

ACCOUNTING AND FINANCIAL MANAGEMENT

UNIT I: Introduction to Financial Accounting

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- Significance, Branches of Accounting, Accounting Cycle
- Journal – Ledger – Trial Balance – Final accounts.

UNIT II: Cost Accounting

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UNIT – I

INTRODUCTION TO ACCOUNTING

NEED FOR FINANCIAL ACCOUNTING

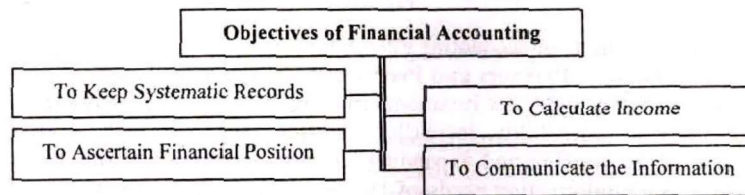
- The need for accounting is all the persons who are running a business. He must know:
 - (i) What he owns?
 - (ii) What he owes?
 - (iii) Whether he has earned a profit or suffered a loss on account of running a business?
 - (iv) What is his financial position?

DEFINITION OF FINANCIAL ACCOUNTING

- **According to American Institute of Certified Public Accountants (AICPA)**, accounting is “The art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part, at least, of a financial character and interpreting the results thereof”.

OBJECTIVES OF FINANCIAL ACCOUNTING

- Following are the objectives of financial accounting:



1. To Keep Systematic Records:

- The primary objective of financial accounting is to maintain a systematic record of business transactions.
- There is a limit to human memory and, therefore, a systematic record of all transactions is essential for every business.

2. To Calculate Income:

- Another objective of financial accounting is to ascertain profit or loss earned by the business during an accounting year.
- This is done by preparing profit and loss account or income statement.

3. To Ascertain Financial Position:

- Every businessman desires to know about his financial position, i.e., where he stands, what he owns and what he owes.
- This is served by the balance sheet.
- Balance sheet is a statement of assets, liabilities and capital on a particular date.

4. To Communicate the Information:

- The last but not the least objective of the financial accounting is to communicate the various information and facts to various interested groups, viz., owners, creditors, employees, investors, taxation authorities, etc.

ADVANTAGES OF FINANCIAL ACCOUNTING

- The advantages of financial accounting are as follows:
 1. **Assistance to Management;** It provides information to the management to help them do their work efficiently by proper planning, decision making and controlling.
 2. **Replacement of Memory:** No businessman can remember everything about his business; hence it is necessary to maintain a record of business transactions.
 3. **Comparative Study:** A systematic record will enable a businessman to compare a year's results with another and locate factors leading to significant changes, if any.
 4. **Settlement of Taxation Liability:** If accounts are maintained properly, income tax or sales tax assessment becomes easy.
 5. **Evidence in Court:** Systematic record of transactions is often treated by courts as good evidence.
 6. **Sale of Business:** If a person wants to sell his business, then the accounts maintained will facilitate the ascertainment of the proper purchase price.
 7. **Assistance to an Insolvent Person:** In case a person becomes insolvent, he has to provide explanations wherever required. Proper accounting records will help him in this.

DIFFERENCE BETWEEN BOOKKEEPING AND ACCOUNTING

Basis for Comparison	Bookkeeping	Accounting
Meaning	Bookkeeping is an activity of recording the financial transactions of the company in a systematic manner.	Accounting is an orderly recording and reporting of the financial affairs of an organization for a particular period.
What is it?	It is the subset of accounting.	It is regarded as the language of business.
Decision Making	On the basis of bookkeeping records, decisions cannot be taken.	Decisions can be taken on the basis of accounting records.
Preparation of Financial Statements	Not done in the bookkeeping process	Part of Accounting Process
Tools	Journal and Ledgers	Balance Sheet, Profit & Loss Account and Cash Flow Statement

Basis for Comparison	Bookkeeping	Accounting
Methods / Sub-fields	Single Entry System of Bookkeeping and Double Entry System of Bookkeeping	Financial Accounting, Cost Accounting, Management Accounting, Human Resource Accounting, Social Responsibility Accounting.
Determination of Financial Position	Bookkeeping does not reflect the financial position of an organization.	Accounting clearly shows the financial position of the entity.

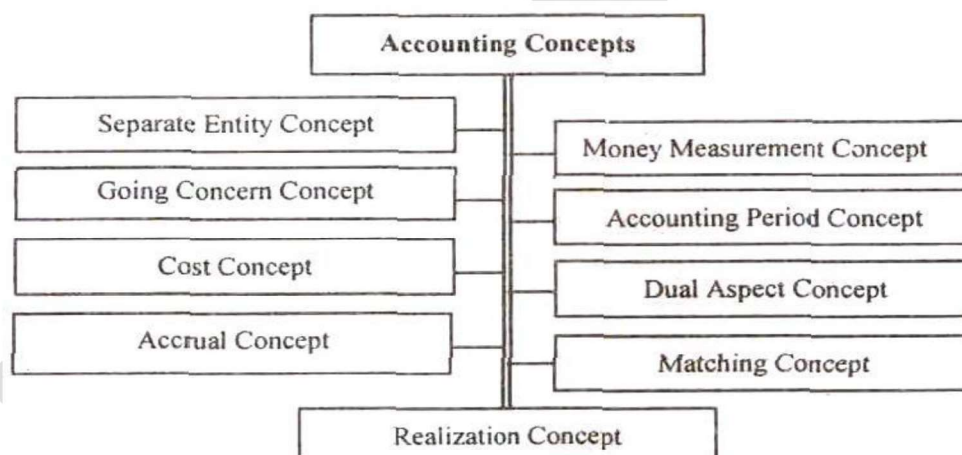
ACCOUNTING PRINCIPLES (GAAP)

