank	20,000	26,500	(+) 6,500	(+) 32.5%
Cash in hand	5,000	15,000	(+) 10,000	(+) 200%
Total Current Assets (A)	1,10,000	1,65,000	(+) 55,000	(+) 50%
Current Liabilities:				
Overdraft	25,000	25,000	NIL	NIL
Creditors	20,000	25,000	(+) 5,000	(+) 25%
Provision for tax	17,500	25,000	(+) 6,500	(+) 42.86%
Total Current Liabilities (B)	62,500	75,000	(+) 12,500	(+) 20%
Working Capital A – B	47,500	90,000	(+) 42,500	(+) 89.47%
Add: Fixed assets (Net)	12,000	1,75,000	(+) 55,000	(+) 45.83%
Capital employed	1,67,500	2,65,000	(+) 97,500	(+) 58.21%
Less: Long term liabilities	-	-	-	-
Shareholder funds	1,67,500	2,65,000	(+) 97,500	(+) 58.21%
Proof:				
Equity capital	1,00,000	1,65,000	(+) 65,000	(+) 65%
Preference capital	50,000	75,000	(+) 25,000	(+) 50%
Reserves	17,500	25,000	(+) 7,500	(+) 42.86%
	1,67,500	**2,65,000**	**(+) 97,500**	**(+) 58.21%**

Comment on financial position: Compared with 2001 and 2002 total current assets increased by 50% and current liabilities increased by 20% working capital is increase by

58.21%. Share capital is increased by 65% of an amount available by issuing the shares in mostly used for working capital.

Illu.10 : From the following data prepare comparative balance sheets in vertical from as at 31-3-2004 and 31-3-2005 of Rao Ltd.

	2004 Rs.	2005 Rs.		2004 Rs.	2005 Rs.
Share capital	**70,000**	**80,000**	**Building**	**55,000**	**80,000**
P and L a/c	**20,000**	**20,000**	**Machinery**	**43,000**	**50,000**
Debentures	**20,000**	**30,000**	**Stock**	**25,000**	**5,000**
Other secured loans	**10,000**	**20,000**	**Debtors**	**15,000**	**10,000**
Creditors	**10,000**	**3,000**	**Cash**	**2,000**	**15,000**
Bank Overdraft	**8,000**	**4,000**			
O/s expenses	**2,000**	**3,000**			
	1,40,000	**1,60,000**		**1,40,000**	**1,60,000**

Also offer your comments.

Solution :

Comparative Balance Sheet of Rao Ltd. as at 31-3-04 & 31-3-05

Particulars	2004	2005	Change in Rs.	Change in %
I Assets :				
Current Assets :				
Stock	25,000	5,000	- 20,000	- 20.00
Debtors	15,000	10,000	- 5,000	- 33.33
Cash	2,000	15,000	+ 13,000	+ 650.00
Total Current assets (A)	**42,000**	**30,000**	**- 12,000**	**- 28.57**
Fixed Assets :				

	Building	55,000	80,000	+ 25,000	+ 45.45
	Machinery	43,000	50,000	+ 7,000	+ 16.28
	Total Fixed Assets (B)	**98,000**	**1,30,000**	**+ 32,000**	**+ 32.65**
	Investments :	**-**	**-**	**-**	**-**
	Total Investments ©	**-**	**-**	**-**	**-**
	Total Assets (A + B + C)	**1,40,000**	**1,60,000**	**+ 20,000**	**+ 14.29**
II	**Liabilities :**				
	Current Liabilities :				
	Creditors	10,000	3,000	- 7,000	- 70.00
	Bank Overdraft	8,000	4,000	- 4,000	- 50.00
	Outstanding expenses	2,000	3,000	+ 1,000	+ 50.00
	Total current Liabilities (A)	**20,000**	**10,000**	**- 10,000**	**- 50.00**
	Long term loans :				
	Debentures	20,000	30,000	+ 10,000	+ 50.00
	Other secured loans	10,000	20,000	+ 10,000	+ 100.00
	Total for long term loans (B)	**30,000**	**50,000**	**+ 20,000**	**+ 66.67**
	Shareholders Funds :				
	Share capital	70,000	80,000	+ 10,000	+ 14.29
	Profit & Loss a/c	20,000	20,000	-	-
	Total Shareholders Funds ©	**90,000**	**1,00,000**	**+ 10,000**	**+ 11.11**
	Total Liabilities (A+B+C)	**1,40,000**	**1,60,000**	**+ 20,000**	**+ 14.29**

Comment :

The comparative analysis of the Balance Sheet of Rao Ltd. reveals that in current assets the stock and debtors declined by 20% and 33.3% respectively during 2005 over the previous year. On the other hand, there was a substantial increase by 6.5 times in case of cash balances.

In fixed assets the buildings increased by 45% while the machinery also increased by 16% during the year 2005 over 2004, finally resulting in the increase of total assets by over 14%.

While coming to liabilities, the creditors and overdraft of the company declined by 70% and 50% respectively during 2005 over the previous year 2004. The outstanding expenses and long term loans, more particularly the other secured loans increased substantially. There was increase in the share capital of the company also. However, the profit and loss account remained same.

Even though the present financial position of the company is better of now there is a need to increase the turnover of current assets and profit of the company as early as possible.

Illu.11 : The following are the balance sheets of Hindustan Ltd. for the years ending 31st March 2004 and 2005 :

	2004 Rs.	2005 Rs.
Equity share capital	4,00,000	6,60,000
Preference share capital	2,00,000	3,00,000
Reserves	40,000	60,000
Profit & Loss a/c	30,000	40,000
Bank overdraft	1,00,000	1,00,000
Creditors	80,000	1,00,000
Provision for taxation	40,000	50,000
Proposed dividend	30,000	50,000
	9,20,000	13,60,000
Fixed assets less depreciation	4,80,000	7,00,000
Stock	80,000	1,00,000
Debtors	2,00,000	2,50,000
Bills receivable	40,000	1,20,000
Prepaid expenses	20,000	24,000
Cash in hand	80,000	1,06,000
Cash at bank	20,000	60,000
	9,20,000	13,60,000

Prepare the comparative Balance Sheet and study its financial position.

Solution :

Comparative Balance Sheet of Hindustan Ltd. as at 31st March 2004 and 2005

Particulars	2004	2005	Change in Rs.	Change in %
Assets :				
Current Assets :				
Stock	80,000	1,00,000	+ 20,000	+ 25.00
Debtors	2,00,000	2,50,000	+ 50,000	+ 25.00
Bills receivable	40,000	1,20,000	+ 80,000	+ 200.00
Prepaid expenses	20,000	24,000	+ 4,000	+ 20.00
Cash	80,000	1,06,000	+ 26,000	+ 32.50
Bank	20,000	60,000	+ 40,000	+ 200.00
Total current assets (1)	**4,40,000**	**6,60,000**	**+ 2,20,000**	**+ 50.00**
Fixed assets :				
Fixed assets less depreciation	4,80,000	7,00,000	+ 2,20,000	+ 48.83
Total Fixed assets (2)	**4,80,000**	**7,00,000**	**+ 2,20,000**	**+ 48.83**

Total Assets	**9,20,000**	**13,60,000**	**+ 4,40,000**	**+ 47.83**
II. Liabilities				
Current liabilities :				
Bank overdraft	1,00,000	1,00,000	-	-
Creditors	80,000	1,00,000	+ 20,000	+ 25.00
Provision for taxation	40,000	50,000	+ 10,000	+ 25.00
Provides dividend	30,000	50,000	+ 20,000	+ 66.67
Total current liabilities (3)	**2,50,000**	**3,00,000**	**+ 50,000**	**+ 20.00**
Shareholders Funds :				
Equity capital	4,00,000	6,60,000	+ 2,60,000	+ 65.00
Pre. Capital	2,00,000	3,00,000	+ 1,00,000	+ 50.00
Reserves	40,000	60,000	+ 20,000	+ 50.00
Profit and Loss a/c	30,000	40,000	+ 10,000	+ 33.33
Total shareholders funds (4)	**6,70,000**	**10,60,000**	**+ 3,90,000**	**+ 58.21**
Total Liabilities (3 + 4)	**9,20,000**	**13,60,000**	**+ 4,40,000**	**+ 47.83**

Interpretation of the analysis :

The interpretation of the comparative balance sheet of Hindustan Ltd. for the year 2004 and 2005 is given below.

1. The total current assets of the company increased by 50% during 2005 over the year 2004. In current assets there is substantial increase in bills receivable and bank balances.
2. There is also increase in the fixed assets of the company by around 49% during the same period.
3. The current liabilities of the company increased by 20%. However, the bank overdraft remain constant. While coming to the shareholders funds there was increase of shareholders funds by 58.2% during 2005 over the year 2004.
4. On the whole, the company is having good growth during 2005 over the year 2004. The financial position of the company is satisfactory in all respects.

Illu.12 : The following are the balance sheet of a company for the year 1995 and 1996. Comment on the financial position of the business with the help of comparative balance sheet :

Balance Sheet of Dream Land Co. as on 31st March

Liabilities	1995	1996	Assets	1995	1996
Share capital	**5,00,000**	**7,00,000**	**Buildings**	**5,00,000**	**6,00,000**
Reserve	**50,000**	**50,000**	**Machinery**	**2,00,000**	**3,50,000**
Profit and Loss a/c	**1,60,000**	**1,70,000**	**Stock**	**65,000**	**87,000**
8% Debentures	**1,00,000**	**1,00,000**	**Bills receivable**	**30,000**	**25,000**
Creditors	**1,00,000**	**1,70,000**	**Debtors**	**1,00,000**	**1,32,500**
Bills payable	**70,000**	**22,000**	**Bank**	**95,000**	**58,300**
Outstanding expenses	**20,000**	**48,000**	**Prepaid expenses**	**10,000**	**7,200**
	10,00,000	**12,60,000**		**10,00,000**	**12,60,000**

Solution :

Comparative Balance Sheet of Dreamland Company
as on 31st March 1995 and 1996

Particulars	1995 Rs.	1996 Rs.	Change in Rs.	Change in %
I. Assets :				
Current Assets :				
Stock	65,000	87,000	+22,000	+ 33.85
Debtors	1,00,000	1,32,500	+ 32,500	+ 32.50
Bills Receivable	30,000	25,000	(-) 5,000	(-) 16.67
Bank	95,000	58,300	(-) 36,700	(-) 38.63
Prepaid expenses	10,000	7,200	(-) 2,800	(-) 28.00
Total current assets (1)	**3,00,000**	**3,10,000**	**+ 10,000**	**+ 33.33**
Fixed Assets :				

Buildings	5,00,000	6,00,000	+ 1,00,000	+ 20.00
Machinery	2,00,000	3,50,000	+ 1,50,000	+ 75.00
Total fixed assets (2)	**7,00,000**	**9,50,000**	**+ 2,50,000**	**+ 35.71**
Total Assets (1 + 2)	**10,00,000**	**12,60,000**	**+ 2,60,000**	**+ 26.00**
II. Liabilities :				
Current Liabilities :				
Creditors	1,00,000	1,70,000	+ 70,000	+ 70.00
Bills payable	70,000	22,000	(-) 48,000	(-) 68.57
Outstanding expenses	20,000	48,000	+ 28,000	+ 140.00
Total Current liabilities (3)	**1,90,000**	**2,40,000**	**+ 50,000**	**+ 26.32**
Provisions (4)	**-**	**-**	**-**	**-**
Long-term loans : (5)	**-**	**-**	**-**	**-**
18% Debentures	1,00,000	1,00,000	-	-
Total Long-term debts	**1,00,000**	**1,00,000**	**-**	**-**
Shareholder’s funds (6)				
Share capital	5,00,000	7,00,000	+ 2,00,000	+ 40.00
General Reserve	50,000	50,000	-	-
Profit & Loss Appropriation a/c	1,60,000	1,70,000	+ 10,000	+ 6.25
Total current funds	**7,10,000**	**9,20,000**	**+ 2,10,000**	**+ 29.58**
Total Liabilities (3 + 4 + 5+ 6)	**10,00,000**	**12,60,000**	**+ 2,60,000**	**+ 26.00**

Working Notes :

Calculation of percentages

Similarly other percentages to be calculated.

$$= \frac{\text{Change in Rupees}}{\text{Amount of Base year (1994)}} \text{ x } 100$$

$$\text{For Example: } \frac{\text{Changing in current assets}}{\text{Total amount of current asses in 1994}} \text{ x } 100$$

$$= \frac{10,000}{3,00,000} \text{ x } 100 = 33.33\%$$

Change in working capital :

Current assets – current liabilities

1995 – Rs.3,00,000 – 1,90,000 = 1,10,000

1996 – Rs.3,10,000 – 2,40,000 = 70,000

- 40,000

$$= \frac{40,000}{3,00,000} \text{ x } 100 = -13.33\%$$

Interpretation of Results :

The comparative balance sheet of Dhanalakshmi Company for the years 1995 and 1996 reveals the following.

1. The current assets of the company increased by 33% in 1996 compare to the year 1995. In current assets the stock and the debtors increased during the year while the bills receivable, bank balance and prepaid expenses declined during the year.
2. In fixed assets the buildings as well as machinery increase during 1996 over the year 1995. The increase was substantially incase of machinery.
3. While coming to the current liabilities the outstanding expenses and the creditors increased substantially while the bills payable declined by 68.6% during 1996.
4. The company did not maintain any provision during both the years.
5. The long term debt of the company remain constant, while that of share capital increased by 40% during 1996 over the year 1995.
6. Thus, it can be concluded that the company is trying to grow faster and depending more on equity capital. The company is maintaining more current assets and it may be lead to the fall of the earnings of the company. Hence, the company should concentrate more on the turnover of the current assets for increasing the return of the company.

Illu.13 : The following are the balance sheets of Vindhya Ltd. for the years ended 31-3-2004 and 31-3-2005

Liabilities	31-3-04 Rs.	31-3-05 Rs.	Assets	31-3-04 Rs.	31-3-05 Rs.
Equity capital	**1,00,000**	**1,65,000**	**Fixed assets (net)**	**1,20,000**	**1,75,000**
Preference capital	**50,000**	**75,000**	**Inventory**	**20,000**	**25,000**
Reserves	**17,500**	**25,000**	**Debtors**	**50,000**	**62,500**
Overdraft	**25,000**	**25,000**	**Bills receivables**	**10,000**	**30,000**
Creditors	**20,000**	**25,000**	**Prepaid expenses**	**5,000**	**6,000**
Provision for tax	**17,500**	**25,000**	**Cash at Bank**	**20,000**	**26,500**
			Cash in hand	**5,000**	**15,000**
	2,30,000	**3,40,000**		**2,30,000**	**3,40,000**

Prepare a comparative balance sheet and comment.

Solution :

Comparative Balance Sheet of Vindya ltd. for the years ended 31-3-2004 and 31- 3- 2005

Particulars	31-3-04 Rs.	31-3-05 Rs.	Change in Rs.	Change in %
Assets :				
Current Assets :				
Inventory	20,000	25,000	+ 5,000	+ 25.00
Debtors	50,000	62,500	+ 12,500	+ 25.00
Bills receivable	10,000	30,000	+ 20,000	+ 200.00
Prepaid expenses	5,000	6,000	+ 1,000	+ 20.00
Cash in Bank	20,000	26,500	+ 6,500	+ 200.00
Cash in hand	5,000	15,000	+ 10,000	+ 200.00
Total Current Assets (1)	**1,10,000**	**1,65,000**	**+ 55,000**	**+ 50.00**
Fixed Assets :				
Net fixed Assets	1,20,000	1,75,000	+ 55,000	+ 45.83

Total Fixed assets (2)	**1,20,000**	**1,75,000**	**+ 55,000**	**+ 45.83**
Total assets (1 + 2) (3)	2,30,000	3,40,000	+ 1,10,000	+ 47.83
Liabilities :				
Current liabilities				
Overdraft	25,000	25,000	-	-
Creditors	20,000	25,000	+ 5,000	+ 25.00
Provision for tax	17,500	25,000	+ 7,500	+ 42.86
Total Current liabilities (4)	**62,500**	**75,000**	**+ 12,500**	**+ 20.00**
Share holder's funds				
Equity capital	1,00,000	1,65,000	65,000	+ 65.00
Preference capital	50,000	75,000	+ 25,000	+ 50.00
Reserves	17,500	25,000	+ 7,500	+ 42.86
Total share holders funds (5)	**1,67,500**	**2,65,000**	**+ 97,500**	**58.21**
Total Liabilities (4 + 5)	2,30,000	3,40,000	+ 1,10,000	+ 47.83

Comment :

The analysis of common size balance sheet of Ramu ltd. reveals the following.

1. The current assets of the company increase marginally from 47.8% during 2003 to 48.5% during 2004. Within current assets there is increase in bills receivables and cash. On the other hand, there was decline in stock, debtors and prepaid expenses.
2. The net fixed assets of the company decline slightly 52.2% to 51.5% during 2004 over the year 2003.
3. While coming to the liabilities the current liabilities of the company declined substantially 27.2% during 2004 to 22.1% during 2003. The shareholders funds on the other hand, increased from 43.5% to 48.5% during the same period.
4. The financial position of the company on the whole is satisfactory.

Illu.14 : Following are the Balance sheets for year 2005 and 2006. Prepare comparative balance sheet statement and comment on financial position.

Liabilities	2005 Rs.	2006 Rs.	Assets	2005 Rs.	2006 Rs.
6% Preference shares	**60,000**	**60,000**	**Land**	**20,000**	**20,000**
Equity share capital	**80,000**	**80,000**	**Building**	**60,000**	**54,000**
Reserves	**40,000**	**49,000**	**Plant**	**60,000**	**54,000**
Outstanding tax	**20,000**	**30,000**	**Furniture**	**20,000**	**28,000**
Sundry creditors	**30,000**	**40,000**	**Stock**	**40,000**	**60,000**
B/P	**10,000**	**15,000**	**Debtors**	**40,000**	**60,000**
Debentures	**20,000**	**30,000**	**Cash**	**20,000**	**28,000**
	2,60,000	**3,04,000**		**2,60,000**	**3,04,000**

Solution :

Comparative size Balance Sheet as on 31st Dec 2005 and 2006

Particulars	2005	2006	Change in Rs.	Change in Rs.
I. Assets :				
Current Assets :				
Stock	40,000	60,000	+ 20,000	+ 50.00
Debtors	40,000	60,000	+ 20,000	+ 50.00
Cash	20,000	28,000	+ 8,000	+ 40.00
Total current Assets (A)	**1,00,000**	**1,48,000**	**+ 48,000**	**+ 48.00**
Fixed Assets :				
Land	20,000	20,000	-	-
Buildings	60,000	54,000	- 6,000	- 10.00
Plant	60,000	54,000	- 6,000	- 10.00
Furniture	20,000	28,000	+ 8,000	+ 40.00

Total Fixed Assets (B)	**1,60,000**	**1,56,000**	**- 4,000**	**- 2.5**
Total of assets (A + B)	**2,60,000**	**3,04,000**	**+ 44,000**	**+ 16.92**
II. Liabilities :				
Current Liabilities				
Sundry creditors	30,000	40,000	+ 10,000	+ 33.33
B/P	10,000	15,000	+ 5,000	+ 50.00
Outstanding tax	20,000	30,000	+ 10,000	+ 50.00
Total current liabilities ©	**60,000**	**85,000**	**+ 25,000**	**+ 41.67**
Long term loans :				
Debtors	20,000	30,000	+ 10,000	+ 50.00
Total long- term loans (D)	**20,000**	**30,000**	**+ 10,000**	**+ 50.00**
Shareholder's funds				
6% Preference share capital	60,000	60,000	**-**	**-**
Equity share capital	80,000	80,000	**-**	**-**
Reserves	40,000	49,000	+ 9,000	+ 22.5
Total shareholders' funds (E)	**1,80,000**	**1,89,000**	**+ 9,000**	**+ 22.5**
Total liabilities (C + D + E)	**2,60,000**	**3,04,000**	**+ 44,000**	**+ 16.92**

Comments :

1. The analysis reveals that the current assets of the company increase substantially by 48% during 2006 over the year 2005.
2. On the other hand, the fixed assets of company decline substantially, even though there was substantial increase in the investment in furniture during the same period.
3. The current liabilities and the long term loans of the company also increase during 2006 over the year 2005. However, the preference share capital and equity share capital almost remain constant. There was increase in only in reserves.
4. Thus, the financial position of the company even though satisfactory for the time being, requires the increase in the investment in fixed assets and this can be financed by increasing long term debt of the company.

Illu.15 : The following are the Balance Sheet of Rashmi Company for the years 2001 and 2002. Prepare a comparative Balance Sheet and study the financial position of the company.

Balance Sheet as on 31-12-2001 and 31-12-2002

Liabilities	2001 Rs.	2002 Rs.
Equity share capital	12,00,000	16,00,000
Reserve and Surplus	6,60,000	4,44,000
Debentures	4,00,000	6,00,000
Long- term loans	3,00,000	4,00,000
Bills payable	1,00,000	90,000
Sundry creditors	2,00,000	2,40,000
Other current liabilities	10,000	20,000
Total	28,70,000	33,94,000

Assets	2001 Rs.	2002 Rs.
Land and Buildings	7,40,000	5,40,000
Plant and Machinery	8,00,000	12,00,000
Fixtures and Fittings	90,000	1,10,000
Cash in hand and at Bank	40,000	1,60,000
Bills receivable	3,00,000	1,80,000
Sundry debtors	4,00,000	5,00,000
Stock	5,00,000	7,00,000
Prepaid expenses	Nil	4,000
Total	28,70,000	33,94,000

Solution :

Comparative Balance Sheet of Rashmi Co. Ltd. for the year 2001 and 2002

Particulars	Year ending 31st December		Increase / Decrease (Amounts)	Increase / decrease (Percentage)
	2001	2002		
Assets :				
Current Assets :				
Cash in hand and at bank	40,000	1,60,000	+ 1,20,000	+ 300.00
Bills and receivable	3,00,000	1,80,000	- 1,20,000	- 40.00
Sundry debtors	4,00,000	5,00,000	+ 1,00,000	+ 25.00
Stock	5,00,000	7,00,000	+ 2,00,000	+ 40.00
Prepaid expenses	-	4,000	+ 4,000	- 100.00
Total current assets (1)	**12,40,000**	**15,44,000**	**+ 3,04,000**	**+ 24.52**
Fixed Assets :				
Land & Buildings	7,40,000	5,40,000	- 2,00,000	- 27.03
Plant and Machinery	8,00,000	12,00,000	+ 4,00,000	+ 50.00
Furniture & Fixtures	40,000	50,000	+ 10,000	+ 25.00
Other fixed assets	50,000	60,000	+ 10,000	+ 20.00
Total fixed assets (2)	**16,30,000**	**18,50,000**	**+ 2,20,000**	**+ 13.49**
Total Assets (1 + 2)	**28,70,000**	**33,94,000**	**+ 5,24,000**	**+ 18.26**
Liabilities & Capital				
Current Liabilities :				
Bills payable	1,00,000	90,000	- 10,000	- 10.00
Sundry Creditors	2,00,000	2,40,000	+ 40,000	+ 20.00
Other current liabilities	10,000	20,000	+ 10,000	+ 100.00
Total Current liabilities (3)	**3,10,000**	**3,50,000**	**+ 40,000**	**+ 12.90**
Long-term loans :				
Debentures	4,00,000	6,00,000	+ 2,00,000	+ 50.00
Long-term loan on Mortgage	3,00,000	4,00,000	+ 1,00,000	+ 33.33
Total Long-term loans (4)	**7,00,000**	**10,00,000**	**+ 3,00,000**	**+ 42.86**
Shareholder’s funds:				

Equity share capital	12,00,000	16,00,000	+ 4,00,000	+ 33.33
Reserves & Surplus	6,60,000	4,44,000	- 2,16,000	- 32.73
Total shareholder's funds: (5)	**18,60,000**	**20,44,000**	**+ 1,84,000**	**+ 9.90**
Total Liabilities (3 + 4 + 5)	**28,70,000**	**33,94,000**	**+ 5,24,000**	**+ 18.26**

Interpretation of results :

1. The financial analysis of the company during the year 2002 reveals that there is an increase of 18% in total assets, 24% in current assets and 13.5% in fixed assets. The long term loans of the company increased by 43%. On the other hand, the current liabilities increased by 12.9% only. The company's equity capital was increased by 33%. Since the company withdrew from reserves, the increase in shareholders' funds is 10% only.
2. On the whole, the company's financial position is under control. But from future point of view there is every need to increase the turnover of current assets in addition to bringing changes in the capital structure of the company.

Illu.16 : The following are the Balance Sheets for the years 2003 and 2004. Prepare comparative Balance Sheet and comment on the financial position:

	2003 (Rs.)	2004 (Rs.)		2003 (Rs.)	2004 (Rs.)
6% Preference shares	30,000	30,000	Land	10,000	10,000
Equity share capital	40,000	40,000	Building	30,000	27,000
Reserve	20,000	24,500	Plant	30,000	27,000
Outstanding Tax	10,000	15,000	Furniture	10,000	14,000
Creditors	15,000	20,000	Stock	20,000	30,000
Bills payable	5,000	7,500	Debtors	20,000	30,000
Debentures	10,000	15,000	Cash	10,000	14,000
	1,30,000	1,52,000		1,30,000	1,52,000

Solution :

Comparative Balance Sheet for the years 2003 and 2004

Particulars	2003	2004	Increase / decrease	% of increase/ decrease
(i) Assets :				
(A) Current Assets :				
Stock	20,000	30,000	+ 10,000	+50%
Debtors	20,000	30,000	+ 10,000	+ 50%
Cash	10,000	14,000	+ 4,000	+ 40%
Total of current assets (1)	**50,000**	**74,000**	**24,000**	**48%**
(B) Fixed Assets :				
Land	10,000	10,000	-	-
Buildings	30,000	27,000	- 3,000	- 10%
Plant	30,000	27,000	- 3,000	- 10%
Furniture	10,000	14,000	+ 4,000	+ 40%
Total Fixed Assets (2)	**80,000**	**78,000**	**- 2,000**	**- 2.5%**
Total assets (1 + 2) (3)	**1,30,000**	**1,52,000**	**22,000**	**16.92**
(II) Liabilities :				
(C) Current liabilities :				
Outstanding tax	10,000	15,000	+ 5,000	+ 50%
Creditors	15,000	20,000	+ 5,000	+ 33.33%
Bills payable	5,000	7,500	+ 2,500	+ 50%
Total of Current Liabilities (4)	**30,000**	**42,500**	**+ 12,500**	**+ 41.67%**
(D) Long term debts :				
Debentures	10,000	15,000	+ 5,000	+ 50%
Total long term debts (5)	**10,000**	**15,000**	**+ 5,000**	**50**
(E) Owners funds :				
Preference share	30,000	30,000	-	-
Equity share capital	40,000	40,000	-	-
Reserves	20,000	24,500	+ 4,500	+ 22.5%

Total of owners fund (6)	90,000	94,500	+4,500	+ 5%
Total liabilities (4 + 5 + 6)	**1,30,000**	**1,52,000**	**22,000**	**16.92**

Interpretation :

The Comparative balance Sheet for the years 2003 and 2004 reveal the following :

1. The current assets of the firm have increased from Rs.50,000 in 2003 to Rs.74,000 in 2004 which shows an increase of Rs.48%. The current liabilities have increased from Rs.30,000 to Rs.42,500 registering an increase of 41.67%. Hence, it can be inferred that long term funds have been diverted, which indicates the satisfactory liquidity position of the firm.
2. The fixed assets for the year 2004 has been showing a deline of 2.5% whereas debentures increased by 50% and owners funds increased by 5%. It reveals the satisfactory long term financial position of the firm.
3. The reserves have increased from Rs.20,000 to Rs.24,500 at the end of December 2004, which registered an increase of 22.5%. It indicates the profitability position of the firm.

16.8.2 Common size Statement Analysis :

Common size statement is financial tool of studying key changes and trends in financial position of a company. In common size statement, each time is stated as a percentage of the total of which that item is a part, each percentage exhibits the relation of the individual item to its respective total. Therefore, the common size percentage method represents a type of ratio analysis. That is why this statement is also designated as ``component percentage'' or ``100 per cent statement''. Preparation of the common size statement involves two steps.

(i) State the total of the statement as 100 per cent

(ii) Compute the ratio of each item to the total in the statement.

Common-size statement can be used both for vertical and horizontal analysis. Comparison of the company's position with the related industry as a whole is possible with the help of vertical analysis. In contrast, horizontal analysis facilitates trend analysis of the financial position of the company over the past several years. There are two types of common size statements, viz., common size income statement and balance sheet.

(a) Common Size Income Statement :

The Common size income statement is designed to exhibit what proportion of the net sales has been absorbed by the various costs and expenses incurred by the enterprise, and the proportion that remains as net income. For preparing common size income statement all items in the income statement are expressed in percentage form in terms of total sales.

The common size income statements for a number of years are very helpful in pointing out efficiencies and inefficiencies. It must be remembered that the percentages may be influenced by variation in sale prices, higher or lower cost of goods acquired or both. Common size percentages must be supplemented for making detailed analysis of financial and operating data. It will, therefore, be more useful to use trend ratios as well as individual ratios showing relationships between balance sheet and income statement items.

(b) Common Size Balance Sheet :

Common size balance sheet is prepared by stating the total assets as 100 and reducing individual assets into percentages of the total. likewise, individual liability items are expressed as percentages of the total liabilities. Thus, the common size balance sheet percentage shows the relation of each asset item to total assets and of each liability percentage shows the relation of each asset item to total assets and of each liability and owner's equity item to total liabilities and owners' equity. A closer scrutiny of the common size balance Sheet discloses that this statement focuses on two important aspects.

1. Distribution pattern of liabilities as between current liabilities, long term liabilities and equity capital.
2. Distribution pattern of assets as between current assets, fixed assets and others

   The common size balance sheet analysis can, of course, be carried further and extended to the study of what portion of a sub-group, rather than the total, an item is. Thus, in assessing the liquidity of current assets, it may be of interest to know not only what proportion of total assets is inventories, but also what proportion of current assets to represented by this asset. A study of common size statement of the company with that of a competitive company or the industry would show whether or not the company is managing assets efficiently. An analysis of the pattern of distribution of liabilities reveals the debt equity position of the company too large a percentage of liabilities and a relatively low margin of safety for creditors.

While common size statements do not focus light on the relative sizes of individual companies which are compared, the problem of actual comparability between them is a matter to be resolved by the analyst judgement. Comparison of common size statement of a single enterprise over the years is valuable in that it reveals the changing proportions of components within group of assets and liabilities. However, care must be exercised in interpreting such changes and the trend which discloses.

Illu.17 : Following are the income statements of X & Co. Ltd. and Y & Co. Ltd. For the year ended 31st December 2003.

Expenses	*X & Co. Ltd. Rs.*	*Y & Co. Ltd. Rs.*	*Incomes*	*X & Co. Ltd. Rs.*	*Y & Co. Ltd. Rs.*
To Opening Stock	**20,000**	**32,000**	**By Sales**	**3,84,000**	**4,31,000**
To Purchases	**1,40,000**	**1,60,000**	**By Closing stock**	**40,000**	**45,000**
To Wages	**40,000**	**30,000**	**By Profit on sale of land**	**8,000**	**14,000**
To Manufacturing expenses	**20,000**	**25,000**	**By Discount**	**2,000**	**6,000**
To Salaries	**45,000**	**48,000**			
To Office expenses	**15,000**	**1,7000**			
To Selling expenses	**42,000**	**50,000**			
To Depreciation	**20,000**	**28,000**			
To Loss by fire	**10,000**	**5,000**			
To Interest paid	**18,000**	**23,000**			
To Profit	**64,000**	**78,000**			
	4,34,000	**4,96,000**		**4,34,000**	**4,96,000**

You are required to prepare common size income statement.

Solution :

Comparative Income Statement of X & co. ltd. and Y & Co. Ltd.
For the year ended 31-12-2003

	Particulars	X & Co. Ltd. Amount Rs.	%	Y & Co. Ltd. Amount Rs.	%
	Sales (A)	3,84,000	100	4,31,000	100
Less:	Cost of goods sold:				
	Opening Stock	20,000	5.21	32,000	7.42
Add:	Purchases	1,40,000	36.46	1,60,000	37.12
	Wages	40,000	10.42	30,000	6.96
	Manufacturing expenses	20,000	5.20	25,000	5.80
		2,20,000	**57.29**	**2,47,000**	**57.30**
Less:	Closing Stock	40,000	10.42	45,000	10.44
	Cost of goods sold (B)	1,80,000	46.87	2,02,000	46.86
	Gross profit (A) – (B) = (c)	**2,04,000**	**53.13**	**2,29,000**	**53.14**
Less:	Operating Expenses:				
	Salaries	45,000	11.72	48,000	11.14
	Office Expenses	15,000	3.91	17,000	3.94
	Selling expenses	42,000	10.94	50,000	11.60
	Depreciation	20,000	5.21	28,000	6.50
Total operating expenses (D)		**1,22,000**	**31.78**	**1,43,000**	**33.18**
	(c) – (D)	82,000	21.35	86,000	19.95
Add:	Operating Income:				
	Discount	2,000	0.52	6,000	1.39

	Operating Profit Before Interest and Tax (OPBIT)	84,000	21.87	92,000	21.34
Less:	Non – operating expenses Loss by fire	10,000	2.60	5,000	1.16
		74,000	**19.27**	**87,000**	**20.18**
Add:	Non – operating Income:				
	Profit on sale of land	8,000	2.08	14,000	3.25
	Earnings before interest and Tax	**82,000**	**21.35**	**1,01,000**	**23.43**
Less:	Interest paid	18,000	4.69	23,000	5.34
	Earnings after taxation	**64,000**	**16.66**	**78,000**	**18.09**

Illu.18 : Following are the income statements of a company for the year ending March 31, 2003, 2004 :

	2003 (Rs. '000)	**2004 (Rs. '000)**
Sales	**500**	**700**
Miscellaneous income	**20**	**15**
	520	**715**
Expenses :		
Cost of sales	**325**	**510**
Office expenses	**20**	**25**
Selling expenses	**30**	**45**
Interest	**25**	**30**
	400	**610**
Net Profit	**120**	**105**
	520	**715**

Prepare common size income statement and analyse the results.

Solution :

Common size income statement

for the year ended 31st December 2003 and 2004

Particulars	2003		2004	
	Rs.	**%**	**Rs.**	**%**
Sales	5,00,000	100.00	7,00,000	100.00
Less: Cost of Sales	3,25,000	65.00	5,10,000	72.86
Gross Profit (A)	**1,75,000**	**35.00**	**1,90,000**	**27.14**
Operating expenses :				
Office expenses	20,000	4.00	25,000	3.57
Selling expenses	30,000	6.00	45,000	6.43
Total operating expenses (B)	**50,000**	**10.00**	**70,000**	**10.00**
Operating income :				
Miscellaneous income	20,000	4.00	15,000	2.14
Total operating income ©	**20,000**	**4.00**	**15,000**	**2.14**
Operating profit (A – B + C) (D)	**1,45,000**	**29.00**	**1,35,000**	**19.29**
Non-operating expenses	**-**	**-**	**-**	**-**
Interest	25,000	5.00	30,000	4.29
Total Non-operating expenses (E)	**25,000**	**5.00**	**30,000**	**4.29**
Profit before taxes (D – E) (F)	**1,20,000**	**24.00**	**1,05,000**	**15.00**
Taxation provision @ 50% (assumed)	60,000	12.00	52,500	7.50
Profit after taxes	**60,000**	**12.00**	**52,500**	**7.50**

Comments :

The common size income statement reveals the following.

The gross total of the company decline substantially from 35% during 2003 to 27% to during 2004. Due to the increase in the cost of sales. The operating profit of the company also declined from 29% to 19% during the same period. The profit before tax also decline and the PAT was 7.5% during 2004 as against 12% during 2003. Therefore the overall profitability of the company is declining. There is an urgent need on the part of the company to increase its operational efficiency.

Illu.19 : Following are the Balance Sheets of Ramu Ltd. for the year ended 31st December 2003 and 2004 :

Liabilities	2003 Rs.	2004 Rs.
Equity capital	1,00,000	1,65,000
Preferential capital	50,000	75,000
Reserves	10,000	15,000
Profit and loss a/c	7,500	10,000
Bank overdraft	25,000	25,000
Creditors	20,000	25,000
Provision for taxation	10,000	12,500
Proposed dividend	7,500	12,500
	2,30,000	3,40,000

Assets	2003 Rs.	2004 Rs.
Fixed Assets (net)	1,20,000	1,75,000
Stock	20,000	25,000
Debtors	50,000	62,500
Bills receivable	10,000	30,000
Prepaid expenses	5,000	6,000
Cash at bank	20,000	26,500
Cash in hand	5,000	15,000
	2,30,000	3,40,000

Prepare a common –size balance sheet and interpret the same.

Solution :

Common – size Balance Sheet of Ramu Ltd.

as on 31st December, 2003 and 2004

Particulars	2003		2004	
	Rs.	%	Rs.	%
Assets :				
Current Assets :				
Stock	20,000	8.7	25,000	7.4
Debtors	50,000	21.7	62,500	18.4
Bills Receivable	10,000	4.4	30,000	8.8
Prepaid expenses	5,000	2.2	6,000	1.8
Bank	20,000	8.7	26,500	7.8
Cash	5,000	2.2	15,000	4.4
Total current assets (A)	**1,10,000**	**47.8**	**1,65,000**	**48.5**
Fixed Assets :				
Net fixed assets	1,20,000	52.2	1,75,000	51.5
Total Fixed Assets (B)	**1,20,000**	**52.2**	**1,75,000**	**51.5**
Total Assets (A + B)	**2,30,000**	**100.00**	**3,40,000**	**100.0**
Liabilities :				
Current Liabilities				
Bank overdraft	25,000	10.9	25,000	7.4
Creditors	20,000	8.7	25,000	7.4
Provision for taxation	10,000	4.4	12,500	3.7
Proposed dividend	7,500	3.3	12,500	3.7
Total current liabilities ©	**62,500**	**27.2**	**75,000**	**22.1**
Share holder’s funds :				
Equity capital	1,00,000	43.5	1,65,000	48.5
Preference Capital	50,000	21.8	75,000	22.1

Reserves	10,000	4.4	15,000	4.4
Profit and Loss a/c	7,500	3.6	10,000	2.9
Total shareholders funds (D)	**1,67,500**	**72.8**	**2,65,000**	**77.9**
Total liabilities (C + D)	**2,30,000**	**100.0**	**3,40,000**	**100.0**

Comment :

The analysis of common size balance sheet of Ramu ltd. reveals the following.

1. The current assets of the company increase marginally from 47.8% during 2003 to 48.5% during 2004. Within current assets there is increase in bills receivables and cash. On the other hand, there was decline in stock, debtors and prepaid expenses.
2. The net fixed assets of the company decline slightly 52.2% to 51.5% during 2004 over the year 2003.
3. While coming to the liabilities the current liabilities of the company declined substantially 27.2% during 2004 to 22.1% during 2003. The shareholders funds on the other hand, increased from 43.5% to 48.5% during the same period.
4. The financial position of the company on the whole is satisfactory.

Illu.20 : The following are the Balance Sheet of Gayatri & Co. for the year 2003 and 2004:

Liabilities	***2003***	***2004***	***Assets***	***2003***	***2004***
	Rs.	***Rs.***		***Rs.***	***Rs.***
Bills payable	**25,000**	**38,000**	**Bank a/c**	**50,000**	**70,000**
Creditors	**75,000**	**1,00,000**	**Debtors**	**1,00,000**	**1,50,000**
Outstanding Taxes	**50,000**	**75,000**	**Stock**	**1,00,000**	**1,50,000**
6% Debentures	**50,000**	**75,000**	**Land**	**50,000**	**50,000**
6% Preference share capital	**1,50,000**	**1,50,000**	**Buildings**	**1,50,000**	**1,35,000**
Equity share capital	**2,00,000**	**2,00,000**	**Machinery**	**1,50,000**	**1,35,000**

Reserve	**1,00,000**	**1,22,000**	**Furniture**	**50,000**	**70,000**
	6,50,000	**7,60,000**		**6,50,000**	**7,60,000**

From the above information's, prepare common size Balance Sheet.

Solution :

Common Size Balance Sheet of Gayathri Co.
For the year 2003 & 2004

	2003		2004	
Particulars	**Amount**	**%**	**Amount**	**%**
Assets:				
Current Assets:				
Bank	50,000	7.69	70,000	9.21
Debtors	1,00,000	15.38	1,50,000	19.74
Stock	1,00,000	15.39	1,50,000	19.74
Total Current Assets (1)	**2,50,000**	**38.46**	**3,70,000**	**48.69**
Fixed Assets:				
Land	50,000	7.69	50,000	6.58
Buildings	1,50,000	23.08	1,35,000	17.76
Machinery	1,50,000	23.08	1,35,000	17.76
Furniture's	50,000	7.69	70,000	9.21
Total Fixed Assets (2)	**4,00,000**	**61.54**	**3,90,000**	**51.31**
Total Assets (1 +2)	**6,50,000**	**100.00**	**7,60,000**	**100.00**
Liabilities:				
Current Liabilities:				
Bills payable	25,000	3.85	38,000	5.00
Creditors:	75,000	11.54	1,00,000	13.16
Outstanding taxes	50,000	7.69	75,000	9.87
Total Current Liabilities (1)	**1,50,000**	**23.08**	**2,13,000**	**28.03**
Long term debts:				

6% Debentures	50,000	7.69	75,000	9.87
Total long term debts (2)	**50,000**	**7.69**	**75,000**	**9.87**
Shareholder's funds:				
6% Preference share capital	1,50,000	23.08	1,50,000	19.74
Equity Share Capital	2,00,000	30.77	2,00,000	26.31
Reserve	1,00,000	15.38	1,22,000	16.05
Total shareholder's fund (3)	**4,50,000**	**69.23**	**4,72,000**	**62.10**
Total Liabilities (1+2+3)	**6,50,000**	**100.00**	**7,60,000**	**100.00**

Comment: Overall financial position of the company in 2004 is satisfactory as there is slight raise in current assets with slight fall in fixed assets and slight rise in current liabilities as well as shareholder funds.

Illu.21 : The Balance Sheets of M Company and N Company as on 31-3-2004 are given below. Prepare common size Balance Sheet and compare the financial position of the companies.

Balance Sheet as on 31-3-04

Liabilities	***M Com.***	***N Com***	***Assets***	***M Com***	***N Com***
	Rs.	***Rs.***		***Rs.***	***Rs.***
Pref. Share capital	**1,20,000**	**1,60,000**	**Buildings**	**80,000**	**1,23,000**
Equity share capital	**1,50,000**	**4,00,000**	**Machinery**	**2,34,000**	**6,00,000**
Reserve fund	**14,000**	**18,000**	**Short-term**		
Debentures	**1,50,000**	**1,30,000**	**Investments**	**1,000**	**40,000**
Bills payable	**2,000**	**NIL**	**Stock**	**10,000**	**25,000**
Creditors	**12,000**	**4,000**	**Debtors**	**4,000**	**8,000**
Outstanding expenses	**15,000**	**6,000**	**Prepaid expenses**	**1,000**	**2,000**
Proposed	**10,000**	**90,000**	**Cash & Bank**	**8,000**	**10,000**

dividends					
	4,38,000	**8,08,000**		**4,38,000**	**8,08,000**

Solution :

Common size Balance Sheet as on 31-3-04

Particulars	***M Company***		***N Company***	
	Amount Rs.	***Percentage***	***Amount Rs.***	***Percentage***
Assets side:				
Current Assets:				
Short term investments	1,000	0.23%	40,000	4.95%
Stock	10,000	2.28%	25,000	3.09%
Debtors	4,000	0.91%	8,000	0.99%
Prepaid expenses	1,000	0.23%	2,000	0.25%
Cash & Bank	8,000	1.83%	10,000	1.24%
Total Current Assets (A)	24,000	5.48%	85,000	10.52%
Fixed Assets:				
Buildings	80,000	18.26%	1,23,000	15.22%
Machinery	3,34,000	76.26%	6,00,000	74.26%
Total Fixed Assets (B)	4,14,000	94.52%	7,23,000	89.48%
Total Assets (A) + (B)	4,38,000	100%	8,08,000	100%
Liabilities side:				
Current Liabilities:				
Bills payable	2,000	0.46%	NIL	NIL
Creditors	12,000	2.74%	4,000	0.50%
Outstanding expenses	15,000	3.42%	6,000	0.74%
Proposed dividends	10,000	2.26%	90,000	11.14%
Total Current liabilities (c)	39,000	8.90%	1,00,000	12.38%

Long term liabilities:				
Debentures	1,15,000	26.26%	1,30,000	16.09%
Total long term liabilities (D):	1,15,000	26.26%	1,30,000	16.09%
Capital & Reserves:				
Preference share capital	1,20,000	27.40%	1,60,000	19.80%
Equity share capital	1,50,000	34.24%	4,00,000	48.50%
Reserve fund	14,000	3.20%	18,000	2.23%
Total Capital & Reserves (E)	2,84,000	64.84%	5,78,000	71.53%
Total liabilities (C)+(D)+(E)	4,38,000	100%	8,08,000	100%

Illu.21 : The following are the Balance Sheet of Gayathri & Co. for the year 2003 and 2004.

Liabilities	**2003 Rs.**	**2004 Rs.**	**Assets**	**2003 Rs.**	**2004 Rs.**
Bills payable	**25,000**	**38,000**	**Bank**	**50,000**	**70,000**
Creditors	**75,000**	**1,00,000**	**Debtors**	**1,00,000**	**1,50,000**
Outstanding taxes	**50,000**	**75,000**	**Stock**	**1,00,000**	**1,50,000**
6% Debentures	**50,000**	**75,000**	**Land**	**50,000**	**50,000**
6% preference share capital	**1,50,000**	**1,50,000**	**Buildings**	**1,50,000**	**1,35,000**
Equity share capital	**2,00,000**	**2,00,000**	**Machinery**	**1,50,000**	**1,35,000**
Reserves	**1,00,000**	**1,22,000**	**Furniture**	**50,000**	**70,000**
	6,50,000	**7,60,000**		**6,50,000**	**7,60,000**

From the above information, Prepare common size Balance Sheet.

Solution :

Common size Balance Sheet of Garyatri & Co. as at 31st December 2003 and 2004

Particulars	2003		2004	
	Amount Rs.	**%**	**Amount Rs.**	**%**
Assets :				
Current Assets :				
Bank	50,000	7.69	70,000	9.21
Debtors	1,00,000	15.38	1,50,000	19.74
Stock	1,00,000	15.39	1,50,000	19.74
Total current assets (1)	**2,50,000**	**38.46**	**3,70,000**	**48.69**
Fixed Assets :				
Land	50,000	7.69	50,000	6.58
Buildings	1,50,000	23.08	1,35,000	17.76
Machinery	1,50,000	23.08	1,35,000	17.76
Furniture	50,000	7.69	70,000	9.21
Total fixed assets (2)	**4,00,000**	**61.54**	**3,90,000**	**51.31**
Total Assets (1 + 2)	**6,50,000**	**100.00**	**7,60,000**	**100.00**
Liabilities :				
Current Liabilities :				
Bills payable	25,000	3.85	38,000	5.00
Creditors	75,000	11.54	1,00,000	13.16
Outstanding taxes	50,000	7.69	75,000	9.87
Total Current liabilities (3)	**1,50,000**	**23.08**	**2,13,000**	**28.03**
Long-term debts :				
6% Debentures	50,000	7.69	75,000	9.87
Total Long-term debts (4)	**50,000**	**7.69**	**75,000**	**9.87**
Shareholder's funds				
6% Preference share capital	1,50,000	23.08	1,50,000	19.74
Equity share capital	2,00,000	30.77	2,00,000	26.31
Reserve	1,00,000	15.38	1,22,000	16.05
Total shareholder's funds (5)	**4,50,000**	**69.23**	**4,72,000**	**62.10**
Total Liabilities (3 + 4 + 5)	**6,50,000**	**100.00**	**7,60,000**	**100.00**

Interpretation of results :

The common size balance sheet of Gayatri & co. reveals that the current assets of the company increased substantially from 38.5% during 2003 to 48.7% during 2004. In current assets the debtors and stock increased substantially, while bank balances though increase, the increase was marginal.

The fixed assets of the company declined from 61.5% to 51.3% during the same period. In fixed the fall was substantial in buildings and machinery followed by land. However, there was a slight increase in furniture during the same period.

The current liabilities of the company increased during 2004 over the year 2003. In the same way there was increase in the long term debts also. On the other hand, the shareholders funds of the company declined during the same period.

The company therefore, should be cautious in the management of its financial resources. Even though the present position is satisfactory.

Illu.22 : The following are the balance sheets of Surya Ltd. And Aditya Ltd. As on 31-12-2005:

Liabilities	Surya Ltd. Rs.	Aditya Ltd. Rs.	Assets	Surya Ltd. Rs.	Aditya Ltd. Rs.
Equity share capital	**3,75,000**	**2,55,000**	**Land & Buildings**	**5,25,000**	**4,12,500**
Preference share Capital	**1,80,000**	**1,20,000**	**Plant and Machinery**	**4,05,000**	**4,50,000**
Reserves and surplus	**75,000**	**1,05,000**	**Temporary Investment**	**1,08,000**	**18,000**
Loans	**5,25,000**	**4,18,500**	**Book debt**	**71,250**	**37,500**
Bills payable	**37,500**	**21,000**	**Prepaid expenses**	**53,100**	**-**
Sundry creditors	**27,000**	**12,000**	**Cash and Bank balance**	**73,035**	**31,500**
Outstanding Expense	**12,885**	**6,750**			
Unclaimed dividend	**3,000**	**11,250**			
	12,35,385	**9,49,500**		**12,35,385**	**9,49,500**

Present the data in common –size form and make comments.

Solution :

The Comparative Common-size Balance Sheet of Surya Ltd. and Aditya Ltd.

as on 31-12-2005

Particulars	Surya Ltd.		Aditya Ltd.	
	Amount Rs.	%	Amount Rs.	%
Assets :				
Current Assets :				
Temporary investments	1,08,000	8.74	18,000	1.90
Book debts	71,250	5.77	37,500	3.95
Prepaid expenses	53,100	4.30	-	-
Cash & Bank	73,035	5.91	31,500	3.32
Total current assets (1)	**3,05,385**	**24.72**	**87,000**	**9.17**
Fixed Assets :				
Land & Buildings	5,25,000	42.50	4,12,500	43.44
Plant and Machinery	4,05,000	32.78	4,50,000	47.39
Total fixed assets (2)	**9,30,000**	**75.28**	**8,62,500**	**90.83**
Total Assets (1 + 2)	**12,35,385**	**100.00**	**9,49,500**	**100.00**
Liabilities :				
Current Liabilities :				
Bills payable	37,500	3.04	21,000	2.22
Sundry Creditors	27,000	2.19	12,000	1.26
Outstanding expenses	12,885	1.04	6,750	1.18
Unclaimed dividend	3,000	0.24	11,250	1.18
Total Current liabilities (3)	**80,385**	**6.51**	**51,000**	**5.37**
Long-term loans :				
Loans	5,25,000	42.50	4,18,500	44.08
Total Long-term loans (4)	**5,25,000**	**42.50**	**4,18,500**	**44.08**
Shareholder’s funds:				
Equity capital	3,75,000	30.35	2,55,000	26.86

Preference capital	1,80,000	14.57	1,20,000	12.64
Reserves & Surplus	75,000	6.07	1,05,000	11.05
(3) Total shareholder's funds:	**6,30,000**	**50.99**	**4,80,000**	**50.55**
Total Liabilities (1 + 2 + 3)	**12,35,385**	**100.00**	**9,49,500**	**100.00**

Comment :

The comparative common size balance sheet of Surya Ltd. and Aditya Ltd. reveal the following.

1. The Surya Ltd. maintained 24.7% in current assets. On the other hand, the Aditya Ltd. 9.2% of its total resources in current assets.
2. The Surya Ltd. invested less in fixed assets and more in current assets and the opposite is the direction in case of Aditya Ltd.

Both the companies are maintaining almost the same level of current liabilities and long term loans. However, the Surya Ltd. is depending more on equity capital while the Aditya Ltd. depends is more on reserves.

16.8.3 Trend Analysis :

Trend analysis depicts behaviour of the ratios over a period of time and the trends in the operation of the enterprise. The trend figures are index figures giving a bird's eye view of the comparative data by presenting it over a period of time. This is horizontal analysis of financial statement, often called as Pyramid Method of ratio analysis 0- a guide to yearly changes. Under this form of analysis, generally financial ratios are studied for a specified number of years. It is a dynamic analysis depicting the changes over a stated period. Their method of analysis is one of `direction'. The working of trend analysis involves the following three steps.

1. selection of a base year
2. Assignment of an index number of 100 to each item of the base year
3. Calculation of percentage relationship that each item bears to the same item in the base year.

Objectives of Trend Analysis :

It is of great significance in making comparative study of financial statements for several years. It shows the direction of movement over a period of time. The following are the objectives of Trend analysis.

(i) To draw a comparative chart and make a comprehensive study of Financial statements.

(ii) Trend analysis indicates the direction of movement or changes in item over a long period of time.

(iii) To have a better view of things unaffected by short term fluctuations, by studying a long term trend percentage analysis.

Limitations of Trend Analysis :

This tool has its own limitations. It is necessary that the base year must be a normal year. Further, it places all items at par in the base year with the result that a variation in the least significant item may receive an emphasis out of all proportion to its importance.

Illu.23 : From the following particulars, compute trend percentages:

	Year			
	2000	**2001**	**2002**	**2003**
Equity share capital	**10**	**12**	**14**	**16**
Preference share capital	**10**	**10**	**10**	**10**
Reserves	**05**	**08**	**05**	**10**
Creditors	**03**	**05**	**13**	**12**

Solution :

Liabilities	**Trend percentage**				**Rs. In lakhs (Base Year 2000)**			
	2000	**2001**	**2002**	**2003**	**2000**	**2001**	**2002**	**2003**
	Rs.	**Rs.**	**Rs.**	**Rs.**	**%**	**%**	**%**	**%**
Equity share capital	10	12	14	16	100	100	140	160
Pref. Share capital	10	10	10	10	100	100	100	100

Reserves	05	08	05	10	100	160	100	200
Creditors	03	05	13	12	100	167	433	400
Total	**28**	**35**	**42**	**48**	**100**	**125**	**150**	**171**

Illu.24 : From the following data, prepare a statement showing trend percentages.

	2000	**2001**	**2002**	**2003**
	Rs.	**Rs.**	**Rs.**	**Rs.**
Sales	**10,000**	**9,500**	**12,000**	**13,000**
Cost of goods sold	**6,000**	**5,890**	**6,960**	**7,280**
Gross Profit	**4,000**	**3,610**	**5,040**	**5,720**

Solution :

Trend Ratios

	2000	**2001**	**2002**	**2003**	**2000**	**2001**	**2002**	**2003**
	Rs.	**Rs.**	**Rs.**	**Rs.**	**%**	**%**	**%**	**%**
Sales	10,000	9,500	12,000	13,000	100	95-0	120.0	130.0
(-) Cost of goods sold	6,000	5,890	6,960	7,280	100	98-16	116.0	121.33
Gross profit	**4,000**	**3,610**	**5,040**	**5,720**	**100**	**90-25**	**126.0**	**143.0**

16.9 QUESTIONS :

1. Define Financial Statement.
2. What are the objectives of financial statements?
3. What are the different methods used in financial statements?
4. State the objectives and limitations of Financial statement analysis.
5. What are financial statements? Explain various methods of financial statement analysis.
6. Write short notes on Comparative Financial Statements.

7. What do you understand by `Common size Statements
8. What are trend ratios? How are they computed?

16.10 EXERCISES :

1. Prepare the comparative Income statement from the following:

Income Statement

Particulars	***1998 Rs.***	***1999 Rs.***	***Particulars***	***1998 Rs.***	***1999 Rs.***
To Cost of goods sold	1,00,000	1,00,000	By Sales	2,50,000	3,00,000
To Operational expenses	75,000	1,10,000			
To Interest	25,000	20,000			
To Tax	25,000	30,000			
To Net Profit	25,000	40,000			
	2,50,000	**3,00,000**		**2,50,000**	**3,00,000**

2. From the 31-3- 1998 and 31-3-1999 following information of ‘A’ Ltd., Prepare Comparative Balance Sheet and write the interpretation:

	(Rs.’000)	
Liabilities	***1998***	***1999***
Share Capital	2,400	3,600
Reserves	1,872	2,124
Debentures	300	600
Long-term debt	900	1,530
Bills payable	1,530	702
Other liabilities	42	60

	7,044	8,616
	(Rs.'000)	
Assets	***1998***	***1999***
Land and Buildings	1,620	1,040
Plant	1,860	4,716
Furniture	54	108
Other fixed Assets	120	180
Long –term Investments	276	354
Bank	708	60
Bills receivable	1254	1120
Stock	960	780
Prepaid expenses	18	18
Other current assets	174	2240
	7,044	8,616

3. A firm has a profit before interest and taxes of Rs.5, 00,000, interest charges Rs.1,00,000 and taxes Rs.50, 000. Calculate earnings after taxes.

4. The Balance Sheet of Hero Co. and Villan Co. compare the financial position of the companies by means of common size Balance Sheet.

Liabilities	**Hero Co. Rs.**	**Villain Co. Rs.**
Preferential share Capital	1,00,000	1,50,000
Equity share Capital	1,70,000	5,10,000
Reserve fund	10,000	8,000
P & L a/c	4,000	10,000
Debentures	1,00,000	1,00,000
Bills payable	17,000	30,000
Creditors	27,000	10,000

Provision for taxes	20,000	1,10,000
	4,48,000	**9,28,000**

Assets	Hero Co. Rs.	Villain Co. Rs.
Buildings	75,000	1,00,000
Machinery	2,25,000	4,00,000
Furniture	5,000	23,000
Motor car	1,00,000	2,00,000
Inventory	11,000	65,000
Debtors	5,000	10,000
Cash at Bank	26,150	1,28,800
Cash in hand	850	1,200
	4,48,000	**9,28,000**

5. Prepare a common size statement from the following balance sheet.

Liabilities	***1999***	***2000***	***Assets***	***1999***	***2000***
Capital	1,000	1,200	Debtors	450	390
Capital reserve	90	185	Cash	200	15
General reserve	500	450	Stock	320	250
Sinking fund	90	100	Investments	300	250
Debentures	450	650	Buildings	800	1,400
Creditors	200	150	Land	198	345
Other liabilities	15	20	Furniture	77	105
	2,345	**2,755**		**2,345**	**2,755**

6. From the following prepare a comparative statement:

	31-3-01 Rs.	***31-3-02 Rs.***		***31-3-01 Rs.***	***31-3-02 Rs.***
To cost of goods sold	1,00,000	1,20,000	By Sales	2,00,000	2,50,000
To Office expenses	20,000	20,000			
To Selling expenses	10,000	20,000			
To Other expenses	30,000	-			
To Net Profit	40,000	90,000			
	2,00,000	**2,50,000**		**2,00,000**	**2,50,000**

7. From the following particulars compute trend percentages:

	2000	**2001**	**2002**	**2003**
Cash	20	24	16	28
Debtors	40	50	65	80
Stock	60	80	70	100
Other Current Assets	10	15	25	30

16.11 SUGGESTED READINGS

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Chapter – 17

Funds Flow Analysis

Objectives :

After reading this unit we should be able to :

- Understand the meaning of funds flow statement
- Know how to prepare the funds flow statement
- Prepare the statement of changes in working capital

Structure :

17.1 Introduction

17.2 Meaning of Funds Flow Statement

17.3 Preparation of Funds Flow Statement

17.4 Statement of Changes in Working capital

17.5 Questions

17.6 Exercises

17.7 Suggested Readings

17.1 INTRODUCTION :

A funds flow statement is a valuable aid to financial manager or a creditor in evaluating the uses of funds by a firm and in determining how these funds are financed. Such a statement provides an efficient method for the financial Manager to assess the growth f the firm and its resulting financial needs and to determine the best way to finance those needs. In nut-shell, funds statements are very useful in planning, intermediate and long-term financing. It is an important tool of working capital analysis also.

17.2 MEANING OF FUNDS FLOW STATEMENT :

The funds flow statement is an attempt to report the flow of funds between various assets and liabilities and owner's capital during an accounting period. In the words of Smith and Brown, ``Funds flow statement is prepared to indicate in summary form, changes (and trends if prepared regularly) occurring in items of financial position between two different balance sheet dates. `Such a statement is prepared to indicate the increases and utilisation of resources of a business during an accounting period. A funds flow statement is also known by various other names such as `Statement of Sources and Application of Funds,; `Where Gone statement,' Statement of Funds Generated and Expended' etc.

The funds statement is a method by which we study the net funds flow between two points in time. These points conform to beginning and ending financial statements, dates for whatever period of examination is relevant – quarter or a year. Here, the term funds denotes the `working capital'. Working capital is often regarded as the differences of current assets and current liabilities. Hence, the term `funds' and working capital, both are synonymous.

17.2.1 Meaning of Funds :

The term funds has been defined in a number of ways. Some interpret funds as cash only and fund flow statement prepared on this basis is called a cash flow statement. IN this type of statement only inflow and outflow of cash is taken into account. For its preparation the net income is adjusted for the amount of the increase or decrease in accounts receivable, accounts payable, inventories, accrued revenue and expenses, etc., This type of statement is prepared specially for the use of management in predicting future cash requirements.

On the other hand, in a funds flow statement, a broader approach is adopted interpreting the term, `funds'. It is conceived as all financial resources and it extends the concept to include all the current assets of financial resources. The narrower definition of fund, such as cash flow often leads to the omission of such items which do not directly affect cash or working capital. But in a broader sense, the assets of a firm represent the net uses of funds and its liabilities and net worth represents net resources. Thus, the term funds flow refers to changes in working capital. Changes in working capital position of a business units are significant considerations in the analysis of operating results and financial condition. The sources of working capital, the disposition of working capital and the composition of the working capital at the end of the period, are all important factors in evaluating past activities and in judging a company's ability to prosper in the future. A funds flow statement helps a lot in such appraisal.

In view of this definition of `funds' it becomes necessary to understand the terms of `current assets' , `current liabilities,' non current assets' non current liabilities.

Current Assets : For accounting purposes, the term current assets means cash and such other assets which are reasonably expected to be realised in cash or sold or consumed during the normal operating cycle of the business. Thus, the term current assets includes the following.

1. Cash and bank balances
2. Accounts receivable i.e., debtors and bills receivable
3. Stocks of raw material, work in progress and finished goods
4. Temporary investments or short term investments
5. Prepayment, e.g., prepaid rent, unexpired insurance etc.
6. Accrued incomes

Current Liabilities : The term current liabilities includes all such obligations which are likely to mature within one year in the normal course of business operations and which are paid out of current assets or by creating current liabilities. The broad categories of current liabilities are :

1. Accounts payable, i.e., creditors and bills payables
2. Outstanding expenses, e.g., wages, rent, commission etc.
3. Bank overdrafts
4. Income received in advance
5. Dividend payable
6. Provision for doubtful debts
7. Provision for taxation – may be current or non current
8. Proposed dividends – may be current or non current

Provision against current against current assets, such as, provision for bad and doubtful debts, etc., are also treated as current liabilities because such provisions reduce the amount of current assets.

Non Current assets : All those assets which are not current asset are termed as non current assets. Examples are :

1. Goodwill
2. Land and buildings
3. Plant and machinery
4. Furniture
5. Long term investments
6. Profit and loss account (debit balance)
7. Preliminary expenses
8. Patent rights and trade marks
9. Discount on the issue of shares and debentures

Non-Current Liabilities : This category includes all those liabilities which are not current liabilities. Examples are :

1. Share capital – equity and preference
2. Debentures and long term loans
3. Profit and loss account (credit balance)
4. Provision and reserves e.g., capital reserves, general reserves, sinking fund etc.
5. Proposed dividends
6. Share premium account
7. Share forfeiture accounts.

17.3. PREPARATION OF FUNDS FLOW STATEMENT

Broadly speaking the funds flow statement consists of two parts – (1) Schedule of changes in working capital and (2) statement of sources and uses of funds.

17.3.1. Form of Funds Flow statement :

Generally, this statement is prepared in two formats – in Report Form or in an account form.