➤ **Accounting principles can be classified into two categories:**

- 1) Accounting Concepts
- 2) Accounting Conventions

1). ACCOUNTING CONCEPTS

- The term 'concept' includes those basic assumptions or conditions upon which the science of accounting is based.
- To make the language, convey the same meaning to all people, as far as possible, and to make it full of meaning, accountants have agreed on the following concepts:



1. Separate Entity Concept

- This concept assumes that, for accounting purposes, the business enterprise and its owners are two separate independent entities.
- Thus, the business and personal transactions of its owner are separate.

2. Money Measurement Concept

- This assumption requires that all business transactions will be recorded in terms of money, i.e., rupees and paise in India.
- Only those transactions that are capable of being expressed in terms of money are included in the accounting records of the enterprise.

3. Going Concern Concept

- This concept states that a business firm will continue to carry on its activities for an indefinite period of time.
- Simply stated, it means that every business entity has continuity of life.
- Thus, it will not be dissolved in the near future.

4. Accounting Period Concept

- All the transactions are recorded in the books of accounts on the assumption that profits on these transactions are to be ascertained for a specified period.
- This is known as accounting period concept.
- Thus, this concept requires that a balance sheet and profit and loss account should be prepared at regular intervals.

5. Cost Concept

- Cost concept states that all assets are recorded in the books of accounts at their purchase price, which includes cost of acquisition, transportation and installation and not at its market price.
- It means that fixed assets like building, plant and machinery, furniture, etc are recorded in the books of accounts at a price paid for them.
- This cost is also known as historical cost.

6. Dual Aspect Concept

- This is the basic concept of accounting.
- According to this concept, every business transaction has a dual effect.
- This concept supports the account equation *i.e.* Capital + Liabilities = Assets

7. Accrual Concept

- It suggests that incomes and expenses should be recognized as and when they are earned and incurred, irrespective of whether the money is received or paid in connection thereof.
- This concept is used by all businesses that disclose their financial statements to various interested parties.

8. Matching Concept

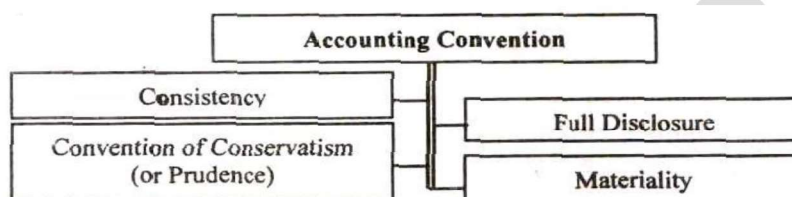
- The matching concept states that the revenue and the expenses incurred to earn the revenues must belong to the same accounting period.
- So once the revenue is realized, the next step is to allocate it to the relevant accounting period.
- This can be done with the help of accrual concept.
- The concept 'matching' implies appropriate association of related revenues and expenses.

9. Realization Concept

- This concept states that revenue from any business transaction should be included in the accounting records only when it is realized.
- In other words, it can be said that, revenue is said to have been realized when cash has been received or right to receive cash on the sale of goods or services or both.

2). ACCOUNTING CONVENTIONS

- The term 'convention' includes customs or traditions, which guides the accountant while preparing the accounting statements.



1. Consistency

- According to this principle, whatever accounting practices are selected for a given category of transactions, they should be followed on a horizontal basis from one accounting period to another.

2. Full Disclosure

- The full disclosure principle requires that all facts necessary to make financial statements not misleading must be disclosed.
- In other words, the full disclosure principle states that all information significant to the users of financial statements should be disclosed.
- This can be done either in the financial statements or their foot-notes.

3. Convention of Conservatism (or Prudence)

- This convention means a caution approach or policy of "play safe".
- If there is a possibility of loss, it should be taken into account at the earliest.
- On the other hand, a prospect of profit should be ignored.

4. Materiality

- The term material refers to the relative importance of an item or event.
- If an item or event is material, it is likely to be relevant to the user of the financial statements.
- The concept of materiality is relative.

ACCOUNTING TERMINOLOGY

1. Business Transaction:

- Every business operation deals with exchange of cash, goods and services.
- This results in change in the financial position of the business concern.
- Hence, a business transaction may be defined as an activity that brings a change in the financial position of the business.

2. Goods:

- Goods are those with which the business concern does business.
- If a commodity is produced or purchased for the purpose of sale, it is called 'goods'.
- Furniture purchased for the office use to run the business is not 'Goods'.
- The furniture will be 'Goods', if it is purchased by the business concern for the sake of sale.