Report form Funds Flow Statement

Sources of Funds	**Rs.**
1. From operation	X x x
2. Issue of Share capital	X x x
3. Issue of Debentures	X x x
4. Long term loans	X x x
5. Sales of fixed assets	X x x
6. Non Trading Receipts, e.g., dividends or donation received	X x x
7. Decrease in working capital (as per schedule	X x x
Total	**X x x**
Application of Funds	
1. Trading losses	X x x
2. Redemption of Pref. Share capital/Debentures	X x x
3. Repayment of long term debts	X x x
4. Purchase of any fixed assets	X x x
5. Non trading payments	X x x
6. Increase in working capital (as per schedule)	X x x
Total	**X x x**

Account Form of Funds Flow statement

Sources of Funds	**Rs.**	**Applications of Funds**	**Rs.**
1. Funds from operations	X x x	1. Trading loss (if any)	X x x
2. Issue of share capital	X x x	2. Redemption of Pref. Shares	X x x
3. Issue of Debentures	X x x	3. Repayment of Loans	X x x
4. Long term loans	X x x	4. Purchase of any fixed asset	X x x
5. Sale of fixed assets	X x x	5. Non-trading payments	X x x
6. Non trading receipts	X x x	6. Increase in working capital	X x x

7. Decrease in working capital	X x x		
	X x x		**X x x**

17.3.2. Sources of Funds :

The transactions that increase working capital are sources of funds. Some of them are :

(1) Funds from Operations : Sales are the main source of funds inflow and at the same time fund flow out for expenses and costs of goods sold. Thus, funds are increased if inflow from sales exceeds the outflow for expenses and goods sold. It can be calculated as under :

Calculations of Funds from Operations :

		Rs.	**Rs.**
	Net profit shown as Profit & Loss a/c		**X x x**
Add :	1. Depreciation and Depletion	X x x	
	2. Amortization of Fictitious and Intangible assets	X x x	
	3. Provision for taxation	X x x	
	4. Appropriation of Retained Earnings	X x x	
	5. Dividend (if any paid out of current year's profit)	X x x	
	6. Loss on sale of any asset (if debited) to Profit & Loss a/c	X x x	
	7. Any other non cash expenditure	X x x	X x x
			X x x
Less :	1. Dividend received from outside	X x x	
	2. Retransfer of excess provisions`	X x x	
	3. Profit on sale of fixed assets (if already credited to P & L a/c)	X x x	
	4. Appreciation in the value of fixed assets (if credited in P & L a/c)	X x x	X x x
	Funds From Operations		X x x

a) Depreciation and Depletion : The treatment of depreciation and depletion of non current assets like building and machinery is a difficult problem. These items are non fund items because they are nothing to do with current assets and current liabilities. So to delete their effect, their amount should be credited to current year's profit in order to find out the amount of funds.

b) Amortization of non fund items : This also does not affect the flow of funds. The amortization of some items belonging to the category of deferred revenue expenditure or intangible assets is simply a write off entry. This affects the profits as per financial accounts but does not affect the funds from profit. Profit, therefore should be corrected by adding all such writing-off in order to calculate correct amount of funds from profit.

c) Provision for taxation : Provision for taxes made from current year's profit also does not affect the flow of funds. So it must be added back to the profits.

d) Appropriation of Retained Earnings It is simply a transfer entry. It must also be added back to the profit in order to compute funds from incomes.

The following items are deducted from profits –

(i) Dividends Received from outside : Generally, it is credited in P & L a/c. As it is a non-business income, it is shown separately as a source of funds so, here, it must be deducted from profits.

(ii) Retransfer of Excess Provisions : It does not create any inflow of funds, while profits are increased. Hence, it must be deducted.

(iii) Profit or Gain on Sale of Assets : Any profit or gain on the sale of non current assets (which has been credited to P & L a/c) must be eliminated from the amount of profit.

(iv) Appreciation in the Value of Fixed Assets : If any fixed asset has been appreciated during the year and credited to Profit and Loss a/c, it must also be deducted from the profit.

(2) Issue of Share capital : Increase in Share capital increases funds but shares issued and allotted for other than cash consideration do not generate fund.

(3) Issue of Debentures or Long term loans : Issue of debentures accepted public deposits and long term loans, all results in the increase of funds. If debentures like shares have been allotted to somebody for other than cash consideration, they will not be taken into account.

(4) Sale of Fixed Assets : When any fixed assets (like land, building, machinery, furniture or long term investments) is sold cash or account receivable is increased without increasing current liability, it results in the generation of funds.

(5) Non Trading Receipts : Any non trading receipt like dividends, rent, interest etc., received in cash also increased funds.

17.3.3 Application of Funds :

The following are the examples for the application of fund

1. **Purchase of Any fixed Asset :** If any fixed asset is purchased for cash, it is an application of funds.
2. **Payment of Loans etc.** : Any repayment of loan or redemption of preference shares is also an application of funds.
3. **Payment of Dividend :** Payment of dividend reduces the working capital and is an application of funds. But mere declaration of dividend (proposed dividends) is not an application of fund.
4. **Increase in working capital :** Increase in working capital is also an application of funds because it increase the investment in current sales.

17.4 STATEMENT OF CHANGES IN WORKING CAPITAL

The Statement of changes in working capital denotes the movement of working capital. The variation or change in working capital is shown by a schedule of working capital. As working capital represents the excess of current assets over current liabilities, the schedule of working capital shows the aggregate of current assets, current liabilities at the end of two years and then the increase or decrease in working capital is measured by comparing the net working capital. Its performance is as follows :

Schedule of Changes in Working Capital

Particulars	Previous Year	Current Year	On Working capital	
	Rs.	Rs.	Increase	Decrease
Current assets :				
1.				
2.				
3.				
4.				

Total current Assets				
Current Liabilities				
1.				
2.				
3.				
4.				
Total Current Liabilities				
Net Working capital				
Increase/Decrease in working capital				

Illu.1 : Prepare a statement of changes in working capital from the following Balance Sheets of Manjit and Company Limited.

Liabilities	2002 Rs.	2003 Rs.	Assets	2002 Rs.	2003 Rs.
Equity capital	2,50,000	2,50,000	Fixed assets	3,00,000	3,50,000
Debentures	1,85,000	2,25,000	Long – term Investments	1,00,000	50,000
Tax payable	38,500	21,500	Work in progress	40,000	45,000
Accounts payable	48,000	96,000	Stock – in – trade	75,000	1,12,500
Interest payable	18,500	22,500	Accounts receivable	35,000	70,000
Dividend payable	25,000	17,500	Cash	15,000	5,000
	5,65,000	6,32,500		5,65,000	6,32,500

Solution :

Schedule showing changes is working capital

Particulars	2002 Rs.	2003 Rs.	Increase/ Decrease Rs.	Increase/ Decrease Rs.
Current assets:				
Work – in – progress	40,000	45,000	5,000	-
Stock in trade	75,000	1,12,500	37,500	-
Accounts receivable	35,000	70,000	35,000	-
Cash	15,000	5,000	-	10,000
Total current Assets (A)	**1,65,000**	**2,32,500**		
Current Liabilities:				
Tax payable	38,500	21,500	17,000	-
Accounts payable	48,000	96,000	-	48,000
Interest payable	18,500	22,500	-	4,000
Dividend payable	25,000	17,500	7,500	-
Total Current liabilities (B)	**1,30,000**	**1,57,500**		
Working capital (A) – (B)	**35,000**	**75,000**		

Net increase is working capital = Rs.75,000 – 35,000 = Rs.40,000

Illu.2 : Prepare a statement of changes in working capital:

Assets	2000 Rs.	2001 Rs.	Liabilities	2000 Rs.	2001 Rs.
Cash	**60,000**	**94,000**	**Capital**	**4,00,000**	**5,00,000**
Debtors	**2,40,000**	**2,30,000**	**Creditors**	**1,40,000**	**90,000**
Stock	**1,60,000**	**1,80,000**	**P & L a/c**	**20,000**	**46,000**
Land	**1,00,000**	**1,32,000**			
	5,60,000	**6,36,000**		**5,60,000**	**6,36,000**

Solution :

Statement of changes in working capital

Particulars	2000 (Rs.)	2001 (Rs.)	Changes in Working Capital	
			Increase Rs.	Decrease Rs.
Current Assets:				
Cash	60,000	94,000	34,000	-
Debtors	2,40,000	2,30,000	-	10,000
Stock	1,60,000	1,80,000	20,000	-
Total Current Assets (A)	**4,60,000**	**5,04,000**		
Current Liabilities:				
Creditors	1,40,000	90,000	50,000	-
Total Current Liabilities (B)	**1,40,000**	**90,000**		
Working Capital (A) - (B)	**3,20,000**	**4,14,000**	-	-
Net increase in working capital	94,000	-	-	94,000
Total	**4,14,000**	**4,14,000**	**1,04,000**	**1,04,000**

Illu.3 : The following were comparative balance sheets of XYZ co. as on 31st March 2002 and 2003:

Liabilities	31-3-2002 Rs.	31-3-2003 Rs.	Assets	31-3-2002 Rs.	31-3-2003 Rs.
Share capital	**50,000**	**53,000**	**Fixed Assets**	**50,000**	**60,000**
Profit & Loss a/c	**28,000**	**37,000**	**Investments**	**6,000**	**9,000**
General Reserve	**10,000**	**12,000**	**Stock**	**31,000**	**36,000**
12% Debentures	**16,000**	**23,000**	**Accounts Receivable**	**24,000**	**27,000**
Creditors	**20,000**	**21,000**	**Cash**	**20,000**	**25,000**

Provision for tax	**12,000**	**15,000**	**Preliminary expenses**	**5,000**	**4,000**
	1,36,000	**1,61,000**		**1,36,000**	**1,61,000**

Additional Information:

(a) Depreciation provided on fixed assets Rs.15,000

(b) Tax paid during the year Rs.13,000

(c) Interim dividend paid Rs.5,000

Prepare Funds Flow Statement.

Solution :

Schedule of changes in working capital

	31-3-2002 Rs.	31-3-2003 Rs.	Increase (+) Rs.	Decrease (-) Rs.
Current Assets:				
Cash	20,000	25,000	5,000	
Accounts Receivable	24,000	27,000	3,000	
Stock	31,000	36,000	5,000	
	75,000	**88,000**		
Current Liabilities:				
Creditors	20,000	21,000		1,000
Working capital	55,000	67,000		
Net increase in working capital	12,000			12,000
	67,000	**67,000**	**13,000**	**13,000**

Dr. **Share Capital Account** **Cr.**

	Rs.		Rs.
To Balance c/d	53,000	By Balance b/d	50,000
		By Bank	3,000
	53,000		**53,000**

Dr. **General Reserve Account** **Cr.**

	Rs.		Rs.
To Balance c/d	12,000	By Balance b/d	10,000
		By Profit & Loss a/c	2,000
	12,000		**12,000**

Dr. **12% Debentures Account** **Cr.**

	Rs.		Rs.
To Balance c/d	23,000	By Balance b/d	16,000
		By Bank	7,000
	23,000		**23,000**

Dr. **Provision for taxation Account** **Cr.**

	Rs.		Rs.
To Bank (Tax)	13,000	By Balance b/d	12,000
To Balance c/d	15,000	By Profit & Loss a/c	16,000
	28,000		**28,000**

Dr. **Fixed Assets Account** **Cr.**

	Rs.		Rs.
To Balance b/d	50,000	By Depreciation (P& L a/c)	15,000
To Bank a/c	25,000	By Balance c/d	60,000
	75,000		**75,000**

Dr. **Investment Account** **Cr.**

	Rs.		Rs.
To Balance b/d	6,000	By Balance c/d	9,000
To Bank a/c	3,000		
	9,000		**9,000**

Dr. **Preliminary Expenses Account** **Cr.**

	Rs.		Rs.
To Balance b/d	5,000	By P & L a/c	1,000
		By Balance c/d	4,000
	5,000		**5,000**

Calculation of funds from operations:

	Rs.	Rs.
Balance of P & L a/c (31-3-2003)		37,000
Add: Non – cash and non – operating items:		
i. Transfer to general reserve	2,000	
ii. Provision for tax	16,000	
iii. Depreciation fixed assets	15,000	
iv. Interim dividend paid	5,000	
v. Preliminary expenses written off	1,000	39,000
		76,000
Less: P & L a/c balance on 31-3-2002		28,000
Funds from operations		**48,000**

Funds Flow Statement for the year ending 31-3-2003

Sources	Rs.	Application	Rs.
Issue of shares	3,000	Purchase of Fixed Assets	25,000
Issue of Debentures	7,000	Purchase of Investments	3,000
Funds from operations	48,000	Tax paid	13,000
		Interim Dividend paid	5,000
		Net increase in working capital	12,000
	58,000		**58,000**

Illu.4 : Extracts from Balance Sheets:

Particulars	**As on 31-3-1999 Rs.**	**As on 31-3-2000Rs.**
Equity shares capital	**4,00,000**	**5,00,000**
8% preference share capital	**2,00,000**	**1,50,000**

Additional information:

(i) Equity shares were issued during the year against the purchase of machinery Rs.50,000

(ii) 8% preference shares worth Rs.1,00,000 were redeemed during the year.

Prepare necessary accounts to find out sources / applications of funds.

Solution :

Dr. Equity Share Capital Account Cr.

Particulars	**Rs.**	**Particulars**	**Rs.**
To Balance c/d	5,00,000	By Balance b/d	4,00,000
		By Machinery a/c	50,000
		By Cash	50,000
	5,00,000		**5,00,000**

Dr. 8% Preference Share Capital Account Cr.

Particulars	**Rs.**	**Particulars**	**Rs.**
To Cash	1,00,000	By Balance b/d	2,00,000
To Balance c/d	1,50,000	By Cash	50,000
	2,50,000		**2,50,000**

Working Notes:

1. Issue of shares against the purchase of Machinery is neither a source nor application of funds.
2. Issue of shares worth Rs.50,000 for cash a source of funds.
3. Redemption of preference shares of Rs.50,000 is a source of funds.

Illu.5 : The following is the Balance Sheet of X Ltd. on 31st December 1992 and 1991: -

Liabilities	1991	1992	Assets	1991	1992
Equity share capital	3,00,000	4,00,000	Goodwill	1,15,000	90,000
Preference shares	1,50,000	1,00,000	Land and Buildings	2,00,000	1,70,000
General Reserve	40,000	70,000	Machinery	80,000	2,00,000
Profit & Loss a/c	30,000	48,000	Sundry debtors	1,60,000	2,00,000
Proposed Dividend	42,000	50,000	Stock	77,000	1,09,000
Sundry Creditors	55,000	83,000	Bills receivable	20,000	30,000
Bills payable	20,000	16,000	Cash in hand and at Bank	25,000	18,000
Provision for taxation	40,000	50,000			
	6,77,000	8,17,000		6,77,000	8,17,000

Additional Information:

(a) **Depreciation written off on Machinery and Buildings in 1992 were Rs.10,000 and Rs.20,000 respectively.**

(b) **During the year 1992 Dividends Rs.20,000 were paid**

(c) **The income tax paid during the year was Rs.35,000.**

Prepare Funds Flow Statement.

Solution :

Working Notes:

Dr. **Equity Share Capital Account** **Cr.**

Particulars	Rs.	Particulars	Rs.
31-12-1992		1-1-1992	
To Balance b/d	4,00,000	By Balance b/d	3,00,000
		31-12-1992	
		By Cash (Bal. Fig)	1,00,000

	4,00,000		**4,00,000**

Dr. **8% Redeemable Preference share Capital** **Cr.**

Particulars	**Rs.**	**Particulars**	**Rs.**
31-12-1992		1-1-1992	
To Cash (Bal. Fig)	50,000	By Balance b/d	1,50,000
To Balance c/d	1,00,000		
	1,50,000		**1,50,000**

Dr. **General Reserve Account** **Cr.**

Particulars	**Rs.**	**Particulars**	**Rs.**
31-12-1992		1-1-1992	
To Balance c/d	70,000	By Balance b/d	40,000
		31-12-1992	
		By P & L a/c (Bal. Fig)	30,000
	70,000		**70,000**

Dr. **Provision for taxation Account** **Cr.**

Particulars	**Rs.**	**Particulars**	**Rs.**
31-12-1992		1-1-1992	
To Cash Balance c/d	35,000	By Balance b/d	40,000
To Balance c/d	50,000	31-12-1992	
		By P & L a/c (Bal. Fig)	45,000
	85,000		**85,000**

Dr. **Goodwill Account** **Cr.**

Particulars	**Rs.**	**Particulars**	**Rs.**
1-1-1992		31-12-1992	
To Balance b/d	1,15,000	By P & L a/c (Bal. Fig)	25,000

		By Balance c/d	90,000
	1,15,000		**1,15,000**

Dr. L & B Account Cr.

Particulars	Rs.	Particulars	Rs.
1-1-1992		31-12-1992	
To Balance b/d	2,00,000	By P & L a/c (Dep.)	20,000
		By Cash (sale) (bal. Fig)	10,000
		By Balance c/d	1,70,000
	2,00,000		**2,00,000**

Dr. Machinery Account Cr.

Particulars	Rs.	Particulars	Rs.
1-1-1992		31-12-1992	
To Balance b/d	80,000	By P & L a/c (Dep.)	10,000
31-12-1992		By Balance c/d	2,00,000
To Cash (Bal. Fig)	1,30,000		
	2,10,000		**2,10,000**

Funds from Operations:

Particulars	Rs.	Rs.
Balance of profit as per P & L a/c for the year ended 31-12-1992		**48,000**
Add: Non- Cash and Non – operating expenses:		
General Reserve	30,000	
Proposed dividend	50,000	
Interim dividend	20,000	
Provision for taxation	45,000	
Depreciation on Machinery & Buildings	30,000	
Goodwill written off	25,000	2,00,000

		2,48,000
Less: Non – Cash and Non – operating incomes		
NIL	-	-
		2,48,000
Less: Balance of Profit as per P & L a/c for the year ended 31-12-1991		30,000
Cash from operations		**2,18,000**

Statement of Sources and Uses for the year ended 31st December 1992

Particulars	**Rs.**	**Rs.**
Cash & Bank Balance as on 31-12-1991		**25,000**
Sources:		
Issue of equity shares	1,00,000	
Sale of building	10,000	
Increase in Creditors	28,000	
Cash from operations	2,18,000	3,56,000
		3,81,000
Uses:		
Redemption of 8% Preference shares	50,000	
Proposed dividend of 1991 paid (assumed)	42,000	
Income – Tax paid	35,000	
Plant purchased	1,30,000	
Increase in Debtors	40,000	
Increase in Stock	32,000	
Increase in Bills receivable	10,000	
Decrease in Bills payable	4,000	
Interim dividend paid	20,000	3,63,000
Cash and Bank balance on 31-12-2000		**18,000**

Illu.6 : Prepare a funds statement from the following particulars:

Assets	2000 Rs.	1999 Rs.	Liabilities	2000 Rs.	1999 Rs.
Cash	**36,000**	**60,000**	**Trade creditors**	**1,70,000**	**1,94,000**
Debtors	**1,08,000**	**1,00,000**	**Accrued Expenses**	**38,000**	**26,000**
Stock	**1,60,000**	**1,40,000**	**Mortgages**	**60,000**	**40,000**
Investment (Marketable)	**-**	**20,000**	**Capital**	**2,60,000**	**2,00,000**
Fixed assets	**3,40,000**	**2,80,000**	**Retained earnings**	**68,000**	**59,000**
Accumulated depreciation	**(48,000)**	**(1,01,000)**			
Fixed assets (Net)	**2,92,000**	**1,79,000**			
Goodwill	**-**	**20,000**			
	5,96,000	**5,19,000**		**5,96,000**	**5,19,000**

Additional information:

(a) **Depreciation provided during 2000 amounted to Rs.27,000**

(b) **Dividends paid in 2000 amounted to Rs.14,000.**

Solution :

Schedule of Changes in working capital

	1999 Rs.	2000 Rs.	Increase in W. C.	Decrease in W. C.
Current Assets:				
Cash	60,000	36,000	-	24,000
Debtors	1,00,000	1,08,000	8,000	-
Stock	1,40,000	1,60,000	20,000	-
Investments	20,000	-	-	20,000
	3,20,000	**3,04,000**		
Current Liabilities:				
Trade Creditors	1,94,000	1,70,000	24,000	-
Accrued Expenses	26,000	38,000	-	12,000

	2,20,000	**2,08,000**		
Working capital (C. A. – C. L)	1,00,000	96,000		
Net Decrease in W. C.	-	4,000	4,000	
	1,00,000	**1,00,000**	**56,000**	**56,000**

Dr. Funds Flow Statement Cr.

Sources	Rs.	Applications	Rs.
Issue of shares [2]	60,000	Purchase of fixed Assets [1]	1,40,000
Raising of Mortgages [3]	20,000	Payment of Dividend	14,000
Funds from operations [4]	70,000		
Net Decrease in W. C.	4,000		
	1,54,000		**1,54,000**

Working Notes:

(1)

Dr. Net Fixed Assets Account Cr.

Particulars	Rs.	Particulars	Rs.
To Balance b/d	1,79,000	By Depreciation	27,000
To Cash – Purchases (Balancing figure)	1,40,000	By Balance c/d	2,92,000
	3,19,000		**3,19,000**

(2)

Dr. Share Capital Account Cr.

Particulars	Rs.	Particulars	Rs.
To Balance c/d	2,60,000	By Balance b/d	2,00,000
		By Cash – Issue (balancing figure)	60,000
	2,60,000		**2,60,000**

(3)

Dr. Mortgages Accounts Cr.

Particulars	Rs.	Particulars	Rs.
To Balance c/d	60,000	By Balance b/d	40,000
		By Cash – raised (Balancing figure)	20,000
	60,000		**60,000**

Dr. Adjusted Profit and loss Account Cr.

Particulars	Rs.	Particulars	Rs.
To Depreciation	27,000	By Balance b/d	59,000
To Goodwill written off	20,000	BY Funds from operations (balancing figure)	70,000
To Dividend paid	14,000		
To Balance c/d	68,000		
	1,29,000		**1,29,000**

Illu.7 : From the following balances extracted from Messrs. Surya Tiles Ltd. as on 31st March 2001 and 2002, you are required to prepare (a)Schedule of changes in working capital and (b) Funds Flow Statement.

Liabilities	31st March 2001 Rs.	31st March 2002 Rs.	Assets	31st March 2001 Rs.	31st March 2002 Rs.
Share capital	**1,00,000**	**1,10,000**	**Buildings**	**40,000**	**38,000**
General Reserve	**14,000**	**18,000**	**Plant & Machinery**	**37,000**	**36,000**
P & L a/c	**16,000**	**13,000**	**Investment**	**10,000**	**21,000**
Creditors	**8,000**	**5,400**	**Stock**	**30,000**	**23,400**
Bills payable	**1,200**	**800**	**Bills receivable**	**2,000**	**3,200**
Provision for tax	**16,000**	**18,000**	**Debtors**	**18,000**	**19,000**
Provision for doubtful debts	**400**	**600**	**Cash at Bank**	**6,600**	**15,200**

			Preliminary expenses	**12,000**	**10,000**
	1,55,600	**1,65,800**		**1,55,600**	**1,65,800**

Additional Information:

(i) Depreciation charged on Plant was Rs.4,000

(ii) Provisions for taxation Rs.19,000 was made during the year 2002.

(iii) Interim dividend of Rs.8,000 was paid during the year.

(iv) A piece of machinery was sold for Rs.8,000 during the year 2002. It has costed Rs.12,000. Depreciation of Rs.7,000 has been provided for it.

Solution :

Schedule of changes in working capital

Particulars	2001 Rs.	2002 Rs.	Increase (+) Rs.	Decrease (-) Rs.
Current assets:				
Cash at Bank	6,600	15,200	8,600	-
Debtors	18,000	19,000	1,000	
Bills receivable	2,000	3,200	1,200	
Stock	30,000	23,400		6,600
Total Current Assets (A)	**56,600**	**60,800**		
Current liabilities:				
Provision for doubtful debts	400	600		200
Bills payable	1,200	800	400	
Sundry creditors	8,000	5,400	2,600	
Total Current Liabilities (B)	**9,600**	**6,800**		
Working Capital			**13,800**	**6,800**

Net increase in working capital = Rs.13,800 – 6,800 = 7,000

Funds Flow Statement for the year ended

Sources:	
Net in working capital	7,000
Funds from operations	29,000
Sales of machinery	8,000
	44,000
Applications:	
Purchase of plant	8,000
Taxes paid	17,000
Investments purchases	11,000
Interim dividend paid	8,000
	44,000

Working Notes: Funds from operations –	**Rs.**
Profit & Loss account balance on 31-12-02	13,000
Add: items which do not decrease funds from Operations:	
Preliminary expenses written off	2,000
Provision for taxation	19,000
Depreciation: Plant	4,000
Buildings	2,000
Interim dividend	8,000
	48,000
Less: Profit on sale of machinery	3,000
	45,000
Less: Profit & Loss a/c balance on 31-12-2001	16,000
Funds from operations	**29,000**

Purchase of Plant:

Balance as on 31-12-2001 37,000

Less: Depreciation	4,000

	33,000
Less: Books value of machinery sold	
(12,000 – 7,000)	5,000

	28,000
Less: Balance as on 31-12-2002	36,000

Purchase of Plant	**8,000**

Taxes Paid:

Provision for tax as on 31-12-01	16,000
Add: Provision created for 2002	19,000

	35,000
Less: Provision for taxes on 31-12-2002	18,000

Taxes Paid	**17,000**

Note: investments have not been treated as current asset.

Illu.8 : Prepare funds flow statement from the following information:

Liabilities	2002 Rs.	2003 Rs.	Assets	2002 Rs.	2003 Rs.
Capital	**77,000**	**81,200**	**Buildings**	**52,000**	**60,100**
Creditors	**10,500**	**14,800**	**Machinery**	**25,000**	**20,000**
Creditors for machinery	**25,000**	**25,000**	**Motorcar**	**21,000**	**16,800**
Bank Loan	**5,000**	**26,000**	**Furniture**	**1,500**	**2,300**
Bills payable	**14,000**	**16,000**	**Stock**	**12,000**	**37,400**
Provision for bad debts	**1,000**	**800**	**Debtors**	**4,000**	**12,600**
			Bills receivable	**14,800**	**11,020**

			Cash in hand	**2,100**	**3,500**
			Petty Cash	**100**	**80**
	1,32,500	**1,63,800**		**1,32,500**	**1,63,800**

(i) **Rs.5,000; on motorcar Rs.4,200 and on furniture Rs.300.**

(ii) **Drawings of Mr. X were Rs.15,000**

(iii) **Additional capital introduced during the year was Rs.10,000**

Solution :

Schedule of changes in working capital of Mr. X as on 31st December 2003

Particulars	**2002 (Rs.)**	**2003 (Rs.)**	**Changes in Working Capital**	
			Increase	**Decrease**
Current Assets:				
Stock	12,000	37,400	25,400	-
Debtors	4,000	12,600	8,600	-
Bills receivable	14,800	11,020	-	3,780
Cash in Hand	2,100	3,500	1,400	-
Petty Cash	100	80	-	20
Total Current Assets (A)	**33,000**	**64,600**		
Current Liabilities:				
Creditors	10,500	14,800	-	4,300
Bills payable	14,000	16,000	-	2,000
Provision for bad debts	1,000	800	200	-
Total Current Liabilities (B)	**25,500**	**31,600**		
Working Capital (A) – (B)	**7,500**	**33,000**		
Increase in working capital	25,500	-	-	25,500
Total	**33,000**	**33,000**	**35,600**	**35,600**

Calculation of Funds from operations:

		Rs.
Profit during the year 2003		9,200
Add: Non –operating funds debited to P & L a/c:		
Depreciation on Building	5,200	
Depreciation on Machinery	5,000	
Depreciation on Motorcar	4,200	
Depreciation on Furniture	300	14,700
Funds from operations		**23,900**

Funds Flow Statement of 'X' as on 31-12-2003

Sources	Amount (Rs.)	Uses	Amount (Rs.)
Funds from operations	23,900	Drawings	15,000
Additional Capital Introduced	10,000	Purchase of Buildings	13,300
Additional Bank Loan raised	21,000	Purchase of Furniture	1,100
		Increase in working capital	25,500
	54,900		**54,900**

Working Notes:

Dr. Buildings a/c Cr.

Particulars	Rs.	Particulars	Rs.
To Opening Balance	52,000	By Depreciation	5,200
To Cash (Buildings purchased)	13,300	By Closing balance	60,100
	65,300		**65,300**

Dr. Furniture A/c Cr.

Particulars	Rs.	Particulars	Rs.
To Opening Balance	1,500	By Depreciation	300
To Cash (Furniture purchased)	1,100	By Closing Balance	2,300
	2,600		**2,600**

Dr. **Capital A/c** **Cr.**

Particulars	Rs.	Particulars	Rs.
To Drawings (Cash)	15,000	By Opening Balance	77,000
To Closing Balance	81,200	By Additional Capital introduced (Cash)	10,000
		By P & L a/c (2003 ear profit) (B / F)	9,200
	96,200		**96,200**

Illu.9 : From the following Balance – Sheet of Mr. Kumar you are requested to prepare a schedule of changes in working capital and statement of Funds Flow.

Liabilities	1999 Rs.	2000 Rs.	Assets	1999 Rs.	2000 Rs.
Capital	**80,000**	**85,000**	**Land & Buildings**	**50,000**	**50,000**
Profit & Loss a/c	**14,500**	**24,500**	**Plant**	**24,000**	**34,000**
Creditors	**9,000**	**5,000**	**Stock**	**9,000**	**7,000**
Mortgage	**-**	**5,000**	**Debtors**	**16,500**	**19,500**
			Cash	**4,000**	**9,000**
	1,03,500	**1,19,500**		**1,03,500**	**1,19,500**

Solution :

Statement showing changes in Working Capital

	1999	2000	Increase	Decrease
Current Assets:	9,000	7,000		2,000
Debtors	16,500	19,500	3,000	
Cash	4,000	9,000	5,000	
Current Liabilities:				
Creditors	9,000	5,000	4,000	
			12,000	**2,000**

Net increase in Working capital = Rs.12,000 – 2,000 = Rs.10,000.

Funds from operations

	Rs.
Balance of profit in 2000	24,500
Less: Balance of profit in 1999	14,500
Funds from operations	**10,000**

Funds Flow Statement

		Rs.
Sources of funds		
Funds from operations	10,000	
Issue of Capital	5,000	
New Mortgage	5,000	20,000
Application of Funds		
Purchase of Plant		10,000
Net Increase in working Capital		**10,000**

Illu.10 : The Balance Sheet of Shri. Constructions Ltd. were as follows:

Liabilities	31-12-98	31-12-99	Assets	31-12-98	31-12-99
Share Capital	**70,000**	**74,000**	**Cash**	**9,000**	**7,800**
Debentures	**12,000**	**6,000**	**Debtors**	**14,900**	**17,700**
Provision for bad debts	**700**	**800**	**Stock**	**49,200**	**42,700**
Creditors	**10,360**	**11,840**	**Land**	**20,000**	**30,000**
P & L a/c	**10,040**	**10,560**	**Goodwill**	**10,000**	**5,000**
	1,03,100	**1,03,200**		**1,03,100**	**1,03,200**

Additional Information:

(a) **Dividend paid Rs.3,500**

(b) **Land Purchased Rs.10,000**

(c) **Goodwill written off Rs.5,000**

(d) Debentures redeemed Rs.6,000

Prepare funds flow statement.

Solution :

Schedule of Changes in Working Capital

	1998 Rs.	1999 Rs.	Increase in W. C. Rs.	Decrease in W. C. Rs.
Current Assets:				
Cash	9,000	7,800	-	1,200
Debtors	14,900	17,700	2,800	-
Stock	49,200	42,700	-	6,500
	73,100	**68,200**	**-**	**-**
Current Liabilities:				
Trade Creditors	10,360	11,840	-	1,480
Reserve for Doubtful debts	700	800	-	100
	11,060	**12,640**		
Working Capital (C. A. – C. L.)	62,040	55,560		
Net Decrease in W. C.	-	6,480	6,480	
Working Capital	**62,040**	**62,040**	**9,280**	**9,280**

Fund Flow Statement (for the year ended 31-12-1999)

Sources	Rs.	Use of Funds	Rs.
Issue of Share Capital (74,000 – 70,000)	4,000	Redemption of Debentures Rs. (12,000 – 6,000)	6,000
Funds from operations	9,020	Purchase of land Rs. (30,000 – 20,000)	10,000
Net Decrease in working capital	6,480	Payment of Dividend	3,500
	19,500		**19,500**

Funds from operations

		Rs.
	Closing Balance of P/ L a/c (1999)	10,560
Add:	Non – fund and non – operating items which have already been debited to P/ L A/c:	
	Goodwill Written off	5,000
	Dividend paid	3,500
		19,060
Less:	Opening balance of P & L a/c (1998)	10,040
	Funds from operations	**9,020**

Illu.11 :The following is the summarised balance sheet of Mr. Ramesh & co.

Liabilities	1997 Rs.	1998 Rs.	Assets	1997 Rs.	1998 Rs.
Equity share capital	**3,00,000**	**3,50,000**	**Fixed Assets (net)**	**5,10,000**	**6,20,000**
Preference capital	**2,00,000**	**1,00,000**	**Investments**	**30,000**	**80,000**
Debentures	**1,00,000**	**2,00,000**	**Current Assets**	**2,40,000**	**3,75,000**
Reserve	**1,00,000**	**2,70,000**	**Discount on debentures**	**10,000**	**5,000**
Provision for doubtful debts	**10,000**	**15,000**			
Current liabilities	**80,000**	**1,45,000**			
	7,90,000	**10,80,000**		**7,90,000**	**10,80,000**

Additional Information:

(a) A machine costing Rs.70,000 whose book value was Rs.30,000 was disposed off Rs.25,000.

(b) Preference share redemption was carried out at a premium of 5%.

(c) The provision for depreciation stock at Rs.1,50,000 on 31-12-87 and at Rs.1,90,000 on 31-12-88.

Prepare Funds Flow Statement.

Solution :

Schedule of Changes in Working Capital

	1997 Rs.	1998 Rs.	Increase	Decrease
Current Assets	2,40,000	3,75,000	1,35,000	65,000
Less: Current liabilities	80,000	1,45,000		65,000
Working capital	1,60,000	2,30,000	1,35,000	65,000
Net Increase in Working capital	70,000			70,000
	2,30,000			**1,35,000**

Calculation of Funds from operations.

	Rs.
Depreciation provided on Fixed Assets	80,000
Loss on sale of machinery	5,000
Discount Issue of Debenture 's written off	5,000
Premium on redemption of preference share capital	5,000
Transfers to Reserves	1,70,000
Provision for doubtful debts provided	5,000
Funds from operations	**2,70,000**

Dr. Funds flow Statements Cr.

Sources	Rs.	Applications	Rs.
Issue of equity share capital	50,000	Redemption of preference capital	1,00,000
Issue of Debentures	1,00,000	Premium on Redemption	5,000
Sale of machinery	25,000	Purchase of machinery	2,20,000
Funds from operations	2,70,000	Investment purchase	50,000
		Investments in working capital	70,000
	4,45,000		**4,45,000**

Working Notes:

(1)

Dr. Fixed Assets Account Cr.

To Balance b/d	5,10,000	By Bank 25,000	
To Bank (Bal. Fig) Purchase	2,20,000	By Loss on sales 5,000	30,000
		By Depreciation Provision a/c	80,000
		By Balance c/d	6,20,000
	7,30,000		**7,30,000**

Dr. Provision for Depreciation Account Cr.

To Fixed Assets a/c (accumulated depreciation on machinery sold) (70,000 – 30,000)	40,000	By Balance b/d	1,50,000
To Balance c/d	1,90,000	By Loss on sales Depreciation (Bal. Fig)	80,000
	2,30,000		**2,30,000**

(2) Investments purchased = Rs.80,000 – 30,000 = Rs.50,000

(3) Discount on Debentures written off = Rs.10,000 – 5,000 = Rs.5,000

(4) Issue of Equity share capital = Rs.3,50,000 – 3,00,000 = Rs.50,000.

(5) Redemption of Preference Share capital = Rs.2,00,000 – Rs.1,00,00 = 1,00,000

(6) Premium on redemption of preference share capital
= 5% on Rs.1,00,000 = Rs.5,000

(7) Issue of Debentures = Rs.2,00,000 – 1,00,000 = Rs.1,00,000

(8) Transfer to Reserve = Rs.2,70,000 – 1,00,000 = Rs.1,70,000

(9) Provision for doubtful debts provided = Rs.15,000 – 10,000 = Rs.5,000.

Illu.12 : From the following Balance Sheet and additional information prepare

(a) A schedule of changes in working capital

(b) Funds Flow Statement

Liabilities	2004 Rs.	2005 Rs.	Assets	2004 Rs.	2005 Rs
Share capital	**2,00,000**	**2,50,000**	**Land and Buildings**	**2,00,000**	**1,90,000**
General Reserve	**50,000**	**60,000**	**Plant**	**1,50,000**	**1,74,000**
Profit and Loss a/c	**30,500**	**30,600**	**Stock**	**1,00,000**	**74,000**
Bank overdraft	**70,000**	**-**	**Debtors**	**80,000**	**64,200**
Creditors	**1,50,000**	**1,35,200**	**Cash**	**500**	**600**
Provision for taxation	**30,000**	**35,000**	**Bank**	**-**	**8,000**
	5,30,500	**5,10,800**		**5,30,500**	**5,10,800**

Additional Information:

(a) Depreciation was written off plant Rs.14, 000 in 2005

(b) Dividend of Rs.20, 000 was paid during 2005

(c) Income tax provision made during the year was Rs.25, 000

(d) A piece of land has been sold during the year at cost.

Solution :

(a) Schedule of changes in working capital

Particulars	**Working capital**			
	2004 Rs.	**2005 Rs.**	**Increase Rs.**	**Decrease Rs.**
Current Assets :				
Stock	1,00,000	74,000	-	26,000
Debtors	80,000	64,200	-	15,800
Cash	500	600	100	-
Bank	-	8,000	8,000	-
Total Current Assets (A)	**1,80,500**	**1,46,800**		
Current Liabilities :				

Bank overdraft	70,000	-	70,000	-
Creditors	1,50,000	1,35,200	14,800	-
Total current liabilities (B)	**2,20,000**	**1,35,200**		
Working capital (A – B)	- 39,500	11,600		
Net increase in Working capital	51,100	-	-	51,100
	11,600	**11,600**	**92,900**	**92,900**

Plant a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Balance b/d	1,50,000	By Depreciation a/c	14,000
To Bank a/c (Purchases)(B/f)	38,000	By Balance c/d	1,74,000
	1,88,000		**1,88,000**

Provision for tax a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Bank a/c (Tax paid)	20,000	By Balance b/d	30,000
To Balance c/d	35,000	By P & L a/c (non – fund) (B/f)	25,000
	55,000		**55,000**

Funds from operations

Particulars	**Amount Rs.**	**Amount Rs.**
Profit & Loss account closing balance		**30,600**

Add:	Non-fund items :		
	Depreciation on plant	14,000	
	Income tax provision	25,000	39,000
			69,600
Add:	**Appropriations :**		
	Transfer to general reserve	10,000	
	Dividends paid	20,000	30,000
			99,600
Less:	Profit & Loss account opening balance		30,500
	Funds from operations		**69,100**

Funds flow statement for the year ending 31-12-2005

Sources	**Amount Rs.**	**Uses**	**Amount Rs.**
Issue of capital (Rs.2,50,000 – 2,00,000)	50,000	Purchase of plant	38,000
Sale of Land & Buildings (Rs.2,00,000 – 1,90,000)	10,000	Dividend paid	20,000
Funds from operations	69,100	Income tax paid	20,000
		Net increase in working capital	51,100
	1,29,100		**1,29,100**

Illu.13 : Calculate funds from operations from the information given below as on 31st March 2006 :

(a) Net profit for the year ended 31st March 2006 Rs.6,50,000

(b) Gain on the sale of building Rs.35,500

(c) Goodwill appears in the books of Rs.1,80,000 out of that 10% has been written off during the year.

(d) Old machinery worth Rs.8,000 has been sold for Rs.6,500 during the year.

(e) Rs.1,25,000 has been transferred to the general reserve fund.

(f) Depreciation has been provided during the year on machinery and furniture at 20% whose total cost is Rs.6,50,000.

Solution :

Statement of funds from operations

Particulars		Amount Rs.	Amount Rs.
Net profit for the year			**6,50,000**
Add:	**Non-fund items :**		
	Goodwill written off [1,80,000 x 10/100]	18,000	
	Loss on sale of machinery (8,000 – 6,500)	1,500	
	Depreciation on machinery and furniture (6,50,000 x 20/100)	1,30,000	1,49,500
			7,99,500
Add:	**Appropriations :**		
	Transfer to general reserve		1,25,000
			9,24,500
Less:	**Non-operating income :**		
	Gain on sale of buildings		35,500
	Funds from operations		**8,89,000**

Illu.14 : From the following Balance Sheets of Sujatha Ltd., prepare funds flow statement :

Liabilities	2004 Rs.	2005 Rs.	Assets	2004 Rs.	2005 Rs.
Share capital	**5,00,000**	**5,00,000**	**Land & Buildings**	**6,50,000**	**5,85,000**
Reserves	**25,000**	**70,000**	**Plant & Machinery**	**3,50,000**	**6,00,000**
Profit and Loss a/c	**95,000**	**1,10,000**	**Furniture & Fixtures**	**-**	**1,15,000**
Loans	**4,00,000**	**5,50,000**	**Stock**	**1,00,000**	**1,10,000**
Sundry creditors	**1,30,000**	**1,50,000**	**Debtors**	**40,000**	**50,000**

Bills payable	**10,000**	**25,000**	**Bills receivable**	**-**	**10,000**
Outstanding exp.	**5,000**	**4,000**	**Cash at bank**	**20,000**	**15,000**
Provision for tax	**35,000**	**60,000**	**Cash in hand**	**5,000**	**6,000**
Proposed dividend	**-**	**50,000**	**Goodwill**	**35,000**	**28,000**
	12,00,000	**15,19,000**		**12,00,000**	**15,19,000**

Additional information :

(a) **During the year no land and buildings was purchased.**

(b) **Depreciation on plant and machinery charged Rs.60,000**

(c) **Tax paid Rs.35,000.**

Solution :

Schedule of changes in working capital

Particulars	**2004 Rs.**	**2005 Rs.**	**Working capital**	
			Increase Rs.	**Decrease Rs.**
Current assets :				
Stock	1,00,000	1,10,000	10,000	-
Debtors	40,000	50,000	10,000	-
Bills receivable	-	10,000	10,000	-
Cash at bank	20,000	15,000	-	5,000
Cash in hand	5,000	6,000	1,000	-
Total current assets (A)	**1,65,000**	**1,91,000**		
Current Liabilities :				
Sundry creditors	1,30,000	1,50,000	-	20,000
Bills payable	10,000	25,000	-	15,000
Outstanding expenses	5,000	4,000	1,000	-
Total current liabilities (B)	**1,45,000**	**1,79,000**		
Working capital (A – B)	20,000	12,000		
Net decrease in working capital	-	8,000	8,000	-

	20,000	**20,000**	**40,000**	**40,000**

Working Notes :

Provision for tax a/c

Dr. **Cr.**

Particulars	Rs.	Particulars	Rs.
To Bank a/c	35,000	By Balance b/d	35,000
To Balance c/d	60,000	By P & L a/c (non-fund) (B/f)	60,000
	95,000		**95,000**

Plant & Machinery a/c

Dr. **Cr.**

Particulars	Rs.	Particulars	Rs.
To Balance b/d	3,50,000	By Depreciation	60,000
To Bank (B/f)	3,10,000	By Balance c/d	6,00,000
	6,60,000		**6,60,000**

Funds from operations

Particulars		Amount Rs.	Amount Rs.
Profit & Loss a/c closing balance			**1,10,000**
Add:	**Non – fund items :**		
	Goodwill written off	7,000	
	Depreciation on Plant & Machinery	60,000	
	Income tax provision	60,000	
	Depreciation Land & Buildings (Rs.6,50,000 – 5,85,000)	65,000	1,92,000
			3,02,000
Add:	**Appropriations :**		
	Proposed dividend (2005)	50,000	

	Transfer to reserves (Rs.70,000 – 25,000)	45,000	95,000
			3,97,000
Less:	Profit & Loss a/c opening balance		95,000
	Funds from operations		**3,02,000**

Funds Flow Statement for the year ended 31-12-2005

Sources	**Amount Rs.**	**Uses**	**Amount Rs.**
Funds from operations	3,02,000	Tax paid	35,000
Decrease in working capital	8,000	Purchase of plant	3,10,000
Raising of loans (Rs.5,50,000 – 4,00,000)	1,50,000	Purchase of Furniture & Fixtures	1,15,000
	4,60,000		**4,60,000**

Illu.15 : The Balance sheets of Ravi as on 31.12.2001 and 31.12.2002 where as follows :

Liabilities	**31.12.01**	**31.12.02**	**Assets**	**31.12.01**	**31.12.02**
Creditors	**40,000**	**44,000**	**Cash**	**10,000**	**7,000**
Mr. Ravi's loan	**25,000**	**-**	**Debtors**	**30,000**	**50,000**
Loan 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 machine costing Rs.10,000 (accumulated depreciation on Rs.3,000) was sold for Rs.5,000. The provision for depreciation against machinery as on 31.12.2001 was Rs.25,000 and on 31.12.2002 Rs.40,000. Net profit for the year 2002 amounted to Rs.45,000.

You are required to prepare :

(a) a schedule of change in working capital

(b) a funds flow statement.

Solution :

Schedule of changes in working capital

Particulars	2001 Rs.	2002 Rs.	Increase Rs.	Decrease Rs.
Current assets :				
Cash	10,000	7,000		3,000
Debtors	30,000	50,000	20,000	
Stock	35,000	25,000		10,000
Total Current assets (A)	**75,000**	**82,000**		
Current Liabilities :				
Creditors	40,000	44,000		4,000
Total Current Liabilities (B)	**40,000**	**44,000**		
Working capital (A-B)	**35,000**	**58,000**		
Net increase in working capital				3,000
			20,000	**20,000**

Funds from operations

	Rs.	Rs.
Profit for 2002		45,000
Add: Depreciation on Machinery	18,000	
Loss on sale of machinery	2,000	20,000
Funds from operations		**65,000**

Funds Flow Statement

Dr. **Cr.**

Sources	Rs.	Applications	Rs.
Loan from bank	10,000	Mr. Ravi's Loan	25,000
Sale of Machinery	5,000	Purchased of Land	10,000

Funds from operations	65,000	Purchase of Buildings	25,000
		Drawings (Rs.1,25,000 + 45,000 – 1,53,000)	17,000
		Increase in working capital	3,000
	80,000		**80,000**

Working Notes :

Provision for Depreciation Account

Dr. **Cr.**

	Rs.		**Rs.**
31-12-2002		1-1-2002	
To Machinery a/c	3,000	By Balance b/d	25,000
To Balance c/d	40,000	By Profit & Loss a/c (Bal. fig)	18,000
	43,000		**43,000**

Machinery Account

Dr. **Cr.**

	Rs.		**Rs.**
1-1-2002		31-12-2002	
To Balance b/d	80,000	By Bank	5,000
		By Profit & Loss a/c – Loss on sale	2,000
		By Profit & Loss a/c – Depreciation	18,000
		By Balance c/d	55,000
	80,000		**80,000**

Illu.16 : Find out the changes in working capital of ABC Ltd. from the particulars given below :

Liabilities	**2004 Rs.**	**2003 Rs.**	**Assets**	**2004 Rs.**	**2003 Rs.**
Capital	**1,50,000**	**1,25,000**	**Goodwill**	**5,000**	**10,000**

Creditors	**45,000**	**50,000**	**Cash**	**70,000**	**25,000**
Bills payable	**35,000**	**20,000**	**Debtors**	**90,000**	**98,000**
Loans	**20,000**	**-**	**Stock**	**1,20,000**	**87,000**
Profit and loss a/c	**75,000**	**60,000**	**Investment**	**10,000**	**15,000**
			Land	**27,000**	**15,000**
			Preliminary expenses	**3,000**	**5,000**
	3,25,000	**2,55,000**		**3,25,000**	**2,55,000**

Solution :

Statement showing change in working capital

Particulars	**2004 Rs.**	**2003 Rs.**	**Increase Rs.**	**Decrease Rs.**
Current assets :				
Cash	25,000	70,000	45,000	-
Debtors	98,000	90,000	-	8,000
Stock	87,000	1,20,000	33,000	-
Current Liabilities :				
Creditors	50,000	45,000	5,000	-
Bills payable	20,000	35,000	-	15,000
Loans (Due 1997)	-	20,000	-	20,000
			83,000	**43,000**

Net increase in working capital = Rs.83,000 – 43,000 = Rs.40,000

Note : Loans raised in 2005 will be payable in 2004 is considered to be short term loan and as current liability.

Illu.17 : From the following Balance Sheet of a firm, prepare funds flow statement :

Liabilities	2001 Rs.	2002 Rs.	Assets	2001 Rs.	2002 Rs.
Equity shares capital	**2,40,000**	**3,60,000**	**Buildings**	**1,66,200**	**3,39,600**
Share premium	**24,000**	**36,000**	**Machinery**	**1,06,800**	**1,53,900**
General reserve	**18,000**	**27,000**	**Furniture**	**7,200**	**4,500**
Profit and loss a/c	**58,500**	**62,000**	**Stock**	**66,300**	**78,000**
8% debentures	**-**	**78,000**	**Debtors**	**1,09,500**	**1,17,300**
Provision for taxes	**29,400**	**32,700**	**Bank**	**14,400**	**12,000**
Creditors	**1,00,500**	**1,09,600**			
	4,70,400	**7,05,300**		**4,70,400**	**7,05,300**

Provide depreciation on machinery Rs.38,400, on furniture Rs.1,200.

Solution :

Schedule of changes in working capital

Particulars	2001 Rs.	2002 Rs.	Increase in working capital Rs.	Decrease in working capital Rs.
Current assets :				
Stock	66,300	78,000	11,700	-
Debtors	1,09,500	1,17,300	7,800	-
Bank	14,400	12,000	-	2,400
	1,90,200	**2,07,300**		
Current Liabilities :				
Sundry Creditors	1,00,500	1,09,600		9,100
Provision for taxation	29,400	32,700	-	3,300
	1,29,900	**1,42,300**	-	

Working capital	60,300	65,000		
Net increase in working capital	4,700			4,700
	65,400	**65,400**	**19,500**	**19,500**

Funds flow Statement

Sources	Rs.	Applications	Rs.
Issues of Share Capital	1,20,000	Purchase of land & Building	1,73,400
Share Premium	12,000	Purchase of Machinery	85,500
Issue of Debentures	78,000	Net increase in working capital	5,100
Sale of furniture	1,500		
Funds from operations	52,500		
	2,64,000		**2,64,000**

Working Notes :

Machinery Account

Dr. **Cr.**

	Rs.		Rs.
To Balance b/d	1,06,800	By Depreciation	38,400
To Purchases during the year (Balancing figure)	85,500	By Balance c/d	1,53,900
	1,92,300		**1,92,300**

Land & Building A/c

Dr. **Cr.**

	Rs.		Rs.
To balance b/d	1,66,200	By Balance c/d	3,39,600
To Purchases (balancing figure)	1,73,400		
	3,39,600		**3,39,600**

Furniture Account

Dr. **Cr.**

	Rs.		Rs.
To balance b/d	7,200	By Depreciation	1,200
		By Cash – sale (Bal. Fig)	1,500
		By Balance c/d	4,500
	7,200		**7,200**

Adjusted Profit and Loss Account

Dr. **Cr.**

	Rs.		Rs.
To Transfer to Reserves	9,000	By Balance b/d	58,500
To Depreciation on machinery	38,400	By Funds from operations	52,500
To Depreciation on furniture	1,200		
To Balance c/d	62,400		
	1,11,000		**1,11,000**

Illu.18 : Prepare funds flow statement from the following information of Jeevan Ltd.

(Rs. Thousands)

	2003	2004		2003	2004
Share capital	**500**	**750**	**Cash**	**150**	**225**
Reserves	**250**	**300**	**Stock**	**300**	**325**
Profit & Loss a/c	**50**	**85**	**Debtors**	**150**	**350**
Share premium	**-**	**25**	**Investments**	**300**	**400**
Debentures	**350**	**250**	**Furniture**	**35**	**45**
Provision for tax	**100**	**150**	**Plant**	**520**	**500**
Accumulated depreciation :			**Land and Buildings**	**500**	**500**
Plant	**250**	**280**			
Furniture	**25**	**30**			

Creditors	**430**	**475**			
	1,955	**2,345**		**1,955**	**2,345**

Additional Information :

(i) **A plant worth Rs.20,000 (depreciation accumulated Rs.10,000) was sold for cash Rs.4,000**

(ii) **Furniture worth of Rs.10,000 was purchased**

(iii) **Dividend paid during 2004 was Rs.20,000.**

(iv) **Tax paid during 2004 was Rs.40,000.**

(v) **Depreciation provided on buildings during 2004 was Rs.25,000**

Solution :

Schedule of changes in working capital

Particulars	**2003 Rs.**	**2004 Rs.**	**Increase Rs.**	**Decrease Rs.**
Current Assets :				
Cash	1,50,000	2,25,000	75,000	-
Stock	3,00,000	3,25,000	25,000	-
Debtors	1,50,000	3,50,000	2,00,000	-
Total Current Assets (A)	**6,00,000**	**9,00,000**		
Current Liabilities :				
Creditors	4,30,000	4,75,000	-	45,000
Total Current Liabilities (B)	**4,30,000**	**4,75,000**		
Working capital (A-B)	**1,70,000**	**4,25,000**		
Net increase in working capital				2,55,000
			3,00,000	**3,00,000**

Working Notes :

Investment Account

	Rs.		Rs.
To Balance b/d	3,00,000	By Balance c/d	4,00,000
To Bank (Bal. Fig)	1,00,000		
	4,00,000		**4,00,000**

Furniture Account

	Rs.		Rs.
To Balance b/d	35,000	By Balance c/d	45,000
To Bank	10,000		
	45,000		**45,000**

Provision for depreciation on Furniture

	Rs.		Rs.
To Balance c/d	30,000	By Balance b/d	25,000
		By P & L a/c (Bal. Fig)	5,000
	30,000		**30,000**

Plant Account

	Rs.		Rs.
To Balance b/d	5,20,000	By Provision for depreciation a/c	10,000
		By Bank	4,000
		By P & L a/c (Loss on sale)	6,000
		By Balance c/d	5,00,000
	5,20,000		**5,20,000**

Provision for depreciation on Plant

	Rs.		Rs.
To Plant a/c	10,000	By Balance b/d	2,50,000
To Balance c/d	2,80,000	By P & L a/c (Bal. Fig)	40,000

	2,90,000		**2,90,000**

Land & Buildings A/c

	Rs.		Rs.
To Balance b/d	5,00,000	By Depreciation	25,000
To Balance (Bal. Fig)	25,000	By Balance c/d	5,00,000
	5,25,000		**5,25,000**

Depreciation on Land & Buildings

	Rs.		Rs.
To Land & Buildings	25,000	By P & L a/c	25,000
	25,000		**25,000**

Provision for tax

	Rs.		Rs.
To Bank	40,000	By Balance b/d	1,00,000
To Balance c/d	1,50,000	By P & L a/c (Bal. Fig)	90,000
	1,90,000		**1,90,000**

Funds from operations

		Rs.	Rs.
Net profit as per P & L a/c			85,000
Add:	Non – fund and non – operating expenses		
	Depreciation on furniture	5,000	
	Loss on sale of Plant	6,000	
	Depreciation on Plant	40,000	`
	Depreciation on Buildings	25,000	
	Provision for taxation	90,000	
	Transfer to Reserve	50,000	
	Dividends	20,000	2,36,000
			3,21,000

Less:	Non – fund and non – operating incomes :		
	NIL	-	-
			3,21,000
Less:	Balance of Profit as per P & L a/c on 1-1-96		50,000
	Funds from operations		**2,71,000**

Funds Flow Statement

	Rs.
Sources of funds :	
Sale of Plant	4,000
Issue of shares	2,50,000
Premium on issue of shares	25,000
Funds from operations	2,71,000
	5,50,000
Application of funds :	
Purchase investments	1,00,000
Purchase of furniture	10,000
Payment of tax	40,000
Redumption of debentures	1,00,000
Dividends paid	20,000
Purchase of Land & Buildings	25,000
Net increase in working capital	2,55,000
	5.50,000

Illu.19 : The Balance Sheets of A, B Ltd. as on December 31, 1998 and December 31, 1999 are as follows.

Liabilities	**Dec 31 1998 Rs.**	**Dec 31 1999 Rs.**	**Assets**	**Dec 31 1998 Rs.**	**Dec 31 1999 Rs.**
Share capital	**2,00,000**	**2,50,000**	**Fixed assets**	**3,50,000**	**4,75,000**
Retained earnings	**1,60,000**	**3,00,000**	**Merchandise inventory**	**1,00,000**	**95,000**

Premium on shares	**-**	**5,000**	**Accounts Receivables**	**43,000**	**50,000**
Accumulated depreciation	**80,000**	**60,000**	**Prepaid expenses**	**4,000**	**5,000**
Debentures	**60,000**	**-**	**Cash**	**15,800**	**10,200**
Accounts Payable	**37,800**	**40,200**	**Commission on shares**	**25,000**	**20,000**
	5,37,800	**6,55,200**		**5,37,800**	**6,55,200**

Additional Information :

(i) An addition to the fixed assets was made during the year at a cost of Rs.1,65,000 and fully depreciated machinery costing Rs.40,000 was discarded no salvage being realised.

(ii) Depreciation for the year Rs.20,000.

(iii) Income tax paid was Rs.40,000

(iv) Interim dividend paid during the year Rs.20,000.

You are required to prepare :

(1) A statement of schedule of changes in working capital.

(2) A statement of sources and applications of funds.

Solution :

Schedule of Changes in Working Capital

Assets	**1998 Rs.**	**1999 Rs.**	**Increase Rs.**	**Decrease Rs.**
Stocks	1,00,000	95,000		5,000
Accounts receivable	43,000	50,000	7,000	
Prepaid expenses	4,000	5,000	1,000	
Cash	15,800	10,200		5,600

Total Assets (A)	**1,62,800**	**1,60,200**		
Liabilities				
Accounts payable	37,800	40,200		2,400
Total Liabilities (B)	**37,800**	**40,200**		
Working capital (A-B)	**1,25,000**	**1,20,000**		
Net decrease in working capital			5,000	
			13,000	**13,000**

Funds from Operations

	Rs.	Rs.
Retained earnings as on 31-12-1999		3,00,000
Add : Non – fund and Non – operating expenses		
Accumulated depreciation Rs.60,000 – [80,000 – 40,000]	20,000	
Income tax paid	40,000	
Interim dividend paid	20,000	
Commission on shares written off (Rs.25,000 – 20,000)	5,000	85,000
		3,85,000
Less: Retained earnings as on 31-12-1998		1,60,000
Funds from operations		**2,25,000**

Funds Flow Statement as on 31-3-1999

Dr. **Cr.**

Sources	Rs.	Applications	Rs.
Funds from operations	2,25,000	Fixed assets purchased	1,65,000
Issue of share capital	50,000	Income tax paid	40,000
Premium on issue of shares	5,000	Interium dividend paid	20,000
Deovease in working capital	5,000	Debentures redeemed	60,000
	2,85,000		**2,85,000**

Illu.20 : From the following Balance Sheets of Ramu Ltd. you are requested to Prepare (a) a statement of changes in working capital and (b) a statement of sources and uses of funds :

Liabilities	2004 Rs.	2005 Rs.
Share capital	1,05,000	1,30,500
Retained Earnings	45,000	58,500
8% Debentures	66,000	66,000
Current liabilities	90,000	96,000
Accumulated depreciation	15,000	8,400
	3,21,000	3,59,400

Assets	2004 Rs.	2005 Rs.
Land & Buildings	72,000	60,000
Equipment	45,000	51,000
Patents	3,000	2,700
Stock	45,000	45,000
Accounts receivable	30,000	62,100
Cash & Bank	1,20,000	1,33,200
Discount on Debentures	6,000	5,400
	3,21,000	3,59,400

Additional Information :

(a) Income for the period Rs.30,000

(b) Dividends paid during the year Rs.6,000

(c) Bonus shares issued during the year Rs.10,500. Shares worth Rs.15,000 wee issued to public in the year.

(d) A building that costs Rs.12,000 and had a book value of Rs.3,000 was sold for Rs.4,200

(e) The depreciation charge for the period was Rs.2,400.

Solution :

Schedule of changes in working capital

Particulars	2004 Rs.	2005 Rs.	Increase Rs.	Decrease Rs.
Current Assets :				
Stock	45,000	45,000		
Accounts receivable	30,000	62,100	32,100	
Cash bank	1,20,000	1,33,200	13,200	
Total Current Assets (A)	**1,95,000**	**2,40,300**		
Current liabilities	90,000	96,000		6,000
Total Current Liabilities	**90,000**	**96,000**		
Working capital	**1,05,000**	**1,44,300**		
Net increase in working capital				39,300
			45,300	**45,300**

Dr. Funds Flow Statement Cr.

Sources	Rs.	Application	Rs.
Issue of shares	15,000	Purchase equipment	6,000
Sale of buildings	4,200	Dividends paid	6,000
Funds from operations	32,100	Increase in working capital	39,300
	51,300		**51,300**

Working Notes :

Dr. Accumulated Depreciation Account Cr.

	Rs.		Rs.
To Land & Buildings	9,000	By Balance b/d	15,000
To Balance c/d	8,400	By Profit & Loss a/c	2,400
	17,400		**17,400**

Dr. Land and Buildings Account Cr.

	Rs.		Rs.
To Balance b/d	72,000	By Accumulated Depreciation	9,000
To Profit & Loss a/c	1,200	By Banks	4,200
		By Balance c/d	60,000
	73,200		**73,200**

Dr. Retained Earnings Account Cr.

	Rs.		Rs.
To Dividends	6,000	By Balance b/d	45,000
To Bonus shares	10,500	By Income for the period	30,000
To Balance c/d	58,500		
	75,000		**75,000**

Funds from operations

	Rs.
Income for the period	30,000
Add: Depreciation written off	2,400
Patents written off	300
Discount on debentures	600
	33,300
Less: Profit on sale of buildings	1,200
Funds from operations	**32,100**

Illu.21 : The following are the summarised Balance Sheet of RIL Ltd. as on 31-12-2003 and 31-12-2004:

Liabilities	31-12-03 Rs.	31-12-04 Rs.	Assets	31-12-03 Rs.	31-12-04 Rs.
Equity Capital	**80,000**	**80,000**	**Fixed Assets**	**82,000**	**80,000**

7% Redeemable preference shares	**-**	**20,000**	**- Depreciation**	**22,000**	**30,000**
General Reserve	**4,000**	**4,000**		**60,000**	**50,000**
P & L a/c	**2,000**	**2,400**	**Current Assets:**		
Debtors	**12,000**	**14,000**	**Debtors**	**40,000**	**48,000**
Creditors	**24,000**	**22,000**	**Stock**	**60,000**	**70,000**
Provision for Tax	**6,000**	**8,400**	**Prepaid expenses**	**600**	**1,000**
Proposed Dividend	**10,000**	**11,600**	**Cash**	**2,400**	**7,000**
Bank overdraft	**25,000**	**13,600**			
	1,63,000	**1,76,000**		**1,63,000**	**1,76,000**

You are required to prepare:

(a) Statement of changes in working capital

(b) Statement of sources and application of funds.

Solution :

(i) Schedule of changes in working capital :

Particulars	2003 (Rs.)	2004 (Rs.)	Effect on working capital	
			Increase (Rs.)	Decrease (Rs.)
I. Current Assets :				
Debtors	40,000	48,000	8,000	
Stock	60,000	70,000	10,000	
Prepaid expenses	600	1,000	400	
Cash	2,400	7,000	4,600	
Total Current Assets (A)	**1,03,000**	**1,26,000**		

II. Current liabilities :				
Creditors	24,000	22,000	2,000	
Provision for tax	6,000	8,400		2,400
Proposed dividend	10,000	11,600		1,600
Bank overdraft	25,000	13,600	11,400	
Total Current liabilities (B)	**65,000**	**55,600**		
Working capital (A – B)	38,000	70,400		
Increase in working capital	32,400	-	-	32,400
	70,400	**70,400**	**36,400**	**36,400**

(ii) Funds from Operations

Particulars	Amount Rs.	Particulars	Amount Rs.
Depreciation on fixed assets (30,000 – 22,000)	8,000	Opening balance	2,000
Closing balance	2,400	Funds from operators (Balance c/d)	8,400
	10,400		**10,400**

(iii) Funds Flow Statement

Sources	Amount Rs.	Application	Amount Rs.
ue of Redeemable preference shares	20,000	rease in working capital	32,400
ue of debentures	2,000		
le of Fixed Assets	2,000		
nds from operators	8,400		
	32,400		**32,400**

Illu.22 : From the following balance sheets of A Ltd., make out the statement of sources and uses of funds .

Liabilities	2000 Rs.	2001 Rs.	Assets	2000 Rs.	2001 Rs.
Equity share capital	**3,00,000**	**4,00,000**	**Goodwill**	**1,15,000**	**90,000**
8% Redeemable Preference shares	**1,50,000**	**1,00,000**	**Land and Buildings**	**2,00,000**	**1,70,000**
General Reserve	**40,000**	**70,000**	**Plant**	**80,000**	**20,000**
Profit and Loss a/c	**30,000**	**48,000**	**Debtors**	**1,60,000**	**2,00,000**
Proposed dividend	**42,000**	**50,000**	**Stock**	**77,000**	**2,09,000**
Creditors	**55,000**	**83,000**	**Bills receivable**	**20,000**	**30,000**
Bills payable	**20,000**	**16,000**	**Cash in hand**	**15,000**	**90,000**
Provision for taxes	**40,000**	**50,000**	**Cash at Bank**	**10,000**	**8,000**
	6,77,000	**8,17,000**		**6,77,000**	**8,17,000**

Additional information :

(i) **Depreciation of Rs.10,000 and Rs.20,000 have been charged on plant account and land and buildings account respectively in 2001.**

(ii) **An interim dividend of Rs.20,000 has been paid in 2001.**

(iii) **Income tax Rs.35,000 was paid during the year 2001.**

Solution :

(I) **Schedule changes in working capital :**

Particulars	2000 (Rs.)	2001 (Rs.)	Working capital	
			Increase (Rs.)	Decrease (Rs.)
Current Assets :				

Debtors	1,60,000	2,00,000	40,000	-
Stock	77,000	2,09,000	1,32,000	-
Bills receivable	20,000	30,000	10,000	-
Cash in hand	15,000	90,000	75,000	
Cash at bank	10,000	8,000	-	2,000
Total Current Assets (A)	**2,82,000**	**5,37,000**		
Current liabilities :				
Creditors	55,000	83,000	-	28,000
Bills payable	20,000	16,000	4,000	-
Total Current Liabilities (B)	**75,000**	**99,000**		
Working capital (A – B)	2,07,000	4,38,000		
Increase in working capital	2,31,000	-		2,31,000
	4,38,000	**4,38,000**	**2,61,000**	**2,61,000**

(II) Funds from operations

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Goodwill written off	25,000	By Opening balance	30,000
To Depreciation on plant	10,000	By Funds from operations (Balancing Fig)	1,76,000
To Depreciation on buildings	20,000		
To Increase in general reserve	30,000		
To Income tax	45,000		
To Proposed dividend	28,000		
To Closing Balance	48,000		
	2,06,000		**2,06,000**

Funds Flow Statement

Sources	**Amount Rs.**	**Application**	**Amount Rs.**
Increase in Equity share capital	1,00,000	Redumption of preference share capital	50,000
Sale of buildings	10,000	Income tax paid	35,000
Sale of plant	50,000	Dividend paid	20,000
Funds from operations	1,76,000	Increase in working capital	2,31,000
	3,36,000		**3,36,000**

Working Notes :

Building's a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Opening balance	2,00,000	By Depreciation	20,000
		By Sale of Buildings (Bal. fig)	10,000
		By Closing balance	1,70,000
	2,00,000		**2,00,000**

Plant a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Opening balance	80,000	By Depreciation	10,000
		By Sale of Plant (Bal. Fig)	50,000
		By Closing balance	20,000
	80,000		**80,000**

Provision for Tax a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Income tax paid	35,000	By Opening balance	40,000
To Closing balance	50,000	By Balance c/d	45,000
	85,000		**85,000**

Proposed Dividend a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Interim dividend paid	20,000	By Opening balance	42,000
To Closing balance	50,000	By Balance c/d	28,000
	70,000		**70,000**

17.5 QUESTIONS:

1. What is Funds Flow Analysis?
2. What are the sources and Applications of Funds
3. Draw a Proforma Funds Flow Statement
4. How do you the Statement of Changes in Working Capital position help in Funds flow Analysis?
5. What are the uses of Funds Flow Statement? What are its disadvantages?
6. Income statement concentrates on operating part while Funds Flow statement throws light on the activities and the direction of operations. Comment.

17.6 EXERCISES :

1. Calculate funds from operations from the following:

Net profit for the year Rs.80,000

Administrative expenses Rs.20,000

Depreciation Rs.42,000

Loss on sale of Machinery Rs.10,000

Interest on investments Rs.5,000

Selling and distribution expenses Rs.15,000

[Ans.: Funds from Operations Rs.1,27,000]

2. The following were the Balance Sheet of XYZ Co. Ltd. as on 31st March 2002 and 2003.

Liabilities	31-3-02 Rs.	31-3-03 Rs.	Assets	31-3-02 Rs.	31-3-03 Rs.
Share capital	2,64,000	3,96,000	Land & Buildings	1,66,200	3,39,600
General Reserve	18,000	27,000	Machinery	1,06,800	1,53,900
P & L a/c	58,500	62,400	Furniture	7,200	4,500
12% Debentures	10,000	78,000	Stock	66,300	78,000
Provision for Tax	29,400	37,700	Debtors	1,09,500	1,17,300
Creditors	1,00,500	1,09,200	Cash at Bank	14,400	12,000
			Preliminary expenses	10,000	5,000
	4,80,400	**7,10,300**		**4,80,400**	**7,10,300**

You are required to prepare funds flow statement after taking into account the following:

(a) Depreciation written off during year

On Buildings Rs.20,400

On Machinery Rs.38,400

On Furniture Rs.1,200

(b) Interim dividend paid during the year Rs.26,000

(c) Income tax paid Rs.30,000.

[Ans.: Net increase in working capital Rs.8,400; Funds from operations Rs.1,42,200]

3. The following are the summarised balance sheets of M/s Vivek Ltd. on 31st December, 2003 and 31st December, 2004.

Liabilities	2003 (Rs.)	2004 (Rs.)
Share capital	12,00,000	16,00,000
Debentures	4,00,000	6,00,000
Profit & Loss Account	2,50,000	5,00,000
Creditors	2,30,000	1,80,000
Provision for :		
Bad and doubtful debts	12,000	6,000
Depreciation on land and buildings	40,000	48,000
Depreciation on plant & Machinery	60,000	70,000
	21,92,000	30,04,000
Assets :		
Plant and Machinery (at cost)	8,00,000	12,90,000
Land and buildings (at cost)	6,00,000	8,00,000
Stock	6,00,000	7,00,000
Bank	40,000	80,000
Preliminary expenses	14,000	12,000
Debtors	1,38,000	1,22,000
	21,92,000	30,04,000

Additional Information :

(a) During the year a part of the machinery costing Rs.1,40,000 (accumulated depreciation thereon Rs.4,000) was sold for Rs.12,000.

(b) Dividend for Rs.1,00,000 was paid during the year.

Ascertain :

(i) Change in working capital for 2004

(ii) Funds Flow statement for 2004.

[Ans.: Net increase in working capital Rs.1,74,000; Funds from operations Rs.4,92,000]

4. From the following Balance Sheets of B Ltd., prepare a source and uses of funds statement for 2004.

Assets	31st December, 2004 (Rs.)	31st December, 2003 (Rs.)
Cash	75,000	35,000
Accounts receivable	90,000	98,000
Merchandise inventory	1,20,000	87,000

Long term investments	10,000	15,000
Land	30,000	20,000
	3,25,000	2,55,000
Liabilities and Stockholders		
Equity accounts payable	45,000	50,000
Notes payable (short term)	35,000	20,000
Notes payable (due December, 2005)	20,000	-
Capital stock	1,50,000	1,25,000
Retailed earnings	75,000	60,000
	3,25,000	2,55,000

[Ans.: Increase in working capital Rs.35,000; Funds from operations Rs.15,000]

5. Seeta Mahalakshmi Ltd., presents the following financial statements for 2000 and 2001. Prepare a source and Application of funds statement:

	2000 Rs.	**2001 Rs.**
Assets		
Cash	1,06,000	62,000
Investments	1,74,000	-
Sundry Debtors	6,92,000	10,56,000
Stock in trade	8,64,000	13,66,000
Net fixed assets	22,26,000	27,96,000
	40,62,000	**52,80,000**
Liabilities		
Sundry Creditors	8,26,000	12,54,000
Bills payable	4,52,000	6,28,000
Loan from bank	2,00,000	4,70,000
Reserves and surplus	13,84,000	17,28,000
Share capital	12,00,000	12,00,000
	40,62,000	**52,80,000**

Depreciation of Rs.3,78,000 was written off for 2001 on fixed assets.

[Ans.: Increase in working capital Rs.44,000; Funds from operations Rs.7,22,000]

6. From the following Balance Sheet as on 31st December 2003 and 31st December 2004 you are required to prepare a schedule of changes in the working capital and a funds flow statement taking the provision for tax and proposed dividends as non – current liabilities.

Liabilities	**As on 2003 Rs.**	**31st Dec. 2003 Rs.**	**Assets**	**As on 2003 Rs.**	**31st Dec. 2003 Rs.**
Share capital	10,000	15,000	Fixed Assets	10,000	20,000
Profit and loss a/c	4,000	6,000	Current	13,000	14,500
Provision for tax	2,000	3,000			
Proposed Dividends	1,000	1,500			
Sundry Creditors	4,000	6,000			
Outstanding expenses	2,000	3,000			
	23,000	**34,500**		**23,000**	**34,500**

Additional Information:

(a) Tax paid during 2004 Rs.2,500

(b) Dividends paid during 2004 Rs.1,000

[Ans.: Net decrease in working capital Rs.1,500; Funds from operations Rs.7,000]

17.7 SUGGESTED READINGS :

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Chapter - 18

Cash Flow Analysis

Objectives :

After reading this lesson you should be able to :

- **Know the meaning of cash flow analysis**
- **Classify cash flow on the basis of operations investment and financing**
- **Discuss the treatment of some items in the preparation of cash flow statement.**
- **Prepare a Cash flow statement using the direct and indirect methods**

Structure :

18.1 Introduction

18.2 Meaning of Cash Flow

18.3 Classification of Cash flow

18.4 Treatment of other items

18.5 Preparation of Cash Flow Statement

18.6 Calculation of Cash Flows from operations or Operating Activities

18.7 Questions

18.8 Exercises

18.9 Suggested Readings

18.1 INTRODUCTION :

A cash flow statement presents a summary of investment, dividend and financing decisions with a focus on movements in cash and cash equivalents during the reporting period. A fund flow statement explains changes in working capital, while a cash flow statement explains changes in the cash balance (including cash equivalents). Balance is in the cash credit account and bank overdraft account should be treated as a part of the cash balance. Cash flow statement is considered superior to fund flow statement in terms of 'decision usefulness'. A cash flow statement helps to assess the ability of the firm to generate and use cash to the benefit of shareholders. It helps to estimate the amount, timing and uncertainty of future cash flows.

A cash flow statement is not very much different from a funds flow statement. In fact, the main difference between funds flow statement and cash flow statement relates to meaning and concept of the term 'fund'. The term 'fund' as used in funds flow statement means not working capital i.e., the difference between current assets and current liabilities. But in a cash flow statement the term 'fund' means cash.

18.1.1. Concept of Cash Flow :

As per Accounting Standard (AS – 3) issued by the Institute of Chartered Accountants of India, the term cash includes :

1. Cash in hand,
2. Demand deposits with banks.
3. Cash equivalents. These 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.

18.2 MEANING OF CASH FLOW :

Cash flow means inflow and outflow of cash. An inflow i.e., source of cash increases the total cash available at the disposal of the firm while an outflow i.e., use of cash decreases it. The difference between cash inflows and cash outflow is known as net cash flow which can be either net cash inflow or net cash outflow.

It should be noted that cash flow statement deals with flow of cash fund but does not consider movement among cash, bank balance and cash equivalents. This is in line with funds flow statement which exclude movements between items that constitute working capital i.e., current assets and current liabilities.

18.3 CLASSIFICATION OF CASH FLOWS :

Accounting Standard (As – 3) requires that cash flow statement should report cash flow during the period classified by operating, investing and financing activities.

1. **Operating Activities :** Operating activities are the principal revenue activities of the enterprise. Cash flows from these activities result from transactions and other events that enter into the determination of net profit or loss. Examples of cash flow from operations are :
   - (i) Cash receipts from the sale of goods and the rendering of services usually forms a major share of cash inflow.
   - (ii) Cash receipts from royalties, fees, commission and other revenue.
   - (iii) Cash payment to suppliers for goods and services, such as payment of expenses like lighting and power, rent, insurance etc.
   - (iv) Cash payment of wages and salaries to employees.
   - (v) Cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities, etc.
2. **Investing Activities :** These are the acquisitions and disposal of long term assets (such as plant, machinery, furniture, land and building etc.) and other investments not included in cash equivalents. Examples of cash flow arising from investing activities are :
   - (i) Cash receipts from disposal of fixed assets.
   - (ii) Cash payments to acquire fixed assets.
   - (iii) Cash payment to acquire shares / debentures of other enterprises.
   - (iv) Cash receipts from disposal of shares, debentures of other enterprises.
   - (v) Cash advances and loans made to third parties.
   - (vi) Cash receipts from repayment of advances and loans made to third parties.
3. **Financing Activities :** These are the activities that result in changes in the size and composition of the owner's capital and borrowings of the enterprise. Examples of cash flows arising from financing activities are :
   - (i) Cash receipts from issue of shares and debentures
   - (ii) Cash receipts from loans raised.
   - (iii) Cash payments for redemption of preference shares and debentures.

18.4 TREATMENT OF OTHER ITEMS :

1. **Interest and Dividends :**
   (i) In case of a financing enterprise, cash flows from interest paid and interest and dividend received should be treated as cash flows from operating activities. Dividends paid should be classified as cash flows from financing activities.
   (ii) In the case of other enterprises, cash flows arising from interest and dividend paid should be classified as cash flows from financing activities while interest and dividend received should be classified as cash flows from investing activities.

Net profit is adjusted for non-operating expenses and incomes for calculating operating profits as shown below :

	Net profit	…..
Add:	Non – operating expenses	….
Less:	Non – operating incomes	…..

	Net operating profit	**……**
		-------

2. **Income Tax :** Cash flows arising from income tax should be classified as flows from operating activities unless they can be specifically identified with financing and investing activities. For example, capital gain tax on sale of land can be identified with investing activity and therefore in the cash flow statement, it should be shown as outflow from investing activities.
3. **Extra ordinary items :** The cash flows associated with extra ordinary items should be classified as arising from operating, investing or financing activities as appropriate and separately disclosed. For example, legal claim, cost of winning a law suit or lottery, receipt of claim from an insurance company etc. are extra ordinary items.
4. **Non Cash Transactions :** There are certain transactions which do not involve cash inflow or cash outflow. Although they do effect the capital and assets of an enterprise, they are excluded from cash flow statement for obvious reasons. Examples non – cash transactions are :
   (i) Acquisition of assets by issue of shares / debentures.
   (ii) Conversion of convertible debentures into shares.

(iii) Acquisition of a fixed asset, say machinery, on credit etc.

18.5 PREPARATION OF CASH FLOW STATEMENT :

The procedure used for the preparation of a cash flow statement is as follows :

- Calculation of net increase or decrease in cash and cash equivalents accounts – The difference between cash and cash equivalents for the period may be computed by comparing these accounts given in the comparative balance sheets. The results will be cash receipts and payments during the period responsible for the increase or decrease in cash and cash equivalent items.
- Calculation of the net cash provided or used by operating activities – It is by the analysis of profit and loss account, comparative balance sheet and selected additional information.
- Calculation of the net cash provided or used by investing and financing activities. All other changes in the Balance sheet items must be analysed taking into account the additional information and effect on cash may be grouped under the investing and financing activities.
- Preparation of a cash flow statement. It may be prepared by classifying all cash inflows and outflows in terms of operating, investing and financing activities. The net cash flow provided or used in each of these three activities may be highlighted.
- Ensure that the aggregate of net cash flows from operating, investing and financing activities is equal to net increase or decrease in cash and cash equivalents.
- Report any significant investing, financing transactions that did not involve cash or cash equivalents in a separate schedule to the cash flow statement.

As – 3 has not prescribed any specific format of cash flow statement but SEBI requires the cash flow statement to be prepared in the following form.

Proforma of Cash Flow Statement

	Rs.	Rs.
Cash Flows from Operating Activities :		
Net profit before tax and extra ordinary items adjustment for :		
Depreciation	-	
Interest income	-	
Dividend income	-	
Interest expense	-	
Foreign exchange loss	-	
Operating profit before working capital changes	-	
Adjustments for changes in current assets and current liabilities	-	
Cash generated from or used in operations before tax	-	
Income tax paid	-	
Cash flow before extra ordinary items	-	
Extra ordinary items	-	
Net cash from (or used in) operating activities	-	
Cash Flows from Investing activities	**-**	-
Purchase of fixed assets	-	
Proceeds from sale of fixed assets	-	
Interest and dividend received	-	
Net cash from (or used in) investing activities	-	
Cash Flows from Financing Activities	**-**	
Proceeds from issue of shares / debentures	**-**	
Proceeds from long term borrowings	-	
Repayment of long term borrowings	-	
Interest paid	-	
Dividends paid	-	
Net cash from (or used in) financing activities	-	
Net increase (or Decrease) in Cash and cash equivalents		**-**
Cash and cash equivalents at the beginning of the period		-

Cash and cash equivalents at the end of the period		-

18.6 CALCULATION OF CASH FLOWS FROM OPERATIONS OR OPERATING ACTIVITIES :

There are two methods of calculating cash flows from operating activities :

(a) Direct method, and (b) Indirect method.

(a) Direct method : Under this method, cash receipts from operating revenues and cash payments for operating expenses are calculated and shown in the cash flow statement. The difference between the total cash receipts and total cash payments as shown as the net cash flow from operating activities. Examples of usual cash receipts and payments resulting from operating activities are :

(i) Cash sales of goods and services.

(ii) Cash received from debtors.

(iii) Cash payment for purchase of inventories.

(iv) Cash payment to creditors.

(v) Cash payment for wages, salaries and other operating expenses.

(vi) Cash payment of income tax, etc.

There are many items which appear in the Profit and Loss Account on accrual basis. Necessary adjustments are made to these items to convert them into cash based items.

(b) Indirect Method : Under the indirect method, the net cash from operating activities is determined by making necessary adjustments in the net profit (or loss) as disclosed by Profit and Loss Account. Adjustments is net profit or loss are for the effects of :

(a) Non – cash items like depreciation;

(b) Changes during the period in inventories and operating receivables and payable;

(c) All other items for which cash effects are investing and financing cash flows.

The indirect method is also known as ‘Reconciliation Method’ as it involves a reconciliation of the net profit with net cash flows operating activities.

The method of calculating cash from operating activities is as follows :

		Rs.
Net Profit for the year		
Add:	Non cash and non – operating expenses	
	- Depreciation	
	- Goodwill written off	
	- Preliminary expenses written off	
	- share discount written off	
	- loss on sale of fixed assets, investments, etc.	
	- Provision for taxation	
Less :	Non cash and non – operating incomes	
	Profit on sale of fixed assets, investments, etc.	
Net profit after adjustment for non – cash items		-
	Adjustments for changes in current operating assets (except cash and cash equivalents) and current operating liabilities (except bank overdraft)	
Add:	1. Increase in current liabilities	
	2. Decrease in current assets	
Less:	1. Increase in current assets	
	2. Decrease in current liabilities	
Less:	Income tax paid	
	Cash from operating activities	**-**

Illu.1 : From the following balance sheets prepare Cash Flow Statement:

Liabilities	31-3-2005 Rs.	31-3-2006 Rs.	Assets	31-3-2005 Rs.	31-3-2006 Rs.
Share capital	**20,000**	**28,000**	**Goodwill**	**16,000**	**13,000**
Profit & Loss a/c	**10,000**	**13,000**	**Land**	**10,000**	**20,000**
General Reserve	**8,000**	**10,000**	**Machinery**	**25,000**	**50,000**
12% Debentures	**25,000**	**35,000**	**Investments**	**10,000**	**12,000**
Creditors	**26,000**	**30,000**	**Stock**	**20,000**	**15,000**

Provision for tax	**10,000**	**14,000**	**Debtors**	**10,000**	**13,000**
			Cash	**8,000**	**7,000**
	99,000	**1,30,000**		**99,000**	**1,30,000**

Additional Information:

(a) **Investments costing Rs.5,000 sold for Rs.6,000 during the year.**

(b) **Depreciation charged on Machinery was Rs.5,000**

Solution :

Cash Flow Statement
(for the year ended 31st March 2006)

	Rs.	Rs.
Cash flows from operating activities:		
Increase in balance of P & L a/c	3,000	
Adjustments for non- cash and non – operating items:		
Transfer to general reserve	2,000	
Depreciation Machinery	5,000	
Profit on sale of investments	(-) 1,000	
Goodwill written off	3,000	
Operating profit before working capital changes (A)	**12,000**	
Adjustments for changes in current assets and current liabilities:		
Increase in creditors	4,000	
Increase in provision for tax	4,000	
Increase in debtors	(3,000)	
Decrease in stock	5,000	
Total Decrease in Current assets and increase in current liabilities (B)	**10,000**	
Cash generating from operations (A – B)	22,000	
Income tax paid	-	
Net cash from operating activities		**22,000**
Cash flows from investing activities:		

Purchase of Land	(10,000)	
Purchase of Machinery	(30,000)	
Purchase of Investments	(7,000)	
Sale of investments	6,000	
Net cash used in investing activities		41,000
		(-) 19,000
Cash flows from financing activities:		
Proceeds from issue of shares	8,000	
Proceeds from 12% Debentures	10,000	
Net cash used in financing activities		18,000
Net decrease in cash and cash equivalents		(-) 1,000
Cash and cash equivalent at the beginning		8,000
Cash and Cash equivalent at the end		**7,000**

Illu.2 : Balance Sheets of M/s. A and B as on 1st January and 31st December 2006 were as follows:

Liabilities	1-1-06	31-12-06	Assets	1-1-06	31-12-06
Capital	**2,25,000**	**2,85,000**	**Cash**	**30,000**	**39,000**
Mrs. B 's Loan	**45,000**	**-**	**Debtors**	**81,000**	**1,14,000**
Loan from state Bank of India	**90,000**	**1,20,000**	**Stock**	**72,000**	**63,000**
Sundry creditors	**75,000**	**84,000**	**Furniture**	**3,000**	**3,000**
			Machinery	**1,35,000**	**97,500**
			Land	**54,000**	**67,500**
			Building	**60,000**	**1,05,000**
	4,35,000	**4,89,000**		**4,35,000**	**4,89,000**

During the year a machine costing Rs.18,000 (accumulated depreciation on Rs.6,000) was sold for Rs.7,500. The provision for depreciation against machinery as on 1st January

2006 was Rs.36,000 and on 1st December 2006 Rs.55,500. Net profit for the year 2006 amounted to Rs.90,000. You are required to prepare cash flow statement.

Solution :

Particulars		Rs.	Rs.
Cash flow from operating activities:			
1.	**Net Profit as gives (for the year 2006) adjustment of non cash and non operating activities**	90,000	
	Depreciation	25,500	
	Loss on sale of machinery	4,500	
	Operating profit before work in price changes	1,20,000	
	Decrease is stock (72,000 – 63,000)	9,000	
	Increase in creditors (84,000 – 75,000)	9,000	
	Increase in debtors (1,14,000 – 81,000)	(33,000)	
	Net cash flow from operating activities		1,05,000
ii)	**Cash flow from investing activities:**		
	Sale of machinery	7,500	
	Purchase of land (67,500 – 54,000)	(13,500)	
	Purchase of Buildings (1,05,000 – 60,000)	(45,000)	
	Net cash flow from investing activities		(-) 51,000
iii)	Cash flow from financing activities		
	Loan from State Bank of India	30,000	
	Mrs. B ‘s loan repaid	(45,000)	
	Drawings	(30,000)	
	Net Cash flow from financing activities		(-) 45,000
	Net increase (decrease) is cash and cash equivalent)		9,000
	Cash and cash equivalents as the beginning of the period		30,000
	Cash and cash equivalents at the end off the period		**39,000**

Working Notes:

Calculation of drawings:	**Rs.**
Capital as on 1-1-06	2,25,000
Add: Net profit	90,000

	3,15,000
Less: Capital as on 31-12-06	2,25,000

Drawings	**30,000**

Calculation of depreciation charged	**Rs.**
Depreciation on 1-1-06	36,000
Less: Depreciation transferred	
on assets sole	6,000

	30,000
Less: Depreciation as on	
31-12-06	55,500

Depreciation charged	25,500
Doubtful	---------

Illu.3 : Following are the Comparative Balance Sheet of XYZ Ltd. as on 31st December 2005 and 2006:

Liabilities	2005 Rs.	2006 Rs.	Assets	2005 Rs.	2006 Rs.
Share capital	**3,50,000**	**3,70,000**	**Assets**	**1,00,000**	**1,50,000**
Profit & Loss a/c	**50,400**	**52,800**	**Stocks**	**2,46,000**	**2,13,500**
9% debentures	**60,000**	**30,000**	**Goodwill**	**50,000**	**25,000**
Creditors	**51,600**	**59,200**	**Cash and Bank Bal.**	**45,000**	**39,000**
			Debtors	**71,000**	**84,500**

	5,12,000	**5,12,000**		**5,12,000**	**5,12,000**

Other particulars provided to you are:

(a) Dividends declared and paid during the year Rs.17,500

(b) Land was revalued during the year at Rs.1,50,000 and the profit on revaluation transferred to profit and Loss account.

You are required to prepare a cash flow statement for the year ended 31-12-2005.

Solution :

Cash from operations

Particulars	Rs.	Rs.
Balance of profit as per P & L a/c on 31-12-2006		**52,800**
Add: Non – cash and Non – operating expenses		
Dividends declared	17,500	
Goodwill written off	25,000	42,500
		95,300
Less: Non – Cash and non – operating incomes Profit on revaluation of land	50,000	50,000
		45,300
Less: Balance of profit as per P & L a/c on 31-12-2005		50,400
Cash lost in operations		**(-) 5,100**

Cash Flow Statement

Particulars	Rs.	Rs.
Balance of cash and bank on 1-1-2006		45,000
Sources:		
Issue of shares	20,000	
Increase in Creditors	7,600	
Decrease in Stocks	32,500	60,100
		1,05,100

Applications:		
Redemption of debentures	30,000	
Increase in debtors	13,500	
Dividends paid	17,500	
Cash lost from operations	5,100	66,100
Balance of cash and bank on 31-12-2006		39,000

Illu.4 : From the following condensed comparative Balance sheet of Mysore Mills Ltd., and additional information, prepare a cash flow statement for the year 2004.

Liabilities	**2005 Rs.**	**2006 Rs.**	**Assets**	**2005 Rs.**	**2006 Rs.**
Share Capital	**70,000**	**80,000**	**Plant & machinery**	**62,000**	**66,000**
Share premium	**9,000**	**11,000**	**Accumulated Depreciation on Plant and Machinery**	**(37,000)**	**(26,200)**
Retained Earnings	**23,820**	**30,820**	**Building**	**95,000**	**1,16,000**
7% Mortgage loan	**-**	**20,000**	**Accumulation depreciation on buildings**	**(42,000)**	**(45,000)**
Creditors	**6,900**	**6,000**	**Land**	**10,000**	**12,000**
Outstanding salaries	**2,000**	**1,400**	**Stock**	**10,220**	**9,620**
Provision for taxation	**1,000**	**1,400**	**Debtors**	**8,600**	**7,600**
			Prepaid expenses	**720**	**800**
			Cash	**6,180**	**9,800**
	1,12,720	**1,50,620**		**1,12,720**	**1,50,620**

Additional Information :

1. **Plant costing Rs.16,000 (accumulated depreciation Rs.14,800) was sold during the year for Rs.1,200.**
2. **Building was acquired during the year at a cost of Rs.21,000. In addition to cash payment of Rs.1,000, a 7% mortgage loan was raised for the balance.**
3. **Dividend of Rs.8,000 was paid during the year.**
4. **A sum of Rs.13,900 was transferred to provision for taxation account in 2006.**

Solution :

Cash flow statement for the year 2006

			Rs.	Rs.
(i)	**Cash Flow from operating activities**			
	Net profit during the year			28,900
	Add : Depreciation – Building	2,000		
	Plant	4,000		
	Decrease in stock	600		
	Decrease in debtors	1,000	7,600	
	Less : Decrease in Creditors	900		
	Decrease in outstanding salaries	600		
	Increase in prepaid expenses	80		
	Income tax paid	13,500	(-) 15,080	(-) 7,480
	Net Cash inflow from operating activities			**21,420**
(ii)	**Cash flow from investing activities**			
	Purchase of Building	1,000		
	Purchase of plant and machinery	20,000		
	Purchase of land	2,000	23,000	
	Sale of plant		1,200	
	Net cash outflow from investing activities			**(-) 21,800**
(iii)	**Cash flow from financing activities**			
	Issue of shares		10,000	
	Share premium		2,000	

	Dividend paid		(-) 8,000	4,000
	Net increase in cash			3,620
	Cash in the beginning			6,180
	Cash at the end of 2006			**9,800**

Working Notes :

Retained Earnings a/c

	Rs.		Rs.
To Dividend paid	8,000	By Balance b/d	23,820
To Balance c/d	30,820	By Profit during the year (Balancing figure)	15,000
	38,820		**38,820**

Plant and Machinery a/c

	Rs.		Rs.
To Balance b/d	62,000	By Sale of plant	1,200
To Bank purchase (Balancing figure)	20,000	By Depreciation on plant sold	14,800
		By Balance c/d	66,000
	82,000		**82,000**

Accumulated Depreciation on Plant and Machinery a/c

	Rs.		Rs.
To Plant (Depreciation)	14,800	By Balance b/d	37,000
To Balance c/d	26,200	By Profit & Loss a/c (Depreciation)	4,000
	41,000		**41,000**

Buildings a/c

	Rs.		Rs.
To Balance b/d	95,000	By Balance c/d	1,16,000
To Bank (Purchase)	1,000		
To Mortgage Loan (Purchase)	20,000		
	1,16,000		**1,16,000**

Accumulated Depreciation on Buildings a/c

	Rs.		Rs.
To Balance c/d	45,000	By Balance b/d	43,000
		By P & L a/c (Depreciation)	2,000
	45,000		45,000

Provision for Taxation a/c

	Rs.		Rs.
To Income tax paid (Balancing figure)	13,500	By Balance b/d	1,000
To Balance c/d	1,400	By Profit & Loss a/c (provision during the year)	13,900
	14,900		**14,900**

Illu.5 : From the following Balance Sheet of PK Ltd. for the year ending 31-12-2005 and 31-12-2006, prepare cash flow statement.

Liabilities	2005 Rs.	2006 Rs.	Assets	2005 Rs.	2006 Rs.
Share capital	**2,15,000**	**2,75,000**	**Goodwill**	**-**	**20,000**
Reserves	**40,000**	**40,000**	**Plant and Machinery**	**1,12,950**	**1,16,200**
Profit & Loss a/c	**39,690**	**41,220**	**Land and Buildings**	**1,48,500**	**1,44,250**

Provision for tax	**40,000**	**50,000**	**Current assets**	**1,98,530**	**1,70,730**
Bank loan	**59,510**	**-**	**Cash**	**7,500**	**7,700**
Current liabilities	**73,280**	**52,660**			
	4,67,480	**4,58,880**		**4,67,480**	**4,58,880**

The following information is also provided.

1. **A dividend of Rs.26,000 was paid during the year 2006**
2. **Profit before tax for the year was Rs.62,530**
3. **During the year 2006, the company paid tax of Rs.25,000**
4. **During the year, the company purchased another company and paid Rs.60,000 in share capital. It acquired stock Rs.21,640 and plant Rs.18,360.**
5. **It purchases machinery costing Rs.5,650 during the year.**

Solution :

Cash flow statement for the year 31-12-2006

		Rs.
(i)	**Cash Flow from operating activities**	
	Profit during the year	62,530
	Add : Depreciation on :	
	Land and buildings (Rs.1,48,500 – 1,44,250)	4,250
	Plant and machinery	20,760
	Decrease in current assets	27,800
	Stock acquired on purchase of business	21,640
		1,36,980
	Less : Tax paid	(-) 25,000
	Decrease in current liabilities	(-) 20,620
	Cash inflow from operating activities	**91,360**
(ii)	**Cash flow from investing activities**	
	Purchase of plant and machinery	(-) 5,650
(iii)	**Cash flows from financing activities**	

	Payment of dividend	(-) 26,000
	Repayment of bank loan	(-) 59,510
	Net increase in cash	200
	Add : Cash balance in the beginning	7,500
	Cash balance at the end of the year	**7,700**

Working Notes :

1. Issue of share capital for Rs.6,000 for purchasing another company is a non-cash transaction and thus has not entered in cash flow statement.
2. Plant and machinery account :

Plant and Machinery a/c

	Rs.		**Rs.**
To Balance b/d	1,12,950	By Depreciation (Balancing figure)	20,760
To Cash	5,650	By Balance c/d	1,16,200
To Purchase (non-cash)	18,360		
	1,36,960		1,36,960

Illu.6 : From the following balances you are required to calculate cash from operations.

	31-12-2004 Rs.	**31-12-2005 Rs.**
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**
Outstanding incomes	**600**	**750**

Income received in advance	**300**	**250**
Profit made during the year	**-**	**1,30,000**

Solution :

Cash from operations

Particulars		Amount Rs.	Amount Rs.
Profit made during the year			1,30,000
Add:	**Decrease in Current Assets :**		
	Debtors	3,000	
	Prepaid expenses	100	
	Increase in Current Liabilities :		
	Creditors	5,000	
	Outstanding expenses	200	8,300
			1,38,300
Less:	**Increase in Current Assets :**		
	Bills receivable	2,500	
	Accrued income	150	
	Decrease in Current Liabilities:		
	Bills payable	2,000	
	Incomes received in advance	50	4,700
	Cash from operations		**1,33,600**

Illu.7 : From the following particulars prepare cash flow statement of Mr. Mahadev :

	1st Jan 2005 Rs.	31st Dec 2005 Rs.
Cash	**5,000**	**4,000**
Debtors	**40,000**	**45,000**
Stock	**30,000**	**25,000**
Land	**30,000**	**40,000**

Buildings	**50,000**	**55,000**
Machinery	**70,000**	**80,000**
	2,25,000	**2,49,000**
Current liabilities	**35,000**	**40,000**
Loan from Mrs. Lalitha	**-**	**25,000**
Bank loan	**40,000**	**30,000**
Capital	**1,50,000**	**1,54,000**
	2,25,000	**2,49,000**

During the year, Mr. Mahadev brought an additional capital of Rs.10,000 and his drawings during the year were Rs.31,000. Provision for depreciation on machinery – opening balance Rs.30,000, closing balance Rs.40,000.

No depreciation need to be provided for other assets.

Solution :

Working Notes :

Capital a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Drawings	31,000	By Balance b/d	1,50,000
To Balance c/d	1,54,000	By Bank	10,000
		By Profit & Loss (Profit) (B/f)	25,000
	1,85,000		**1,85,000**

Machinery a/c

Dr. **Cr.**

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Balance b/d	70,000	By Depreciation	10,000

		(40,000 – 30,000)	
To Bank (uses) (B/f)	20,000	By Balance c/d	80,000
	90,000		**90,000**

Cash flow statement

	Particulars	Amount Rs.	Amount Rs.
I.	**Cash flows from operating activities :**		
	Net profit made during the year	25,000	
	Adjustments for depreciation	10,000	
	Operating profit before working capital changes	**35,000**	
	Decrease in stock	5,000	
	Increase in current liabilities	5,000	
	Increase in debtors	(-) 5,000	
	Net cash flow from operating activities		40,000
II	**Cash flows from investing activities :**		
	Purchase of Land	10,000	
	Purchase of Buildings	5,000	
	Purchase of Machinery	20,000	
	Net cash flow from investing activities		(-) 35,000
III	**Cash flows from financing activities :**		
	Loan from Mrs. Lalitha	25,000	
	Additional capital	10,000	
	Bank loan repaid	(-) 10,000	
	Drawings	(-) 31,000	(-) 6,000
	Net decrease in cash & cash equivalents		**(-) 1,000**
	Cash and cash equivalents at the beginning		5,000
	Cash and cash equivalents at the end		**4,000**

Illu.8 : The following are the comparative Balance Sheet of ABC Ltd. as on 31st December 2003 and 2004 :

Liabilities	2003 Rs.	2004 Rs.	Assets	2003 Rs.	2004 Rs.
Share capital	**35,000**	**37,000**	**Land**	**10,000**	**15,000**
Profit and loss a/c	**5,040**	**5,280**	**Stock**	**24,600**	**21,350**
9% Debentures	**6,000**	**3,000**	**Goodwill**	**5,000**	**2,500**
Creditors	**5,000**	**4,000**	**Bank**	**4,500**	**3,900**
Dividend provision	**3,000**	**5,000**	**Debtors**	**9,940**	**11,530**
	54,040	**54,280**		**54,040**	**54,280**

You are required to prepare a cash flow statement.

Solution :

Cash from operations

		Rs.	Rs.
Profit and Loss a/c Balance for 2004			5,280
Add:	Non–cash and non – operating expenses		
	Goodwill written off	2,500	
	Provision for Dividend	5,000	7,500
			12,780
Less:	Profit and loss a/c balance for 2003		5,040
	Cash from operations		**7,740**

Cash Flow Statement

		Rs.	Rs.
Bank Balance for 2003			4,500
Add:	Cash from operations	7,740	
	Issue of shares	2,000	
	Decrease in stock	3,250	12,990

			17,490
Less:	Redemption of Debentures	3,000	
	Decrease in creditors	1,000	
	Dividend paid	3,000	
	Purchase in Land	5,000	
	Increase in Debtors	1,590	13,590
	Bank Balance for 2004		**3,900**

Illu.9 : Balance Sheets of S and K on 1.4.05 and 31.3.06 were as follows :

Liabilities	1.4.05 Rs.	31.3.06 Rs.	Assets	1.4.05 Rs.	31.3.06 Rs.
Creditors	**80,000**	**88,000**	**Cash**	**20,000**	**14,000**
Mrs. S's loan	**50,000**	**-**	**Debtors**	**60,000**	**1,00,000**
Loan from bank	**80,000**	**1,00,000**	**Stock**	**70,000**	**50,000**
Capital	**2,50,000**	**3,06,000**	**Machinery**	**1,60,000**	**1,10,000**
			Land	**80,000**	**1,00,000**
			Building	**70,000**	**1,20,000**
	4,60,000	**4,94,000**		**4,60,000**	**4,94,000**

During the year, a machine costing Rs.20,000 (accumulated depreciation Rs.6,000) was sold for Rs.10,000. The provisions for depreciation against machinery as on 1.4.05 was Rs.50,000 and on 31.3.06 Rs.80,000. Net profit for year 2005 –06 amounted to Rs.90,000.

You are required to prepare cash flow statement.

Solution :

Cash Flow Statement of S & K

	Rs.	Rs.
Cash in hand on 1-4-05		20,000
Add : Decrease in stock	20,000	

	Increase in creditors	8,000	
	Increase in bank loan	20,000	
	Sale of machinery	10,000	
	Cash from operations	1,30,000	1,88,000
			2,08,000
Less:	Increase in Debtors	40,000	
	Purchase of land	20,000	
	Purchase of building	50,000	
	Decrease in Mrs. S's loan	50,000	
	Drawings	34,000	1,94,000
	Cash in hand on 31-3-2006		**14,000**

Working Notes :

Provision for Depreciation Account

Dr. **Cr.**

	Rs.		**Rs.**
To Sale of Machinery	6,000	By Balance b/d	50,000
To Balance c/d	80,000	By Depreciation for the year	36,000
	86,000		**86,000**

Cash from operations

			Rs.
Profit for the year			90,000
Add :	Non – cash and Non – operating expenses		
	Loss on sale of Machinery (20,000 – 6,000 – 10,000)	4,000	
	Depreciation on machinery	36,000	40,000
	Cash from operations		**1,30,000**

Capital Account

Dr. **Cr.**

	Rs.		Rs.
To Drawing (Bal. Fig)	34,000	By Balance b/d	2,50,000
To Balance c/d	3,06,000	By Profit	90,000
	3,40,000		**3,40,000**

Illu.10 : The following are the Balance Sheets of Sri Ram Ltd. :

Liabilities	1998 Rs.	1999 Rs.	Assets	1998 Rs.	1999 Rs.
Equity share Capital	**1,00,000**	**1,42,000**	**Land**	**24,000**	**48,000**
8% Pref. Share capital	**80,000**	**80,000**	**Building and equipment**	**1,80,000**	**2,88,000**
P & L Account	**75,900**	**81,900**	**Debtors**	**84,000**	**84,000**
Creditors	**1,20,000**	**1,08,000**	**Inventory**	**1,32,000**	**48,000**
Outstanding expenses	**12,000**	**24,000**	**Prepaid rent**	**1,800**	**2,400**
Provision for taxation	**6,000**	**6,600**	**Prepaid insurance**	**2,100**	**2,100**
Provision for depreciation	**60,000**	**66,000**	**Cash**	**30,000**	**36,000**
	4,53,900	**5,08,500**		**4,53,900**	**5,08,500**

(i) The company declared and paid equity dividend of Rs.36,000 during the year 1998.

(ii) A truck costing Rs.36,000 and with accumulated depreciation of Rs.24,000 was sold at a profit of Rs.600.

Prepare Cash Flow Statement.

Solution :

Working Notes :

(1) Appreciation in land = 48,000 – 24,000 = Rs.24,000

(2) Purchase of Buildings & Equipment = Rs.1,44,000

Buildings & Equipment Account

Dr. **Cr.**

	Rs.		**Rs.**
To Balance b/d	1,80,000	By Cash	12,600
To P & L a/c (Profit on sale)	600	By Provision Depreciation	24,000
To Cash – assumed as new purchase	1,44,000	By Balance c/d	2,88,000
	3,24,600		**3,24,600**

Provision for Depreciation Account

Dr. **Cr.**

	Rs.		**Rs.**
To Buildings & Equipment a/c	24,000	By Balance b/d	60,000
To Balance c/d	66,000	By Profit & Loss a/c Depreciation	30,000
	90,000		**90,000**

(3) No change in debtors balance

(4) Decrease in inventory = Rs.1,32,000 – Rs.48,000 = Rs.84,000

(5) Increase in prepaid rent = Rs.2,400 – Rs.1,800 = Rs.600

(6) No change in prepaid insurance

(7) Increase in equity share capital = Rs.1,42,000 – Rs.1,00,000 = Rs.42,000

(8) Decrease in creditors = Rs.1,20,000 – Rs.1,08,000 = Rs.12,000

(9) Increase in outstanding expenses = Rs.24,000 – Rs.12,000 = Rs.12,000

(10) Increase in provision for taxation = Rs.6,600 – Rs.6,000 = Rs.600

(11) Depreciation Provided = Rs.30,000

(Refer Provision for Depreciation Account)

Calculation of cash from operations

	Rs.	**Rs.**
Profit & Loss a/c balance in 1999		81,900
Add : Non – cash and Non – operating expenses :		

Dividends paid	36,000	
Depreciation written off	30,000	66,000
		1,47,900
Less: Non – cash non – operating incomes		
Appreciation in Land	24,000	
Profit on the sale of Truck	600	24,600
		1,23,300
Less: Balance of Profit & Loss a/c in 1998		75,900
Cash from operations		**47,400**

Cash Flow Statement

	Rs.	**Rs.**
Cash balance in 1998		30,000
Add : Sources		
Cash from operations	47,400	
Issue of equity shares	42,000	
Decrease in inventory	84,000	
Increase in outstanding expenses	12,000	
Increase in provision for taxation	600	
Sale proceeds from sale of trucks	12,600	1,98,600
		2,28,600
Less: Applications :		
Purchase of Building	1,44,000	
Increase in prepaid rent	600	
Decrease in creditors	12,000	
Dividends paid	36,000	1,92,600
Cash balance in 1998		**36,000**

Illu.11 : From the following Balance Sheets, you are required to prepare cash flow statement for the year ended 31st December 2005 :

Liabilities	2004 Rs.	2005 Rs.
Share capital	**1,20,000**	**1,20,000**
Reserves	**40,000**	**1,30,000**
7% Debentures	**70,000**	**80,000**
Creditors	**20,000**	**40,000**
Bills payable	**18,000**	**26,000**
Provision for dividend	**-**	**20,000**
	2,68,000	**4,16,000**

Assets	2004 Rs.	2005 Rs.
Fixed Assets (Cost)	**1,40,000**	**1,90,000**
Accu. Depreciation	**(-) 40,000**	**(-) 50,000**
Stock	**90,000**	**75,000**
Bills receivable	**55,000**	**1,72,000**
Bank balance	**23,000**	**29,000**
	2,68,000	**4,16,000**

Income – tax paid during the year Rs.40,000.

Solution :

Cash from operations

		Rs.
Reserve as on 31-12-2005		1,30,000
Add: Non- cash and Non-operating expenses :		
Depreciation (50,000 – 40,000)	10,000	
Dividend provision	20,000	
Tax provision	40,000	70,000
		2,00,000
Less: Reserve as on 1-1-2005 Incomes :		40,000
NiL	-	**-**
Cash from operations		**1,60,000**

Cash Flow Statement

		Rs.
Cash in hand on 1-1-05		23,000
Add: Sources :		
Cash from operation	1,60,000	
Decrease in inventory	15,000	
Raise in debentures	10,000	
Increase in current liabilities (20,000 + 8,000)	28,000	2,13,000
		2,36,000
Less: Applications -		
Purchase fixed assets	50,000	
Increase in bills receivable	1,17,000	
Taxes paid	40,000	2,07,000
Cash in hand 31-12-05		**29,000**

Illu.12 : The following are the summarised Balance Sheets of a company as on 31st December 2004 and 2005.

Liabilities	2004 Rs.	2005 Rs.
Share capital	**2,00,000**	**2,50,000**
General Reserve	**50,000**	**60,000**
Profit and Loss a/c	**30,500**	**30,800**
Bank Loan (long term)	**70,000**	**-**
Sundry creditors	**1,50,000**	**1,35,000**
Provision for taxation	**30,000**	**35,000**
	5,30,500	**5,10,800**
Assets		
Land and Buildings	**2,00,000**	**1,90,000**
Machinery	**1,50,000**	**1,69,000**
Stock	**1,00,000**	**74,000**
Sundry Debtors	**80,000**	**64,200**
Cash	**500**	**600**

Bank	**-**	**8,000**
Goodwill	**-**	**5,000**
	5,30,500	**5,10,800**

Additional Information:

(a) Dividend of Rs.23, 000 was paid

(b) Assets of another company were purchased for a consideration of Rs.50, 000 payable in shares.

The following assets were purchased:

Stock – Rs.20, 000

Machinery – Rs.25, 000

(c) Depreciation written off of machinery Rs.12, 000

(d) Machinery was further purchased for Rs.8, 000

(e) Income tax provided during the year Rs.33, 000

(f) Loss on sale of machinery Rs.200 was transferred to general reserve.

You are required to prepare the cash flows statement.

Solution :

Cash flow statement

for the year ending 31-12-2005

Particulars	**Amount Rs.**	**Amount Rs.**
(i) Cash flows from operating activities :		
Profit during the year (30,800 – 30,500)	300	
Add: Adjustment from non-operating and non-cash items ;		
Depreciation	22,000	
Transfer to general reserve	10,200	
Dividends paid	23,000	
Provision for tax	33,000	

	Operating profit before working capital changes	88,500	
	Adjustments for current Assets & Liabilities:		
Add:	**Decrease in current Assets :**		
	Stock	46,000	
	Debtors	15,800	
		1,50,300	
Less:	**Decrease in current liabilities :**		
	Creditors	15,000	
	Net cash generated before tax	**1,35,300**	
Less:	Income tax paid	28,000	
	Net cash from operating activities		1,07,300
(ii) Cash flows from investing activities :			
	Sale of machinery	1,800	
	Purchase of machinery	(-) 8,000	(-) 6,200
(iii) Cash flows from financing activities :			
	Repayment of bank loan	(-) 70,000	
	Dividend paid	(-) 23,000	
	Net cash used in financing activities		(-) 93,000
Net increase in cash and cash equivalents			**8,100**
Cash and cash equivalents as at 1-1-05			500
Cash and cash equivalents as at 31-12-05			**8,600**

18.7 QUESTIONS :

1. Explain the concept of ``Cash Flow''. Discuss the objectives of cash flow analysis.
2. Explain clearly the difference between funds flow and cash flow statement.
3. Explain the procedure of preparing a cash flow statement.
4. Discuss the procedures of ascertaining cash from operations as required for the preparation of a cash flow statement.
5. Draw a cash flow statement with the help of imaginary figures
6. Explain the major sources and applications of cash with examples

7. What is the utility of preparing cash flow statement.
8. Write short notes on :

(a) Notional cash and

(b) Non cash items

18.8 EXERCISES :

1. Calculate cash from operations from the following information.

   Sales Rs.2,00,000

   Purchases Rs.1,60,000

   Expenses Rs.20,000

   Debtors at the beginning of the year Rs.12,000

   Debtors at the end of the year Rs.22,000

   Creditors at the beginning of the year Rs.20,000

   Creditors at the end of the year Rs.30,000

   [Ans.: Cash from operations Rs.20,000]

2. Calculate cash from operations from the following Profit & Loss account.

Profit and Loss account

For the year ending 31st March, 2006

	Rs.		**Rs.**
To Wages	25,000	By Gross profit	1,12,500
To Salaries	37,500	By Profit on sale of land	10,000
To Depreciation	2,500	By Income tax refund	10,000
To Loss on sale of plant	5,000		
To Goodwill written off	10,000		
To proposed dividend	12,500		
To Provision for taxation	12,500		
To Net profit	27,500		
	1,32,500		**1,32,500**

[Ans.: Rs.60,000]

3. The following are the comparative balance Sheets of a company.

Liabilities	31-3-05	31-3-06	Assets	31-3-05	31-3-06
Share capital	1,00,000	1,50,000	Land	1,00,000	85,000
General Reserve	30,000	35,000	Machinery	80,000	90,000
P & L a/c	20,000	22,000	Stock	65,000	1,10,000
10% Debentures	80,000	75,000	Debtors	20,000	25,000
Creditors	65,000	58,000	Investments	5,000	10,000
Provision for tax	5,000	10,000	Cash	12,000	10,000
			Goodwill	18,000	10,000
	3,00,000	**3,50,000**		**3,00,000**	**3,50,000**

Additional Information :

(i) Depreciation charged on Machinery Rs.8,000

(ii) Divided paid during the year Rs.16,000

(iii) Tax paid during the year Rs.6,000

You are required to prepare cash flow statement.

[Ans.: Rs.10,000]

4. From the following Trading and Profit & Loss a/c for the year ended 31st March 2006 calculate Cash from operations:

Dr. **Cr.**

Particulars	Rs.	Particulars	Rs.
To Purchases	1,27,600	By Sales	1,91,000
To Wages	31,900		
To Gross profit	31,500		
	1,91,000		**1,91,000**
To Salaries	6,600	By Gross Profit b/d	31,500
To Rent	3,190	By Profit on sale of	

		building (Book value Rs.40,000)	25,000
To Depreciation	9,570		
To Loss on sale of investments	3,200		
To Goodwill written off	3,940		
To Net profit	30,000		
	56,500		**56,500**

[Ans.: Rs.21,710]

5. Balance sheet of XY & Co. Ltd., as at March 31st, 2005 and 2006.

Liabilities	**2005 Rs.**	**2006 Rs.**	**Assets**	**2005 Rs.**	**2006 Rs.**
Share capital	2,00,000	2,50,000	Buildings	2,00,000	1,60,000
General reserve	50,000	60,000	Machinery	1,50,000	1,69,000
P & L a/c	30,500	30,600	Stock	1,00,000	75,000
Long term loan	80,000	-	Debtors	50,000	54,200
Creditors	1,20,000	1,00,400	Cash and Bank	500	2,800
Provision for taxation	20,000	25,000	Goodwill		5,000
	5,00,500	**4,66,000**		**5,00,500**	**4,66,000**

Additional Information :

1. During the year ended 31-3-2006 a dividend of Rs.23,000 was paid
2. Assets were purchased for Rs.45,000 payable in shares of XY Co. Ltd. The assets were
3. Stock Rs.20,000 and Machinery Rs.25,000
4. Further Purchase of Machinery for Cash Rs.10,000
5. Machinery is depreciated by Rs.14,000
6. Income tax provided during the year Rs.30,000

7. There was loss on sale of machinery Rs.1,000 which was written off to general reserve.

   You are required to prepare Cash flow statement.

   [Ans.: Cash from operating activities Rs.1,39,300; Net increase in cash Rs.2,300]

18.9 SUGGESTED READINGS

1. Bhattacharyya, S.K., John Dearden, Costing for Management, Vikas Publishing House Pvt. Ltd., 2002
2. Jayanta Mitra, Cost & Management Accounting, Books & Allied (P) Ltd., Calcutta.
3. Lall Nigam, B.M., Cost Accounting Principles and practices, Prentice Hall of India Private Limited, New Delhi.
4. Pandey, I.M., Management Accounting, Vikas Publishing House Pvt. Ltd., 2001
5. Ramachandran, Accounting for Management, Scitech Publications (India) Pvt. Ltd., 2003
6. Sahaf, M.A., Management Accounting, Principles and Practices, Vikas Publishing House Pvt. Ltd. New Delhi, 2004

Chapter – 19

Ratio Analysis

Objectives :

After reading this lesson you should be able to :

- **Understanding the meaning of a ratio and ratio analysis**
- **Know the objects and utilities of ratio analysis**
- **Classify the ratios on the basis of profitability, activity, liquidity, solvency**
- **Discuss the advantages and limitations of ratio analysis**

Structure :

19.1 Introduction

19.2 Meaning of Ratio

19.3 Objects and Utility of Ratio Analysis

19.4 Classification of Ratios

19.5 Advantages of Ratio Analysis

19.6 Limitations of Ratio Analysis

19.7 Questions

19.8 Exercises

19.9 Suggested Readings

19.1 INTRODUCTION :

The most important task of a financial manager is to interpret the financial information in such a manner that it can be well understood by the people, who are not well versed in financial information figures. The technique by which it is do done, know as `Ratio Analysis' `Ratio' is a relationship between two or more variables expressed in (I) percentage (ii) rate and (iii) proportion.

The construction of ratios is a major analytical rule in the hands of financial executives. Mostly financial statements are expressed in absolute rupee figures The use of ratios aids the financial manager and other analysts in pointing out the relative importance of the various items appearing in the financial statements. Each major item in the balance sheet and the income statement has a relationship with one or more items in either or both statements which can be expressed in ratio. By using ratio, comparisons with financial statements or other firms are facilitated and comparison of a firm's financial performance can too be made over a period of time.

19.2 MEANING OF RATIO :

Ratios are simply a means of highlighting in arithmetical terms the relationship between figures drawn from various financial statements. Robert Anthony defines a ratio as – simply one number expressed in terms of another.' A great number of ratios can be computed from the basis financial statements – balance sheet and profit and loss account.

Ratio Analysis :

It involves three steps. First, the financial manager selects from the statements those sets of data which are relevant to his objective of analysis and calculates appropriate ratios for the firm. The second step calls for a comparison either with the industry standards or with the ratio of the same firm relating to past. After such comparison the conclusions may be withdrawn and presented in the shape of reports.

19.3 OBJECTS AND UTILITY OF RATIO ANALYSIS :

Ratio analysis is an important and useful technique to check upon the efficiency with which working capital is being used in the enterprise. Some ratio indicate the rend of progress or downfall of the firm. It helps the financial management in evaluating the financial position and performance of the firm. The use of ratio analysis is not confined to the financial manager only. The credit supplier, bank, lending institutions and experienced investor all use ratio analysis as their initial tool in evaluating the firm as a desirable borrower or as potential investment outlet. It functions as a sort of health test. With the help of ratio analysis financial executive can measure whether the firm is at present financially healthy or not. The following are the important managerial uses or ratio analysis.

1. **Aid in Financial Forecasting :** Ratio analysis is very helpful in financial forecasting . Ratios relating to past sales, profits and financial position are base for future trends.
2. **Aid in comparison :** With the help of ratio analysis ideal ratios can be composed and they can be used for comparison of a particular firm's progress and performance.
3. **Aid in Cost Control :** Ratios are very useful for measuring the progress and performance.
4. **Communication Value :** Different financial ratios communicate the strength and financial standing of the firm to the internal and external parties.
5. **Other uses :** Financial ratios are helpful in the diagnosis and financial health of a firm. They highlight the liquidity, solvency, profitability and capital gearing, etc., of the firm. They are a useful tool of analysis of financial performance.

19.4 CLASSIFICATION OF RATIOS :

Ratios can be classified on the following two basis.

1. **According to Financial statements :** According to this basis, the ratios are classified as under –
   (a) **Balance Sheet ratios :** These ratios are calculated to know the financial position of a concern on a particular date. Both items for which ratio is to be calculated appear on the balance sheet. Such a ratio may be called a financial ratio. Example of balance sheet ratios are – Current ratio, quick ratio, liquidity ratio, ratio of inventory to working capital, ratio of current assets to fixed assets, debt to equity ratio, proprietary ratio and capital gearing ratio.
   (b) **Profit and Loss Ratios :** Ratios which are drawn from trading and profit and loss account are known as profit and loss ratios. These ratios deal with the relationship between two items both of which belong to the profit and loss account. Such a ratio may be called an operating ratio. Examples of these ratios are – Gross profit ratio, operating ratios, operating profit ratio and net profit ratio.
   (c) **Combined ratios :** These ratios portray the relationship between items, one of which is a part of the balance sheet and the other of the profit and loss account. Such a ratio may be called a mixed ratio. Examples of these ratios are – Stock turnover ratio, Receivable

turnover ratio, working capital turnover ratio, Fixed assets turnover ratio, capital turnover ratio, Total assets turnover ratio, Return on shareholders, Investment and Return on capital employed.

Chart Showing Application of Different Ratios

	For Testing	Ratio concerned	Interested parties
A.	Profitability	1. Gross Profit ratio 2. Net profit ratio 3. Operating ration 4. Return on capital employed 5. Dividend ratio 6. Earning per share 7. Dividend per share	Shareholders Creditors (Long term) Government Purchasers of Enterprise Employees
B.	Liquidity and Solvency	1. Current Ratio 2. Liquid ratio 3. Absolute Liquid ratio 4. Proprietary ratio 5. Assets to proprietorship ratio 6. Debt Equity ratio 7. Capital Gearing ratio	Creditors (Short term) Investors Money lenders
C.	Capital Structure	1. Capital gearing ratio 2. Equity capital ratio 3. Long term loans to Net worth	Shareholders and outsiders
D.	Activity	1. Debtors Turnover ratio 2. Creditors Turnover ratio 3. Stock Turnover ratio 4. Fixed Asset Turnover	Management Shareholders Creditors (Long and

		ratio 5. Current assets turnover ratio 6. Total Assets turnover ratio 7. Working capital turnover ratio	Short Term) Customers
E.	Management Efficiency	All concerned ratios	Management

2. According to Purpose or Functional Classification :

On the basis of purpose, ratios can be grouped into the following four categories.

(a) Profitability Ratios : A measure of \`profitability' is the overall measure of efficiency. Under profitability ratios, following ratios should be studied to judge the profitability of an organisation.

(i) Gross Profit ratio (GPR) : It expresses the relationship of gross profit on sales to net sales, in terms of percentage, representing the percentage of gross profit earned on sales. The ratio is arrived at as follows.

$$\text{Gross profit ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}}$$

(ii) Operating ratio : This ratio expresses the relationship between total cost of goods and sales. It is calculated as follows.

$$\frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Net Sales}} \times 100$$

The main components of this ratios are :

(a) Cost of goods sold = Opening stock + Purchases + Manufacturing expenses – Closing stock or sales – Gross Profit.

(b) Operating expenses = Office and Administrative expenses and selling and distribution expenses.

(iii) Operating Profit Ratio : This ratio establishes the relationship between operating profit

$$\text{Operating Profit ratio} = \frac{\text{Operating Profit}}{\text{Net Sales}} \times 100$$

and sales and is calculated as follows.

The main component of this ratio are :

(a) Operating profit = Gross profit – Operating expenses

(b) Operating profit ratio = 100 – Operating ratio

(iv) Net profit ratio : This is the ratio of net income or profit after taxes to net sales. This ratio is very useful to the proprietors because it reveals the overall efficiency of the business. The ratio is arrived at as follows.

$$\text{Net Profit ratio} = \frac{\text{Net Profit after Taxes}}{\text{Net Sales}} \times 100$$

(b) Liquidity ratios : These ratios, constituting ratio analysis of the short term financial position, are intended to derive a picture of the capacity of a firm to meet its short term obligation out of its short term resources. Some of the important liquidity ratios are as follows.

(i) Current or working capital Ratio : This is the ratio of the current assets to the current liabilities of a business at any time. The ratio is usually taken at the end of a financial year when all the required figures can be collected after they have been thoroughly examined. It is expressed as follows.

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

The ratio should preferably be 2:1. If the current assets are two times the current liabilities, there will be no adverse effect on business operations when the payment of current liabilities is made.

(ii) **Quick Ratio :** This is the ratio of liquid assets to current liabilities. 1 to 1 ratio is considered ideal ratio for concern. This ratio is of great importance for banks and financial institutions. This ratio is also known as Acid Test Ratio or Liquid Ratio. It is worked out as follows.

$$\text{Quick Ratio or Acid Test ratio} = \frac{\text{Liquid or Quick Assets}}{\text{Liquid or Quick Liabilities}}$$

Liquid assets are those assets which are readily converted into cash and will include cash, cash at bank, bills receivables, sundry debtors and short term investments.

(iii) **Debtors Turnover ratio :** This ratios also known as Receivable Turnover ratio measures the accounts receivables (trade debtors and bills receivables) in terms of number of days of credit sales during a particular period. This ratio is calculated as follows :

$$\text{Debtors Turnover ratio} = \frac{\text{Trade Debtors} + \text{Bills receivable}}{\text{Net Credit Sales}} \text{ x No. of days in a period}$$

(iv) **Stock or Inventory Turnover ratio :** It establishes the relationship between cost of goods sold during a given period and the average stock of goods in hand during that period. This ratio can be calculated as follows.

$$\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average Stock held}}$$

(a) Cost of goods sold = Opening Stock + Purchases – Closing Stock or sales - Gross Profit

(b)

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

(c) Solvency Ratios :

Solvency refers to the ability of the concern to meet its long term liabilities. These ratios are studied to measure the long term solvency and comprise of :

(i) **Debt Equity ratio :** This ratio reflects the proportionate relationship between outsider's Funds and Shareholders' funds. It relates to all recorded creditors claims on asset to the owners, recorded claims in order to measure the firm's obligation to creditors in relation to funds provided by the owners. It is also known as ``External – Internal Equity ratio' and is calculated as follows.

$$\text{Debt Equity ratio} = \frac{\text{External Equity}}{\text{Internal Equities}} \quad \text{(or)}$$

$$\text{Debt to equity ratio} = \frac{\text{Outsider's Funds}}{\text{Shareholdes funds}}$$

Outsiders' Funds include all long term debts, while shareholders funds consist of Preference Share capital, equity share capital and all types of reserves.

(ii) Proprietary Ratio : A variant of debt to equity ratio is the proprietary ratio which establishes the relationship between proprietors funds and total assets. The ratio is worked out as follows

$$\text{Proprietary ratio} = \frac{\text{Shareholders' Funds}}{\text{Total Assets}}$$

(iii) Creditors Equity to Total Equities : This ratio is ascertained to find out the proportion of outsiders' equity in the total equities. This can be calculated with the help of the following formula.

$$\text{Creditors' Equity total Equities} = \frac{\text{Creditors' Equity}}{\text{Total Equities}}$$

(c) Over-all ratios : These ratios are also known as `Test of overall profitability'. Under this, we shall study the following ratios.

(i) Return on Investment : The ratio shows how much concern is earning on its capital employed. Return on investment or Return on capital employed can be ascertained with the help of the following formula.

$$\text{Return on Investment} = \frac{\text{Profit before tax}}{\text{Capital Employed}} \times 100$$

(ii) Return on Equity Capital : Another aspect to be considered in the analysis of overall profitability is the rate of return on Equity capital which relates to the net profits available to equity shareholders to the amount of capital invested by them.

Another way of looking at the rate of return on equity capital is to divide the net profit available to equity shareholders by the number of outstanding equity shares in order to calculate earnings per equity share. This ratio is ascertained with the help of the following formula.

Rate of Return on Equity Capital =

$$\frac{\text{Net profit - Dividend due to preference shares}}{\text{Number of Equity shares}}$$

= Earnings per Equity share

(iii) Dividend per share and Pay out ratio : The pay out ratio indicates the proportion of earnings which has been paid out to the equity shareholders out of the total earnings available to them. This is ascertained with the help of the following formula.

$$\text{Dvidend per share} = \frac{\text{Account of Dividend shares}}{\text{Number of Equity shares}}$$

Pay out ratio =

$$\frac{\text{Amount of Dvidend paid on Equity shares}}{\text{Amount of Total Earnings available for Distribution among equity shares}}$$

19.5 ADVANTAGES OF RATIO ANALYSIS :

Ratio Analysis is a very important and useful tool for financial analysis. It serves may purpose and is helpful not only for internal management but also for prospective investors, creditors and other outsiders. The following are the important uses (advantages) of ratio analysis.

1. It is an important and useful tool to exercise check upon the efficiency with which the working capital is being used (managed) in a business enterprise. Efficient Management of Work cap.
2. It helps the management of business concern in evaluating its financial position and efficiency of performance.
3. It serves as a sort of health test of a business firm, because with the help of this analysis financial mangers can determine whether the firm is financially healthy or not.

4. A ratio analysis covering a number of past accounting (financial) periods clearly show the trend of changes in the business position (i.e., whether the trend in financial position, income position etc. is upward, or downward or static). The progress or downfall of a business concern is clearly indicated by this analysis. Use to measure the trend of the Business.
5. It helps in making financial estimates for the future (i.e., in financial forecasting)
6. It helps the task of managerial control to a great extent.
7. It helps the credit suppliers and investors in evaluating a business firm as a desirable debtor or as a potential investment outlet.
8. With the help of this analysis ideal (standard) ratios can be established and these can be used for the purpose of comparison of a firm's progress and performance.
9. This analysis communicates important information regarding financial strength and standing, earning capacity, debt (borrowing) capacity, liquidity position, capacity to meet fixed commitment (charges), solvency , capital gearing, working capital management, future prospects etc., of a business concern.
10. This analysis may be employed for the purpose of comparing the working result and efficiency of performance of a business enterprise with that of other enterprises engaged in the same industry. (Inter firm comparison).
11. It helps the management of a business concern to discharge their basic functions of planning, coordinating, controlling etc.
12. It serves as an instrument for testing management efficiency
13. It sometimes provides a useful tool for decisions on certain policy matters.

19.6 LIMITATIONS OF RATIO ANALYSIS :

The chief limitations of accounting ratios are states below.

1. **A single ratio has no significance :** A ratio taken by itself would be meaningless unless it is studied along with other ratios. Ratios of one firm should be compared with ratios of other such similar firms and any deviations should be investigated.
2. **It ignores qualitative factors :** They are the factors which cannot be expressed in terms of money. Ratio analysis is a tool of qualitative factors like sincerity, ability to pay back loans etc., which may sometimes be of more importance in taking financial decisions.

3. **Lack of proper standard for comparison :** Since business firms differ from one another in capital structure, financial problems, size etc., a standard fixed for one firm may not be suitable to other firms.
4. **Reveals more about Past :** Balance Sheet and profit and loss account are historical statements because they are prepared on the basis of the events and transactions that have already taken place. Ratios are calculated from other sources because this ratio analysis provides only a fraction of information required for decision making.
5. **Fraction of Information :** Information received from the ratio analysis should always be used in conjunction with the information received from other sources because this ratio analysis provides only a fraction of information required for decision making.
6. **Illusionary Precision :** Ratio analysis may attach some precision to the arithmetical results of the accounting data because of their numerical character. But these datas are more estimates e.g., estimates regarding the life of an asset, provision for doubtful debts etc.

Illu.1 From the following details prepare the Balance Sheet with as many details as possible:

(a) Stock velocity	**6**
(b) Capital turnover ratio (on cost of sales)	**2**
(c) Fixed assets turnover ratio (on cost of sales)	**4**
(d) Gross profit turnover ratio	**20%**
(e) Debtors velocity	**2 months**
(f) Creditors velocity	**73 days**

Gross Profit was Rs.60,000. Reserves and surplus amounted to Rs.20,000. Closing stock was Rs.5,000 in excess of opening Stock.

Solution :

(a) Gross profit Ratio =

$$= \frac{\text{Gross profit}}{\text{Net Sales}} \text{ x } 100; \frac{20}{100} = \frac{60,000}{\text{Net Sales}}$$

20 Sales = 60,000 x 100 = 20 sales = Rs.60,00,000

$$\text{Sales} = \frac{60,00,000}{20} = \text{Rs.}3,00,000$$

Cost of Goods sold = Sales – Gross profit

3,00,000 – 60,000 = Rs.2,40,000.

(b) Stock Turnover Ratio =

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

$$6 = \frac{2{,}40{,}000}{\text{Average Stock}} = \text{Average Stock} = \frac{2{,}40{,}000}{6} = \text{Rs.}40{,}000$$

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

$$40{,}000 = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

40,000 x 2 = Opening Stock + Closing Stock

80,000 = Opening Stock + Closing Stock

Closing Stock = Opening Stock + Closing Stock

Closing stock = Opening stock + 5,000

80,000 = 2 Opening Stock + 5,000

2 Opening Stock = 80,000 – 5,000

$$\text{Opening Stock} = \frac{75{,}000}{2} = \text{Rs.}37{,}500$$

Closing Stock = 37,500 + 5,000 = Rs.42,500.

(c) Debtors Turnover =

$$= \frac{\text{Debtors}}{\text{Sales}} \text{ x } 12 \text{ months} = 2 \text{ months} = \frac{\text{Debtors}}{3{,}00{,}000} \text{ x } 12 \text{ months}$$

$$\text{Debtors} = \frac{3{,}00{,}000 \text{ x } 2}{12} = \text{Rs.}50{,}000$$

(d) Creditors Turnover =

$$= \frac{\text{Creditors}}{\text{Purchases}} \text{ x } 365 \text{ days}$$

Credit purchases = Cost of goods sold + increase in Closing Stock

= 2,40,000 + 5,000 = Rs.2,45,000

$$\text{Creditors} = \frac{73 \text{ x } 2{,}45{,}000}{365} = \text{Rs.}49{,}000$$

(e) Capital Turnover Ratio =

$$= \frac{\text{Cost of Goods Sold}}{\text{Capital}}$$

$$= \frac{\text{Cost of goods sold}}{\text{Fixed Assets}}$$

$$2 = \frac{2{,}40{,}000}{\text{Capital}}$$

$$4 = \frac{2{,}40{,}000}{\text{Fixed Assets}}$$

$$\text{Capital} = \frac{2{,}40{,}000}{2} = \text{Rs.}1{,}20{,}000$$

(f) Fixed Assets turnover Ratio =

Fixed Assets = 2,40,000 / 4 = Rs.60,000

Proprietary Statement

	Rs.	**Rs.**
Current Assets;		
Cash in hand (Balancing Figure)	16,500	
Debtors	50,000	
Stock	42,500	1,09,000
Less: Current liabilities:		
Creditors		49,000
Working capital		60,000
Add: Fixed Assets		60,000
Total Capital employed		**1,20,000**
Net Worth:		
Share Capital	1,00,000	

Reserves, Surplus	20,000	
Capital Employed		**1,20,000**

Illu.2 The following are the summarised profit and loss account for the year ending 31st December 1994 and the balance sheet as on that date:

Trading and Profit & Loss Account

Dr.	Rs.	Cr.	Rs.
To Opening stock	1,00,000	By Sales	10,00,000
To Purchases	5,50,000	By Closing Stock	1,50,000
To Gross profit	5,00,000		
	11,50,000		11,50,000
To Administrative expenses	1,50,000	By Gross profit	5,00,000
To Interest	30,000		
To Selling expenses	1,20,000		
To Net profit	2,00,000		
	5,00,000		5,00,000

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Capital	10,00,000	Land and Buildings	5,00,000
P & L a/c	2,00,000	Plant and Machinery	3,00,000
Creditors	2,50,000	Stock	1,50,000
Bills payable	1,50,000	Sundry debtors	1,50,000
		Bills receivable	1,25,000
		Cash in hand &at Bank	1,75,000
		Furniture	2,00,000
	16,00,000		16,00,000

Additional information:

(a) **Average debts, Rs.1,25,000**

(b) **Average credit purchases, Rs.8,00,000**

You are required to calculate:

(1) Stock turnover ratio,

(2) Current Ratio

(3) Quick ratio

(4) Operating ratio and

(5) Return on equity.

Solution :

Cost of goods sold = Sales – Gross Profit

= 10,00,000 – 5,00,000 = 5,00,000

$$\text{(i) Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$\text{Average stock} = \frac{\text{Operating stock} + \text{closing stock}}{2}$$

$$= \frac{1,00,000 + 1,50,000}{2} = \frac{2,50,000}{2} = 1,25,000$$

$$= \frac{5,00,000}{1,25,000} = 4 \text{ times}$$

$$\text{(ii) Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets:

Stock	1,50,000
Debtors	1,50,000
Bills receivable	1,25,000
Cash and Bank	1,75,000

	6,00,000

Current Liabilities:

Creditors	2,50,000
Bills payable	1,50,000

	4,00,000

$$= \frac{6,00,000}{4,00,000} = 1.5$$

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

Quick assets = Current assets – Stock

= 6,00,000 – 1,50,000 = 4,50,000

Current Liabilities = 4,00,000

$$= \frac{4,50,000}{4,00,000} = 1.125$$

$$\text{(iv) Operating ratio} = \frac{\text{Operating cost}}{\text{Sales}}$$

Operating cost = Cost of goods sold + Operating expenses

Cost of goods sold = Sales – Gross profit

= 10,00,000 – 5,00,000 = 5,00,000

Operating expenses = Administrative expenses + Selling expenses

= 1,50,000 + 1,20,000 = 2,70,000

Sales = 10,00,000

$$= \frac{5,00,000 + 2,70,000}{10,00,000} = \frac{7,70,000}{10,00,000} = 0.77$$

$$\text{(v) Return on equity} = \frac{\text{Profit after tax - Preference dividend}}{\text{Equity share capital}}$$

Profit before taxes	=	2,00,000
(-) Tax	=	NIL

		2,00,000
(-) Preference dividend		NIL

2,00,000

Equity share capital = 6,00,000

$$= \frac{2,00,000}{6,00,000} = 0.33\,(\text{or})\,1/3$$

Illu.3 A Ltd. Company submitted the following particulars

Gross Profit	**= Rs.1,00,000**
Reserves & Surplus	**= Rs.40,000**
Cost of sales	**= Rs.2,00,000**
Fixed assets turnover	**= 5**
Capital turnover	**= 2**
Current liabilities	**= Rs.10,000**
Debentures	**= Rs.20,000**

Solution :

$$\text{Fixed assets turnover ratio} = \frac{\text{Sales}}{\text{Fixed assets}}$$

$$5 = \frac{3,00,000}{\text{Fixed Assets}}$$

Note: Sales = Cost of Sales + Gross profit

$$\text{Fixed assets} = \frac{3,00,000}{5} = 60,000$$

$$\text{Capital turnover ratio} = \frac{\text{Cost of sales}}{\text{working capital}}$$

(working capital turnover ratio)

$$2 = \frac{2,00,000}{\text{Working capital}}$$

$$\text{Working capital} = \frac{2,00,000}{2} = \text{Rs.}1,00,000$$

Working capital = Current assets – Current liabilities

1,00,000 = Current assets – 10,000

Current assets = 1,00,000 + 10,000 = 1,10,000

Dr. Balance Sheet Cr.

Liabilities	Rs.	Assets	Rs.
Share capital (B/f)	1,00,000	Fixed Assets	60,000
Reserves & Surplus	40,000	Current assets	1,10,000
Debentures	20,000		
Current liabilities	10,000		
	1,70,000		**1,70,000**

Illu.4 The following is the profit and Loss account to Electro Ltd. For the year ended 31st December 1995:

	Rs.		***Rs.***
To opening Stock	**1,00,000**	**By Sales**	**5,60,000**
To Purchases	**3,50,000**	**By Closing Stock**	**1,00,000**
To Wages	**9,000**		
To Gross profit	**2,01,000**		
	6,60,000		**6,60,000**
To Administrative expenses	**20,000**	**By Gross Profit**	**2,01,000**
To Selling & distribution expenses	**89,000**	**By Interest on Investments (outside business)**	**10,000**
To Non–operating	**30,000**	**By Profit on sale of**	

expenses		**investments**	**8,000**
	2,19,000		**2,19,000**

You are required to calculate:

(a) Gross Profit Ratio

(b) Net Profit ratio

(c) Operating Profit ratio

(d) Operating ratio

(e) Administrative Expenses ratio

Solution :

(a) Gross Profit ratio =

$$= \frac{\text{Gross Profit}}{\text{Sales}} x100$$

$$= \frac{2{,}01{,}000}{5{,}60{,}000} x100 = 36\%$$

(b) Net Profit ratio =

$$= \frac{\text{Net Profit}}{\text{Sales}} x100$$

$$= \frac{80{,}000}{5{,}60{,}000} x100 = 14\%$$

(c) Operating Profit ratio =

$$= \frac{\text{Operating Profit}}{\text{Sales}}$$

Operating profit = Gross profit – Operating expenses + Operating incomes

Gross profit = 2,01,000

(-) Operating expenses:

Administrative expenses 20,000

Selling and distribution expenses	89,000	1,09,000
	----------	-------------
		92,000
(+) Operating incomes:		
NIL		-

Operating profit		92,000

$$= \frac{92,000}{5,60,000} = 0.16(0r)16\%$$

(d) Operating ratio =

$$= \frac{\text{Cost of sales} + \text{Operating expenses}}{\text{Sales}}$$

Cost sales = Sales – Gross profit

= 5,60,000 – 2,01,000 = 3,59,000

Operating expenses = 1,09,000

$$= \frac{3,59,000 + 1,09,000}{5,60,000}$$

$$= \frac{4,68,000}{5,60,000} = 0.84(or)84\%$$

(e) Administrative expenses ratio =

$$= \frac{\text{Administrative expenses}}{\text{Sales}}$$

$$= \frac{20,000}{5,60,000} = 0.036(or)3.6\%$$

Illu.5 : From the following particulars, calculate (a) Gross Profit Ratio, (b) Net Profit ratio, (c) Return on total assets, (d) Inventory turnover, (e) Working capital turnover and (f) New worth to debt.

	Rs.
Sales	**25,20,000**
Cost of sales	**19,20,000**
Net Profit	**3,60,000**
Inventory	**8,00,000**
Other current assets	**7,60,000**
Fixed Assets	**14,40,000**
Net worth	**15,00,000**
Debt	**9,00,000**
Current Liabilities	**6,00,000**

Solution :

(a) Gross profit Ratio:

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Sales}}$$

Gross Profit = 25,20,000 – 19,20,000

= 6,00,000

Sales = 25,20,000

$$= \frac{6,00,000}{25,20,000} = 0.24 \text{ or } 24\%$$

(b) Net Profit ratio :

$$= \frac{\text{Net Profit}}{\text{Sales}}$$

Net Profit = 3,60,000

Sales = 25,20,000

$$= \frac{3,60,000}{25,20,000} = 0.14 or 14\%$$

(c) Return on total assets ratio = Net Profit / Total assets

Net Profit = 3,60,000

Total Assets =

Inventory	8,00,000
Other Current assets	7,60,000
Fixed Assets	14,40,000
	30,00,000

$$= \frac{3,60,000}{30,00,000} = 0.12 \text{ or } 12\%$$

(d) Inventory turnover ratio = Cost of sales / Average Stock

Cost of sales = 19,20,000

Average stock = 8,00,000

$$= \frac{19,20,000}{8,00,000} = 2.4 \text{ times}$$

(e) Working capital turnover ratio = Cost of sales / Working capital

Cost of sales = 19,20,000

Working Capital =

Current assets

Inventory	8,00,000
Other current assets	7,60,000
	15,60,000
(-) Current liabilities	6,00,000
	9,60,000

$$= \frac{19,20,000}{9,60,000} = 2 \text{ times}$$

(f) Net Worth to debt: Net Worth / Debt

Net Worth = 15,00,000

Debt = 9,00,000

$$= \frac{15,00,000}{9,00,000} = 1.67 \text{ or } 167\%$$

Illu.6 : Make out Balance Sheet with as many details:

Gross Profit	**Rs.80,000**
Gross Profit / Sales	**1/3**
Stock velocity	**6**
Opening stock	**Rs.36,000**
Average collection period / velocity	**72 days**
Average payment velocity	**90 days**
No. of days in a year	**360**
Bills receivables	**Rs.20,000**
Bills payable	**Rs.5,000**
Fixed assets turn over ratio	**8**
Assets	**Rs.1,40,000**

Solution :

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

$$= \frac{80{,}000}{\text{Sales}} = 1/3 \qquad \text{Sales} = \frac{80{,}000}{1/3}$$

= 80,000 x 3/1 = 2,40,000

$$\text{Stock Velocity} = \frac{\text{Sales}}{\text{Average Stock}}$$

$$= \frac{2{,}40{,}000}{\text{Average stock}} = 6$$

$$\text{Average Stock} = \frac{2{,}40{,}000}{6}$$

$$\text{Average Collection period} = \frac{\text{No. of days in a year}}{\text{Debtors turnover ratio}}$$

$$= \frac{360}{\text{Debors turnover ratio}} = 72 \text{ days}$$

= 40,000

Closing Stock = (40,000 x2) – 36,000

= 80,000 – 36,000

= 44,000

Debtors turnover ratio = 360/72 = 5 times

$$\text{Debtors turnover ratio} = \frac{\text{Sales}}{\text{Average debtors}}$$

Average debtors = 2,40,000/5 = 48,000

$$\text{Average payment period} = \frac{\text{No. of days in a year}}{\text{Creditors turnover ratio}}$$

$$= \frac{2,40,000}{\text{Average debtors}} = 5 \text{ times}$$

Debtors = 48,000 – 20,000 = 28,000

Creditors turnover ratio = 360/90 = 4 times

Creditors turnover ratio = Purchases / Average creditors

Purchases: Cost of goods sold + Closing Stock – Opening stock

$$= \frac{360}{\text{Creditors turnover ratio}} = 90 \text{ days}$$

Cost of goods sold:

Sales	2,40,000
(-) Gross profit	80,000

	1,60,000

Purchases = 1,60,000 + 44,000 – 36,000

= 1,68,000

= 1,68,000 / Average Creditors = 4

Average creditors = 1,68,000 / 4 = 42,000

Creditors = 42,000 – 5,000 = 37,000

$$\text{Fixed Assets turnover ratio} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

= 2,40,000 / Fixed assets = 8 times

Fixed Assets = 2,40,000 / 8 = 30,000

Balance Sheet as on

Liabilities	**Rs.**	**Assets**	**Rs.**
Capital (B /F)	98,000	Cash (B/ f)	18,000
Creditors	37,000	Debtors	28,000
Bills payable	5,000	Bills receivable	20,000
		Stock	44,000
		Fixed Assets	30,000
	1,40,000		**1,40,000**

Illu.8 : Profit after taxes Rs.3, 00,000, fixed interest charges Rs.50, 000. Income tax paid is 50% on profit. Calculate interest coverage ratio.

Solution :

Profit after taxes is Rs.3, 00,000. Income tax 50%. Hence profit before tax is Rs.6,00,000.

$$\text{Interest Coverage ratio} = \frac{\text{Profit before interest and tax}}{\text{Fixed interest charges}}$$

= 6,00,000 + 1,00,000 / 1,00,000 = 7,00,000 / 1,00,000 = 7.

Illu.9 : From the following information, calculate liquidity ratios for the two companies and give your interpretation of the liquidity position of the companies as revealed by the ratios:

	Company A Rs.	***(Rs. In lakhs)* *Company B Rs.***
Cash	**180**	**140**
Debtors	**1,400**	**3,200**
Inventory	**2,000**	**6,000**
Bills payable	**300**	**1,000**
Creditors	**800**	**5,000**
Accrued expenses	**100**	**125**
Tax payable	**600**	**500**

Solution :

Particulars	Company A	Company B
Current Assets:		
Cash	180	140
Debtors	1,400	3,200
Inventory	2,000	6,000
Total	**3,580**	**9,340**
Liquid Assets:		
(Current Assets – Inventory)	**1,580**	**3,340**
Absolute liquid Assets : (Cash only)	**180**	**140**
Current Liabilities:		
Bills payable	300	1,000
Creditors	800	5,000
Accrued Expenses	100	125
Tax payable	600	500
	1,800	**6,625**

Liquidity Ratios:

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

$$\text{Company A} = \frac{3{,}580}{1{,}800} = 1.99:1$$

$$\text{Company } \mathbf{B} = \frac{9{,}340}{6{,}625} = 1.40:1$$

The idle ratio is 2 : 1

It is satisfactory in the case of company A where as it slightly less in the case of Company B.

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilites}}$$

$$\text{Company A} = \frac{1{,}580}{1{,}800} = 0.87:1$$

$$\text{Company } \mathbf{B} = \frac{3{,}340}{6{,}625} = 0.5:1$$

$$\text{Absolute liquidity ratio} = \frac{\text{Absolute liquid Assets}}{\text{Current Liabilities}}$$

$$\text{Company A} = \frac{180}{1{,}800} = 0.01:1$$

$$\text{Company } \mathbf{B} = \frac{140}{6{,}625} = 0.02:1$$

The idle ratio is 1 : 1. So, it is not satisfactory in both the companies.

The absolute liquidity ratio is not satisfactory in both the companies as the idle ratio is 1 : 2 or 0.5 : 1.

Illu.10 : Find out the stock turnover ratio when Opening stock is Rs.58,0000; Closing stock Rs.62,000; Sales Rs.6,40,000 and Gross profit 20% on Sales.

Solution :

Calculation of Stock Turnover Ratio:

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

$$= \frac{58{,}000 + 62{,}000}{2} = \text{Rs.}60{,}000$$

Cost of the goods sold = Sales – Gross profit

= 6,40,000 – 1,28,000

= 5,12,000

$$\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$\text{(i) Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{5,12,000}{60,000} = 8.5 times$$

Illu.11 : From the following information determine:

(i) Current Ratio

(ii) Quick Ratio

(iii) Stock turnover Ratio

(iv) Operating Ratio

(v) Rate of return on equity capital.

Balance Sheet as at December 31, 2003

Liabilities	Rs.	Assets	Rs.
Equity share capital	20,00,000	Plant and Equipment	12,80,000
Profit & Loss a/c	7,36,000	Land and Buildings	1,60,000
Sundry creditors	2,08,000	Cash	3,20,000
Bills payable	4,00,000	Sundry Debtors 7,20,000	
Other current liabilities	40,000	Less: Provision 80,000	6,40,000
		Stock	9,60,000
		Prepaid expenses	24,000
	33,84,000		33,84,000

Solution :

$$\text{(i) Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Current Ratio} = \frac{19{,}44{,}000}{6{,}48{,}000} = 3:1$$

Current Assets	Rs.	Current Liabilities	Rs.
Cash	3,20,000	Sundry Creditors	2,08,000
Debtors	6,40,000	Bills payable	4,00,000
Stock	9,60,000	Other current liabilities	40,000
Prepaid expenses	24,000		
	19,44,000		**6,48,000**

$$\text{(ii) Quick Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

$$\text{Quick Ratio} = \frac{9{,}60{,}000}{6{,}48{,}000} = 1.48:1$$

$$\text{Average Stock} = \frac{8{,}00{,}000 + 9{,}60{,}000}{2} = \text{Rs.}8{,}80{,}000$$

$$\text{Stock turnover ratio} = \frac{61{,}60{,}000}{8{,}80{,}000} = 7\,times$$

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

$$\text{(iv) Operating ratio} = \frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Net Sales}} \text{ x } 100$$

Quick Assets are cash and debtors = Rs.9,60,000

Cost of goods sold Rs.61,60,000

= 94%.

(v) Rate of return on capital employed:

$$= \frac{61{,}60{,}000 + 13{,}60{,}000}{80{,}00{,}000} \text{ x } 100$$

= 12%

Note: Profit and loss statement was not given in the above problem. It is assumed as follows:

$$= \frac{\text{Net Profit (after tax)}}{\text{Equity share capital}} \times 100$$

$$= \frac{2,40,000}{20,00,000} \times 100$$

	Rs.
Sales	80,00,000
Less: Cost of goods sold	61,60,000
	18,40,000
Less: Operating expenses	13,60,000
Net Profit	4,80,000
Less: operating expenses (50%)	2,40,000
Net profit after tax	2,40,000

Balances at the beginning of the year:

Sundry debtors - Rs.6,00,000

Stock - Rs.8,00,000

Illu.12 Find out (1) Current ratio and (2) Liquid ratio from the following information: Stock Rs.30, 000, Prepaid expenses Rs.30, 000, other current assets Rs.2, 05,000, Current liabilities Rs.1, 65,000.

Solution :

Current assets = Stock + Prepaid expenses + Other Current assets

= 30,000 + 30,000 + 2,05,000

= **Rs.2, 65,000**

Current Ratio =

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

=

= **1.61 : 1**

Liquid assets = Current assets – (Stock + Prepaid expenses)

$$= \frac{2,65,000}{1,65,000}$$

= 2,65,000 – (30,000 + 30,000)

= **Rs.2, 05,000**

Liquid Ratio =

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

=

$$= \frac{2,05,000}{1,65,000}$$

= **1.24: 1**

Illu.13 : Find out the following ratios from the following information:

(1) Gross profit ratio

(2) Net profit ratio

(3) Operating ratio

(4) Rate of return on capital employed.

	Rs.
Gross profit	**6,00,000**
Net sales	**9,00,000**
Profit after tax	**1,85,000**
Operating expenses	**5,40,000**
Profit before interest and tax	**3,60,000**
Capital employed	**16,50,000**

Solution :

$$\text{(i) Gross profit Ratio} = \frac{\text{Gross profit}}{\textit{Net}\ \text{Sales}} \times 100$$

= 67%

$$= \frac{6,00,000}{9,00,000} x100$$

$$\text{(ii) Net profit Ratio} = \frac{\text{Net profit}}{\textit{Net}\ \text{Sales}}\ \text{x}\ 100$$

$$= \frac{1,85,000}{9,00,000} x100$$

= 20.55%

(iii) Operating Ratio =

$$= \frac{\text{Cost of goods sold} + \text{Operating Expenses}}{\text{Net Sales}} x100$$

Cost of goods sold = Net Sales – Gross Profit

= 9,00,000 – 6,00,000

= Rs.3, 00,000

$$\therefore \text{Operating Ratio} = \frac{3,00,000 + 5,40,000}{9,00,000}\ \text{x}\ 100$$

(iv) Rate of return on capital employed

$$= \frac{8,40,000}{9,00,000} x100$$

$$= \frac{\text{Net Profit}}{\text{Capital employed}} \text{ x } 100$$

$$= \frac{1{,}85{,}000}{16{,}50{,}000} x100$$

$$= 11.21\%$$

Illu.13 The following is the Balance Sheet of a Company as on 31-12-2000.

Liabilities	Rs.	Assets	Rs.
Equity capital	2,00,000	Fixed assets	4,00,000
9% Preference capital	1,20,000	Short-term investments	10,000
Reserves	75,000	Stock	1,00,000
12% Debentures	1,00,000	Debtors	50,000
Current liabilities	1,05,000	Cash	25,000
		Preliminary expenses	15,000
	6,00,000		6,00,000

From the above information, find out the following ratios:

(i) Current ratio,

(ii) Liquid ratio

(iii) Absolute liquid ratio

Solution :

$$\text{(A) Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Short – term investments + Stock + Debtors +Cash + Preliminary expenses

= 10,000 + 1,00,000 +50,000 + 25,000 + 15,000

Current Assets = **Rs.2,00,000**

Current Liabilities = Rs.1,05,000

$$\therefore \text{Current Ratio} = \frac{2,00,000}{1,05,000} = 1.9:1$$

Current Ratio = **1.6 : 1**

$$\text{(B) Liquid Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Quick assets = Current Assets - (Stock + Preliminary expenses)

= 2,00,000 – (1,00,000 +15,000)

= 2,00,000 – 1,15,000

Quick Assets = **Rs.85,000**

Liquid Ratio = 85,000 / 1,05,000

= **0.81 : 1**

$$\text{(C) Absolute Liquid Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}}$$

$\therefore$ Absolute Liquid assets = Cash + Short –term investments

= 25,000 + 10,000 = **Rs.35,000**

$$\therefore \text{Absolute liquid ratio} = \frac{35,000}{1,05,000} = 0.33:1$$

Illu.14 The following figures are extracted from the Balance sheet of X Limited as on 31st December 2002, 2003.

	2002	2003
	Rs.	Rs.
Stock	**25,000**	**40,000**
Debtors	**10,000**	**16,000**
Cash at Bank	**5,000**	**4,000**
Creditors	**8,000**	**15,000**
Bills payable	**2,000**	**3,000**
Provision for taxes	**5,000**	**7,000**
Bank overdraft	**5,000**	**15,000**

Calculate the Current Ratio and Acid Test Ratio for the two years and give comment on the inquidity position of the company.

Solution :

$$CurrentRatio = \frac{CurrentAssets}{CurrentLiabilities}$$

Current Assets:	***2002***	***2003***
Stock	25,000	40,000
Debtors	10,000	16,000
Cash at Bank	5,000	4,000
Current Liabilities:		
Creditors	8,000	15,000
Bills payable	2,000	3,000
Provision for taxes	5,000	7,000
Bank O.D	5,000	15,000
Total	**20,000**	**40,000**
Current Ratio =	40,000 --------- = 2: 1 20,000	60,000 --------- = 1.5:1 40,000

Acid Test Ratio (Quick Ratio) = Quick Assets ÷ Quick Liabilities

Quick Assets:	***2002***	***2003***
Debtors	10,000	16,000

Cash at Bank	5,000	4,000
Total	**15,000**	**20,000**
Quick Liabilities:		
Creditors	8,000	15,000
Bills payable	2,000	3,000
Provision for taxes	5,000	7,000
Total	**15,000**	**25,000**
Acid Test Ratio =	15,000 -------- = 1 :1 15,000	20,000 --------- = 0.8 : 1 25,000

Comment: An ideal current ratio is '2'. The current ratio for 2002 is 2 and for 2003 is 1.5. An ideal acid test ratio is '1'. The acid test ratio for 2002 is 1.5 and for 2003 is 0.8. Thus the company's liquid position in 2002 is better than the liquid position in 2003.

19.7 QUESTIONS

1. What do you understand by Accounting Ratios? How does the ratio analysis technique help in the financial analysis?
2. Discuss the uses and limitation of Accounting Ratios
3. ``A device for making financial data more meaningful is to reduce them to ratios.'' Elucidate.
4. Discuss the importance of Ratio Analysis for inter firm and intra firm comparisons, including circumstances responsible for its limitation, if any
5. Describe the various profitability ratios. How are they worked out?
6. The return of capital employed is often taken as measure of efficiency of an organisation'' Comment.
7. Discuss the significance of the ratio analysis as a decision making technique.
8. Ratio are mechanical and incomplete. Explain
9. What does the rate of return on assets employed tell about management?
10. What do you understand by liquidity ratio , Leverage ratio, profitability ratio & Activity ratio?

19.8 EXERCISES

1. Following are the trading and Profit and Loss Account and Balance Sheet of Praneeth Ltd.

Trading and Profit & Loss Account

for the year ended 31st March, 2003

Dr.	**Rs.**	**Cr.**	**Rs.**
To Opening Stock	5,80,000	By Sales	30,00,000
To Purchases	24,40,000	By Closing Stock	6,20,000
To Gross Profit c/d	6,00,000		
	36,20,000		**36,20,000**
To Sundry expenses	3,20,000	By Gross Profit b/d	6,00,000
To Net Profit	2,80,000		
	6,00,000		**6,00,000**

Balance Sheet as on 31-12-2003

Liabilities	***Rs.***	***Assets***	***Rs.***
Share Capital	28,00,000	Net fixed Assets	22,00,000
Reserve and Surplus	2,00,000	Stock	6,20,000
Profit for the year	2,80,000	Debtors	3,20,000
Bank Overdraft	1,40,000	Cash	8,80,000
Creditors	6,00,000		
	40,20,000		**40,20,000**

Calculate (1) Current Ratio, (2) Quick Ratio, (3) Gross Profit ratio, (4) Stock Turnover Ratio, (5) Debtors Turnover Ratio, (6) Net profit to paid – up Capital Ratio.

2. The following are extracts from the financial statements of M/s. Swetha Ltd., as on 31-12-1998 and 31-3-1999:

Items	**31-3-98**	**31-3-99**
	Rs.	**Rs.**
Stock	20,000	50,000
Debtors	40,000	40,000
Bills Receivable	20,000	10,000
Advances	4,000	-
Cash in hand	36,000	30,000
Bills Payable	30,000	40,000
Creditors	50,000	60,000
Bank overdrafts	-	4,000
9% Debentures	10,00,000	10,00,000
Sales for the year	7,00,000	6,00,000
Gross profit	1,40,000	1,00,000

You are required to compute (1) Current Ratio, (2) Quick Ratio, (3) Stock turnover Ratio and (4) Debtors Turnover Ratio for two years.

3. From the following information's, prepare a Balance Sheet:

a. Current Ratio: 2.5
b. Liquid ratio: 1.5
c. Proprietary ratio: 0.75 (Fixed assets / Proprietary fund)
d. Working capital: Rs.60, 000
e. Reserve & Surplus: Rs.40, 000
f. There is no long – term loans or fictitious assets.

4. From the following Balance Sheet of Popular & Co. as on 30-6-2005. Calculate (a) Liquid Ratio, (b) Current Ratio, (c) Fixed assets ratio and (d) Debt – equity ratio:

Liabilities	***Rs.***	***Assets***	***Rs.***
Equity Share Capital	1,00,000	Fixed Assets	1,80,000
9% preference share capital	50,000	Stores	25,000
8% Debentures	50,000	Debtors	55,000
Reserves	20,000	Bills receivable	3,000
Creditors	45,000	Bank	2,000
	2,65,000		**2,65,000**

5. From the following particulars calculate a) Gross profit ratio b) Net Profit ratio.

Sales Rs.10, 00,000, Cost of goods sold Rs.5,00,000; other establishment charges Rs.2, 50,000.

6. From the following information relating to Moon Light Ltd., Prepare Balance sheet as on 31-12-04.

a. Current ratio 2.5
b. Liquid ratio 1.5
c. Networking capital Rs.3, 00,000
d. G.P. Ratio 20%
e. Cost of sales/ Closing stock 8 times
f. Average debt collection period 1.5 times
g. Fixed assets / shareholders net worth 0.75
h. Reserves and surplus / share capital 0.50

7. Current ratio is 2/5; Quick ratio is 1:5; Working capital Rs.30, 000; Calculate stock value.

8. From the following data, calculate:

(a) Gross profit ratio,
(b) Return on total assets,
(c) Inventory turnover ratio,

(d) Working capital turnover ratio and

(e) Net worth to debt ratio.

Particulars	***Rs.***	***Particulars***	***Rs.***
Sales	25,20,000	Cost of goods sold	19,20,000
Net profit	3,60,000	Inventory	8,00,000
Fixed assets	14,40,000	Other current assets	7,60,000
Net Worth	15,00,000	Debentures	9,00,000
Liabilities	6,00,000		

9. Current ratio is 2.6 : 1 and Current liabilities are Rs.80,000. Find out Current Assets.

10. A company sells goods on cash as well as on credit. The following particulars are extracted from their books of accounts.

	Rs.
Gross total sales	8,00,000
Cash sales	1,60,000
Sales Returns	56,000
Debtors at the end	72,000
B /R at the end	16,000

Calculate debtors turnover ratio.

11. With the help of following ratios and further information, calculate

(i) Sales (ii) Gross Profit (iii) Net Profit (iv) Current assets

(v) Total capital (vi) Total liability and (vii) Outsiders liability

Gross profit ratio	25%
Net Profit Ratio	20%
Sales / inventory	8
Fixed Assets / Current assets	¾
Fixed Assets / Total Capital	3/2
Capital / outside Liabilities	2/5

Fixed Assets	Rs.15,00,000
Closing Stock	Rs.2,00,000

12. From the following information, find out Current Assets, Current Liabilities and Value of Inventory.

(a) current ratio 3.5
(b) Liquid ratio 2.5
(c) Working capital RS.2,00,000

13. The following are summarised profit and loss account of X Ltd. for the year ending 31-12-2003 and the balance sheet as at that date.

Trading and Profit and Loss Account

Particulars	Rs.	Particulars	Rs.
To Opening Stock	20,000	By Sales	2,00,000
To Purchases	1,10,000	By Closing stock	30,000
To Gross Profit	1,00,000		
	2,30,000		2,30,000
To Administrative expenses	30,000	By Gross Profit	1,00,000
To Interest	6,000		
To Selling expenses	24,000		
To Net Profit	40,000		
	1,00,000		1,00,000

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Capital	2,00,000	Land and Buildings	1,00,000
P & L a/c	40,000	Plant and Machinery	60,000

Creditors	50,000	Stock	30,000
Bills payable	30,000	Sundry Debtors	30,000
		Bills receivable	25,000
		Cash at Bank	35,000
		Furniture	40,000
`	3,20,000		3,20,000

Additional Information :

1. Average debtors Rs.25,000
2. Average credit purchases Rs.80,000

You are required to calculate :

(a)Net profit ratio (b) Operating ratio (c) Debtors turnover ratio (d) Creditors Turnover ratio (e) Current ratio (f) Sales to Fixed Assets ratio (g) Acid Test Ratio

14. Following is the balance sheet of Rudramamba company Limited:

Liabilities	Rs.	Assets	Rs.
Equity capital	5,00,000	Land and Buildings	3,50,000
5% Debentures	2,00,000	Machinery	2,50,000
Bank loan	1,50,000	Cash in hand	25,000
Creditors	75,000	Cash at Bank	55,000
Bills payable	50,000	Debtors	85,000
Outstanding expenses	5,000	Bills receivable	1,05,000
		Stock	1,00,000
		Prepaid expenses	10,000
	9,80,000		**9,80,000**

With the help of above particulars calculate:

(i) Current ratio

(ii) Quick Ratio

(iii) Debt- equity ratio

(iv) Proprietary ratio

15. The following are the profit and loss account of a company for the year ended 31-12-2003 and the balance sheet as on that date.

Dr. Trading and Profit and Loss Account Cr.

Particulars	Rs.	Particulars	Rs.
To Opening Stock	99,500	By Sales	8,50,000
To Purchases	5,45,250	By Closing stock	1,49,000
To Incidental charges	14,250		
To Gross profit	3,40,000		
	9,99,000		9,99,000
To Operating expenses	1,95,000	By Gross profit	3,40,000
To Non-operating expenses	4,000	By Non-operating income :	
To Net profit	1,50,000	Interest	3,000
		Profit on sale of shares	6,000
	3,49,000		3,49,000

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Capital	2,00,000	Fixed assets	2,30,000
Reserve	90,000	Current assets	2,50,000
Profit & loss account	60,000		
Current liabilities	1,30,000		
	4,80,000		4,80,000

You are required to calculate :

(i) Gross profit ratio

(ii) Net profit ratio

(iii) Current ratio

(iv) Operating ratio

16. From the following calculate:

(a) Gross profit ratio

(b) Operating ratio

(c) Return on assets

(d) Return on equity capital

Equity capital Rs.6,00,000

Total Assets: Rs.16,00,000

8% Borrowed capital: 50% of total assets

Direct costs for the year: Rs.9.6 lakhs

Operating expenses: Rs.1.6lakhs

Goods are sold to customer at 150% of direct costs.

Tax rate: 50%.

17. From the following details prepare the balance sheet of Sri Damodara & Co. as on 31st December 2004.

Stock of velocity	:	6 times
Capital turnover ratio	:	2 times
Fixed assets turnover ratio	:	4 times
Gross profit	:	20%
Debtors collection period	:	2 months
Creditors payments period	:	73 days
The Gross profit was		Rs.6,00,000

18. The following is the Trading and Profit and Loss Account of a firm.

Trading and Profit and Loss a/c

Particulars	Rs.	Particulars	Rs.
To Opening stock	10,000	By Sales	1,00,000
To Purchases	55,000	By Closing stock	15,000
To Gross profit c/d	50,000		
	1,15,000		1,15,000
To Administration expenses	15,000	By Gross profit b/d	50,000
To Interest	3,000		
To Selling expenses	12,000		
To Net profit	20,000		
	50,000		50,000

Calculate the following ratios :

(a) Inventory turnover ratio (b) Gross profit ratio (c) Net profit ratio (d) Operating ratio

19. Using the following data, complete the Balance Sheet below

Gross profit (20% of Sales)	:	Rs.60,000
Shareholder's equity	:	Rs.50,000
Credit sales to total sales	:	80%
Total assets turnover	:	3 times
Inventory turnover (to cost of sales)	:	8 times
Average debtors collection period (360 days a year)	:	18 days
Current ratio	:	1:6
Long-term debt to equity	:	40%

Balance Sheet

	Rs.		Rs.
Creditors	…	Cash	…
Long term debt	…	Debtors	…
Shareholder’s equity	…	Inventory	…
		Fixed Assets	…

19.9 SUGGESTED READINGS

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2. Jayanta Mitra, Cost & Management Accounting, Books & Allied (P) Ltd., Calcutta.
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4. Pandey, I.M., Management Accounting, Vikas Publishing House Pvt. Ltd., 2001
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Chapter - 20

WORKING CAPITAL MANAGEMENT

Objectives

After studying this lesson we should be able to

- Understand the concept of working capital
- Know the factors determining working capital
- Find out the matters of forecasting working capital requirements of any organisation

Structure

20.1 Introduction

20.2 Concept of Working Capital

20.3 Factors determining working capital

20.4 Methods of forecasting working capital requirements

20.5 Questions

20.6 Exercises

20.7 Suggested Readings

20.1 INTRODUCTION :

Working capital management is a significant part of business decisions and is of major concern to a finance manager in as much as accomplishment of value maximization goal depends essentially on prudent working capital decisions. Maintaining optimal level of working capital is crux of the problem with which finance manager is seriously concerned because problem of trade off between risk and return is involved. A firm is required to carry adequate amount of working capital so as to carry on the productive and distributive activities smoothly. Thus, holding adequate amount of raw materials in stock ensures uninterrupted production activity. Like wise, sufficient stock of finished goods has also to be maintained in anticipation of future demand and for this purpose the firm would need funds. Goods usually sold on credit do not return cash immediately. The firm will have to arrange for funds to finance accounts receivables for the period until they are collected. Alongside this, a minimum level of cash is required for the ordinary operations of the enterprise, for availing of the business opportunities and for absorbing shocks of business vicissitudes. However, these assets will have to be maintained at appropriate level because both surfeit and shortage of working capital is detrimental to the financial health of the enterprise. Lesser the liquid resources held in the firm to satisfy operational requirements, the more can be invested in income-producing fixed assets. This does not imply that the firm should reduce the holdings of current assets even below the minimum required level because that would mean interrupted production and sales because of frequent stock outs and inability to sell goods on credit to marginal customers due to restrictive credit policy and loss of credit standing in the market owing to failure of the firm in the past to pay creditors in time.

Finance manager is, therefore, in a dilemma between liquidity and profitability. An astute finance manager has to manage working capital in such a way as to maximize profits of the firm without impairing its liquidity. This calls for setting optimal level of working capital. Setting optimal level of working capital requires an exercise of determining that level of current assets where total cost of liquidity and cost of liquidity is minimum. This is why management of working capital calls for careful attention of a finance manager.

Working capital management is particularly more important to small firms. A small firm may reduce its fixed assets requirements by renting or leasing plant and equipment, but there is no way it can avoid an investment in current assets. Finance manager should, therefore, devote considerable time to manage current assets. Further, owing to limited access to the capital market, small firm has to rely heavily on trade credit and short-term bank loans. Both affect net working capital by increasing current liabilities.

20.1.1 Trade off between liquidity and profitability :

The finance manager of a business enterprise has to strike a trade off between conflicting but equally important goals of liquidity and profitability. Greater the resources of the firm in liquid form, lesser will be its profitability and the vice-versa. A finance manager has to maintain the working capital at such level as may ensure satisfactory earnings to the enterprise without jeopardizing its liquidity position. This is possible only when he has thorough acquaintance of the conception of working capital, factors influencing the level of working capital requirements and methods of determining the requirements of working capital precisely. The present chapter is devoted to discuss these aspects in detail.

20.1.2 Conceptual understanding of working capital management :

The term working capital is understood in two different but interlinked senses. In the first sense, working capital refers to sum total of all current assets employed in the business process. This is known as 'Gross working capital' concept. This is also known as going concern concept, since finance manager is highly concerned with the management of these assets with a view to bringing about productivity from other assets. The gross concept of working capital is considerably useful in making correct estimate of working capital needs of the firm. Working capital is also understood in terms of net concept according to which excess of current assets over current liabilities represents working capital.

Both the gross and net concepts are not to be regarded as mutually exclusive. Each has its relevance in specific situations. Gross working capital concept focuses on the problems of managing individual current assets in day-to-day operations. It is in the nature of a quantitative definition that highlights attention on the levels of current assets for given activity.

The concepts used in working capital management are given below for clear understanding.

- **(i) Gross Working Capital :** It refers to the firms investment in current assets i.e., mainly stock, debtors, Bill receivables and cash.
- **(ii) Net working capital :** It is the difference between the current assets and current liabilities. If the current assets exceed the current liabilities, it is a positive one.
- **(iii) Negative Working Capital :** This situation occurs when the current liabilities exceed the current assets. It is an indication of crisis to the firm.
- **(iv) Fixed Working Capital :** Every firm is required to maintain a minimum balance of cash, inventory etc. in order to meet the business requirements even in the slack season. This part of the current assets is called as permanent or fixed working capital. It will be a sound policy, if this is financed by long-term sources of finance.

(v) **Variable Working Capital :** Net working capital minus fixed working capital will be the variable working capital. It is also called as fluctuating working capital. It varies with seasonal requirements and scale of operations in a business.

20.2 Factors determining working capital :

Working capital requirements of a concern depend on a number of factors, each of which should be considered carefully for determining the proper amount of working capital. These factors have been discussed below :

1. **Nature of Business :** Working Capital requirements of an enterprise are basically determined by the nature of its business. Trading concerns invest a major part of their funds on inventories and bills receivable, and they also have to keep large amounts of cash. Conversely, the public utility concerns like railways, electricity, insurance etc., need relatively much less inventories and cash. Manufacturing concerns stand in between these two extremes. Working capital requirements of these concerns depends on a number of factors including nature of products, technology, marketing policies etc.
2. **Production Policies :** Production policies persued by the management constitute an important factor determining the working capital requirements of the firm. More working capital is required by those industries, which produce, or sale goods in a particular season. For example : Sugar and Woollen textile industries require more working capital in winter season. Likewise, concerns engaged in the manufacture of fans, refrigerators, water coolers etc., undertake production whose year, whereas sales take place only in summer season. Such concerns of seasonal nature also require more working capital.
3. **Size of Business :** The amount of working capital also depends upon the size of a business unit. Generally, large-scale concerns require more working capital as against the small concerns for maintaining big inventories and carrying out business operations.
4. **Length of Manufacturing Cycle :** The size of working capital is also influenced by the length of the manufacturing cycle. Manufacturing process always involves a time lag between the time when raw materials are fed in the production line and finished products are finally turned out by it. The length of this period depends on the nature of products and production technology used by a concern. Longer the manufacturing process, the higher will be the requirements of working capital and vice versa. Generally, highly capital-intensive

industries need more working capital because of their highly sophisticated and production process. A concern can reduce its working capital needs by shortening the length of its manufacturing cycle through technological improvements, and also by efficient planning and control of its manufacturing operations.

5. **Credit Policy :** Almost all manufacturing companies and also several trading company's use customer credit as one of their promotional tools. Companies allowing liberal credit to their customers require more working capital as against the companies which have efficient debt collection machinery and observe strict credit terms. This is because in the former case, a su8bstantial amount of fund is tied up in bills receivable or sundry debtors. Similarly, working capital needs are also determined by the credit facilities availed by a business concern from its suppliers. Liberal credit facilities from the suppliers of raw materials inventories reduce the working capital requirements of a concern to that extent. A company which does not enjoy liberal credit facilities from its suppliers will need more amount of working capital.
6. **Turnover of Circulating Capital :** There is a high degree of correlation between the quantum of working capital and the speed with which the sales are affected. Companies with higher rate of turnover or faster sales will need less amount of working capital as against the companies with low turnover ratio.
7. **Business Fluctuations :** Cyclical changes in the economy also influences the level of working capital. During boom period, the tendency of management is to pile up inventories of raw materials and finished goods to avail the advantage of rising prices. This creates demand for more capital. Similarly, during depression when the prices and demand for manufactured goods constantly reduce the industrial and trading activities show a downward trend. Hence, the demand for working capital is low.
8. **Growth and Expansion of Business :** In the beginning, the working capital requirements of a company are low. However, with the gradual growth and expansion, its working capital needs also increase. Discernibly, large amount of working capital in a growing concern is required for its expansion programmes.

9. **Economies of Scale :** Need for working capital is also influenced by a company's desire to take advantage of the economies of scale. In purchasing inventories, it balances the

ordering costs against carrying costs so as to arrive at the optimum order quantity. Similarly, it balances the transaction costs of borrowed funds against their interest costs.

10. **Current Assets Policies :** the quantum of working capital of a company is significantly determined by its current assets policies. A company with conservative assets policy may operate with a relatively high level of working capital than its sales volume. It may carry larger volume of raw materials and finished goods inventories, offer liberal terms of credit to its customers and carry a large amount of cash to meet its current expenditure. One the contrary, a company pursuing an aggressive current assets policy operates with a relatively lower level of working capital**.**
11. **Fluctuations of Supply :** Certain companies have to maintain large reserves of raw material due to their irregular sales and intermittent supply. This is particularly true in case of companies, which require special kind of materials available from limited sources. Similarly, companies using bulky materials also maintain large reserves of raw materials inventories. In case of such companies, the working capital requirements would be large.
12. **Labour-intensive Vs. Capital-intensive Industries :** In case of labour-intensive industries the working capital requirements will be high due to regular payments of heavy wage-bills and overtime. On the other hand, highly automatic and capital-intensive industries require lesser amount of working capital because of heavy investments in fixed assets and shorter time in manufacturing process.
13. **Seasonal Variations :** A number of industries manufacture and sell goods only during certain seasons. For example, sugar, oil and woollen textile industries have either seasonal supplies of raw materials or make their sales in a particular season. Hence, the working capital requirements of such industries will be higher during a certain season as compared to any other period.
14. **Dividend Policy :** Dividend policy also influence the working capital requirements of a business enterprise. If a company follows a conservative dividend policy, more working capital would be required because more funds would be needed for payment to the shareholders even if the company's earnings are not sufficient to cover such payment. On the contrary, if a strick dividend policy is followed by the management, less working capital will be needed by the concern. This is so because a portion of the company's earnings may be retained in the business.

15. Other Factors : Besides the above considerations, there are a number of other factors which affect the working capital of a business concern. Some of them are as follows :

(i) Effective co-ordination between production and distribution policies will reduce the quantum of working capital in a business concern.

(ii) Less developed means of transportation and communication and to the quantum of working capital of companies in such area, because of stockpiling.

(iii) The magnitude of working capital is also determined by the extent of hazards and contingencies inherent in a particular type of business.

(iv) Absence of specialization in marketing of goodwill require more working capital, because such concerns will have to maintain their own marketing organizations.

(v) Companies, which have good banking connections and proved credit worthiness, will require less working capital as they can easily obtain the requisite funds from banks.

20.2.1. Financing of Working Capital :

The following sources are available for financing the working capital :

(a) Loans from Financial institutions.
(b) Floating debentures.
(c) Public deposits
(d) Issue of shares
(e) Retained Earnings or internal resources.
(f) Trade creditors and advances from customers.
(g) Bank credit.

While selecting, the source of finance, the cost of financing flexibility, risk of financing, taxes and return are to be taken into account.

20.3 Methods of Forecasting Working Capital Requirements :

After taking into consideration myriad of factors that influence working capital needs of the firm, finance manager prepares a working capital forecast. In preparing such forecast, first of all the estimate of all the current assets should be made. Thus, estimate of amount of raw materials and finished goods to be held in stock and amount of materials that will remain tied in process and outstanding receipts from different parties and other receipts will have to be made. This estimate should be followed by estimate of current liabilities comprising outstanding payments of wages, stores, materials, rent administrative expenses, taxes and other expenses. Difference between the forecasted amount of current assets and current liabilities gives net working capital requirements of the firm. To this amount, a flat percentage would be added by way of provision for contingencies. The rationale of making this provision lies in the fact that most of the figures required to build up a composite figure of working capital can only be guess estimates even with the best of efforts and the provision for contingencies would provide cushion to the management with which they can withstand any business orders.

In preparing working capital forecast, the following information are required :

(1) Costs to be defrayed on materials, wages and overheads;
(2) Length of time during which raw materials are to remain in stock before they are put to production;
(3) Length of production cycle;
(4) Length of sale cycle denoting the period of time finished goods have to stay in the warehouse before sale;
(5) Period of credit allowed to debtors;
(6) Period of credit availed from creditors;
(7) Time lag involved in the payment of ages and overhead expenses.

Cash Cost Technique :

The above technique of forecasting the working capital needs is known as 'Cash Cost' technique of forecasting. In this method, all transactions are shown in the working capital forecast on cost basis.

Balance Sheet Method :

There is another technique of forecasting working capital requirements and it is 'Balance Sheet Method'. In this method a forecast is made of the various assets and liabilities. Thereafter, the difference between the two is taken out. This difference will indicate the deficiency or surplus of cash.

Illu.1 : Find out quantity of Raw materials to be purchased from the following:

Production 1000 units

Raw materials required to produce one unit of output is 10kgs.

Closing stock of raw materials to be maintained at 2000 kgs. There is no opening stock of raw materials.

Solution :

Raw materials to be purchased

For the production one unit ---- 10kg are required

For the production of 10,000 units –

1,000 x 10 = 10,000kgs.

Closing stock to be held - 2,000kgs

Raw materials to be purchased 12,000Kgs.

Illu.2 : Mr. Murthy wishes to commence a new trading business and he gives the following information:

- **(i) The total estimated sales in a year Rs.12,00,000.**
- **(ii) Estimated fixed expenses Rs.2,000 per month and variable expenses equal to five percent of his turnover.**
- **(iii) He expects to fix a Sales price for each unit, which will be 25% in excess of his cost of purchase.**
- **(iv) He expects to turnover his stock four times in a year.**
- **(v) The sales and purchases will be evenly spread throughout the year.**
- **(vi) All sales will be for cash but he expects one month 's credit for purchases.**

Calculate his average working capital requirements.

Solution :

Statement of Working Capital Requirements

Particulars	Rs.
Current Assets:	

1. Stock	2,40,000
Turnover of stock is 4 times	
Stock turnover = Cost of goods sold / average stock	
Or 4= Rs.9,60,000 / Average stock	
Or Average stock = 9,60,000 / 4 = Rs.2,40,000	
2. Cash: To meet fixed expenses = Rs.2,000	7,000
To meet variable expenses	
(12,00,000 x 5/100 x 1/12) = Rs.5,000	
Assumed for one month = Rs.7,000	
Debtors (as all sales are for cash only)	NIL
	2,47,000
Less: current Liabilities:	
Creditors (1 month) Rs.9,60,000 x 1/12	80,000
Working capital required	**1,67,000**

Illu.3 : Mr. Kiran wishers to commence a new trading business and gives the following information.

(a) The total estimated sales in a year will be Rs.12,00,000

(b) His expenses are estimated as fixed expenses of Rs.2,000 per month plus variable expenses equal to five percent of his turnover.

(c) He expects to fix a sales price for each product which will be 25 percent in excess of his cost of purchase.

(d) He expects to turnover his stock four times a year.

(e) The sales and purchases will be evenly spread throughout the year. All sales will be for cash but he expects one month's credit for purchases.

Calculate:

(i) His estimated profit for the year

(ii) His average working capital requirements.

Solution :

(i) Estimated Profit of

	Rs.	Rs.
Sales		12,00,000
Less: Gross Profit (Rs.12,00,000 x 25/125)		2,40,000
Cost of Goods sold		9,60,000
Gross profit		2,40,000
Less: Expenses Fixed (2,000 x 12)	24,000	
Variable Cost (Rs.12,00,000 x 5/100)	60,000	84,000
Net Profit		**1,56,000**

(ii) Statement of Average Working Capital Requirements:

	Rs.
Current Assets:	
Stock	2,40,000
Turnover of stocks is 4 times Stock Turnover = Cost of goods sold / Average stock at cost Or 4 = 9,60,000/ Average stock Or Average stock = 9,60,000 / 4 = 2,40,000	
Cash	7,000
To meet fixed expenses 2,000 To meet variable expenses 12,00,000 x 5/100 x 1/12 5,000 -------- 7,000 (assumed for one month)	
Debtors (as all sales are for cash only)	NIL
	2,47,000
Less: *Current Liabilities:*	
Creditors (1 month) 9,60,000 x 1/12	80,000
Working Capital Required	**1,67,000**

Illu.4 : A proforma cost sheet of a company provides the following particulars:

Elements of cost:

Materials 40%

Direct Labour 20%

Overheads 20%

The following further particulars are available:

(a) It is proposed to maintain a level of activity of 2,00,000 units.

(b) Selling price is Rs.12 per unit

(c) Raw materials are expected to remain in stores for an average period of one month.

(d) Materials will be in process, on average half a month

(e) Finished goods are required to be in stock for an average period of one month.

(f) Credit allowed to debtors is two months

(g) Credit allowed by suppliers is one month.

You may assume that sales and production follow a consistent pattern. You are required to prepare a statement of working capital requirements a forecast profit & Loss account and balance sheet of the company assuming that.

	Rs.
Share capital	**15,00,000**
8% debentures	**2,00,000**
Fixed assets	**13,00,000**

Solution :

Statement of Net Working Capital Required

	Rs.	Rs.
Current Assets:		
Stock of Raw Materials (1 month) 24,000 x 40/ 100 x12		80,000
Work –in-process (1/2 month):		
Materials Rs.24,00,000 x 40 / 100 x 12 x ½	40,000	
Labour Rs.24,00,000 x 20 / 100 x 12 x ½	20,000	
Overheads Rs.24,00,000 x 20 / 100x 12 x ½	20,000	80,000
Stock of finished goods (1 month)		
Materials Rs.24,00,000 x 40/100 x 12	80,000	
Labour Rs.24,00,000 x 20 / 100 x 12	40,000	
Overheads Rs.24,00,000 x 20 / 100 x 12	40,000	1,60,000
Debtors (2 months) at cost		
Material	1,60,000	
Labour	80,000	
Overheads	80,000	3,20,000
		6,40,000
Less: Current Liabilities:		
Creditors (1 month) for raw materials 24,00,000 x 40 / 100 x 12		80,000
Net working Capital Required		**5,60,000**

(Note: Sales = 2,00,000 x 12 = **Rs.24,00,000**)

Dr. Forecast Profit and Loss Account for the year ended Cr.

	Rs.		Rs.
To Materials	9,60,000	By cost goods sold	19,20,000
To wages	4,80,000		
To Overheads	4,80,000		
	19,20,000		**19,20,000**

To Cost of goods sold	19,20,000	By Sales	24,00,000
To Gross profit c/d	4,80,000		
	24,00,000		**24,00,000**
To Interest on Debentures	16,000	By Gross profit b/d	4,80,000
To Net Profit	4,64,000		
	4,80,000		**4,80,000**

Dr. **Balance Sheet as at….** **Cr.**

Liabilities	**Rs.**	**Assets**	**Rs.**
Share capital	15,00,000	Fixed Assets	13,00,000
8% Debentures	2,00,000	Stock	
Net Profit	4,64,000	Raw Materials	80,000
Creditors	80,000	Work – in – process	80,000
		Finished Goods	1,60,000
		Debtors	4,00,000
		Cash & Bank balance	2,24,000
	22,44,000		**22,44,000**

Working Notes:

(a) Profit was ignored while preparing working capital requirements for the following reasons:

(i) Profits may or may not be used for working capital.

(ii) Even if profits have to be used for working capital, they are to be reduced by the amount of income tax, dividends, etc.

(b) Assumed that Interest on debentures was paid.

20.5 QUESTIONS :

1. Discuss the concept of working capital. Are the gross and net concepts of working capital exclusive? Explain.

2. Enumerate the cardinal principles of working capital management. Discuss the significance of these principles in management of working capital.
3. Discuss the risk return trade off in current assets financing.
4. Explain the merits of a matching plan in relation to financing extensively using (a) long term financing (b) short term financing.
5. What factors should the finance manager take into consideration while estimating working capital needs of a firm?
6. How does a stores accounting system provide the essential information for inventory control decisions.
7. What are the different methods of valuation of materials?
8. What is meant by FIFO, LIFO, HIFO and Weighted average method? Where are they used?

20.6 EXERCISES

1. Krishna & Co. is desires to purchase a business and has consulted you on one point on which you are asked to advise them is the average amount of working capital which will be required in the first year's working.

   You are given the following estimates and are instructed to add 10% to your computed figure to allow for contingencies.

Figures for the year

	Rs.
(a) Amount blocked up for stocks:	
Stock of finished product	5,000
Stock of stores, material etc.	8,000
(b) Average credit given:	
Inland sales – 6 weeks credit	3,12,000
Export – Sales – 11/2 weeks credit	78,000
(c) Lag in payment of wages and other outgoing:	
Wages 1 ½ weeks	2,60,000
Stock of material etc. 1 ½ month	48,000
Rent, royalties etc. – 6 months	10,000

Clerical staff – ½ month	62,400
Manager – ½ month	4,800
Miscellaneous expenses – 1 ½ months	48,000
(d) Payment in advance:	
Sundry expenses (paid quarterly in advance)	8,000
(e) Undrawn profit on the average throughout the year	11,000

Estimate the average amount of working capital required.

2. A proforma cost sheet of a company provides the following particulars :

Elements of cost	**Amount per unit Rs.**
Raw materials	80
Direct labour	30
Overheads	60
Total cost	**170**
Profit	30
Selling price	**200**

The following further particulars are available :

(a) Raw materials are in stock on an average for one month
(b) Materials are in process on an average half of month
(c) Finished goods are in stock on an average for one month
(d) Credit allowed by suppliers is one month
(e) Credit allowed to customers is two months
(f) Lag in payment of wages is 1 ½ weeks
(g) Lag in payment of overheads is one month
(h) ¼ th of the output is sold against cash.
(i) Cash in hand and at bank is expected to be Rs.25,000.

You are required to prepare a statement showing the working capital needed to finance a level of activity of 1,04,000 units of production.

You may assume that production is carried on evenly through out the year, wages and overheads accrue similarly and a time period of 4 weeks is equivalent to a month.

3. Shiva Leasing Ltd. is taking up a new project, which will have weekly sales of 40,000 units at Rs.45, a unit. Credit customers is being given for six weeks. Unit cost will be Rs.18 for direct material and Rs.7.50 for direct labour, while overheads will run at Rs.6,00,000 per week. Planned stocks will include Rs.37,50,000 raw materials and 2,00,000 units in the finished goods store. Creditors follows the month of delivery and for overheads four weeks after incurring the expenses. Wages are paid at the end of each week for the whole of that week. Units are two weeks in production and profit is remitted to the parent company. At the moment of sale, a cash flow of Rs.5,00,000 is considerable
Prepare a working capital estimate for the Shiva Leasing Ltd.

4. The proforma cost sheet of Sri Nadh Ltd. Provides the following information:

Particulars	**Per unit (Rs.)**
Direct Material	80
Direct Labour	30
Overheads	60
Total cost	170
Profit	30
Selling price	200

Additional Information:

(a) On an average one month of raw materials are in stock
(b) Work –in –progress carries for half a month an average
(c) Finished goods on an average are in stock for one month
(d) Credit allowed by suppliers is one month
(e) Credit allowed to debtors is two months

(f) Lag in payment of wages is 1 ½ weeks

(g) Lag in payment of overheads is one month.

One-fourth of the output is sold against cash. Cash on hand and at bank is expected to be Rs.25, 000.

You are required to prepare a statement showing the working capital needed to finance a level of activity of 1,04,000 units production.

You may assume a period of 4 weeks is equivalent to a month and production is carried on evenly throughout the year and wages and overheads accrue similarly.

20.7 SUGGESTED READINGS :

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4. Pandey, I.M., Management Accounting, Vikas Publishing House Pvt. Ltd., 2001
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6. Sahaf, M.A., Management Accounting, Principles and Practices, Vikas Publishing House Pvt. Ltd. New Delhi, 2004