3. Assets:

- Assets mean accumulation of benefits.
- Assets are those which are essential and beneficial for running the business operations.
- For example, Furniture, Machinery, Land, Buildings etc.

4. Fixed Assets:

- Fixed Assets are those which provide long-term benefits for running the business.
- For example, Land and Buildings; Plant and Machinery.

5. Current Assets:

- Current or Floating Assets are means those assets which provide short term benefits for running the business.
- For example, Stock or Inventory, Debtors, Cash etc.,

6. Liabilities:

- The debts due by the business to outsiders are called 'Liabilities'.
- For example, Creditors, Bills payable Loan from banks etc.

7. Capital:

- The amount invested by the owner for running the business is called Capital.
- This can be in the form of Goods, Cash or Assets.

8. Drawings:

- Cash, Goods or Services or Assets withdrawn by the owner for self consumption are called drawings.

9. Debtor:

- A person due money to the business is called 'Debtor'.
- In other words, a debtor is one who received benefit from the firm and yet to repay it.
- For Example, when the business sell goods on credit or when the person purchased goods on credit from the business.

10. Creditor:

- Creditor is a person who lends money or sells goods on credit to the business.

- In other words, creditor means, who gave benefit to the firm and yet to receive, the equivalent benefit from the business.

11. Account:

- Account is a summarized statement of Debit and Credit.
- There are two parts for every account.
- The left hand side of the part is called 'Debit' side and the right hand side of the part is known as 'Credit' side.

12. Expenditure:

- Amount spent for acquiring goods or services for running business is known as expenditure.
- It may be capital expenditure or Revenue Expenditure.

13. Capital Expenditure:

- The amount spent for the acquisition of fixed assets which have long life and which are useful for the long term benefit of the business is known as capital expenditure.
- For example, Purchase of Machinery, Furniture and Fixtures.

14. Revenue Expenditure:

- All expenses incurred for running the business for the current year is known as 'Revenue Expenditure'.
- For example, Salaries, Rent, Interest etc.

15. Income:

- The amount earned by a firm out of its business transaction during a period is called income.
- Particular income is of two types. Capital gains, Revenue Income.

16. Capital Gains:

- Capital Gain is the excess amount received over the Book value of the asset owned by the business.
- For example, Profit earned over Sale of Building.

17. Revenue Income:

- Revenue income is the income received during business transactions or sale and purchase of goods or on services rendered to outsider.
- For example, Interest and Commission received.

18. Journal:

- This is called the 'Book of Prime Entry'. The word 'Journal' is derived from the latin word 'Journ' which means a day.
- Hence, Journal is also termed as a **day book** wherein the day to day transactions are recorded in chronological order.

19. Journal Entry:

- The process of recording the business transactions in the Journal is known as journalizing.
- To divide business transactions into 2 aspects and recording in the Journal is called 'Journal Entry'.
- The first one is Debit Aspect and the second one is Credit Aspect.

20. Ledger:

- Ledger means a set of accounts.
- This is also called 'Book of Final Entry'.
- All the transactions from the Journal Entries are recorded in the Ledger by opening separate accounts and their balances are found.

21. Cheque:

- A cheque is an instrument, by means of which a depositor can order the bank to pay a certain sum of money only to the order of a person or to the bearer of the instrument.

22. Invoice:

- Invoice is a statement sent by the seller to the purchaser which contains the details of the quantity of goods sold and price of the goods/product, terms and conditions of payment particulars.

ACCOUNTING CYCLE**The Accounting Cycle: Steps**

1. Analyze the transaction
2. Journalize the transaction
3. Post the transaction to accounts in **ledger**
4. Prepare the **trial balance**
5. Prepare financial statements

ACCOUNTING EQUATION

$$\begin{aligned} \text{Total Assets} &= \text{Total Liabilities} \\ \text{Total Assets} &= \text{Internal Liabilities} + \text{External Liabilities} \\ \text{Total Assets} &= \text{Capital} + \text{Liabilities} \end{aligned}$$

DOUBLE ENTRY SYSTEM**Meaning of Double Entry System**

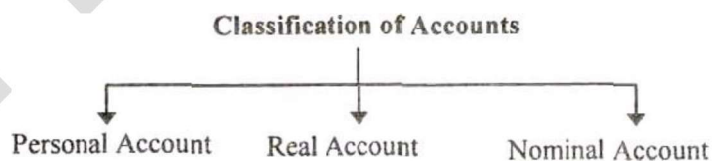
- The double entry book-keeping refers to a system of accounting in which every transaction affects at least two accounts.
- This is the basis of the accounting equation also.
- Recording dual aspects of business transactions in terms of * Debit and Credit' is Double Entry System.

- In accountancy, the double-entry bookkeeping (or double-entry accounting) system is the basis of the standard system used by businesses and other organizations to record financial transactions.
- It was first described by the Italian mathematician Luca Pacioli.
- Each account maintains a history of changes in monetary values about a particular aspect of the business.
- This system is called double-entry because each transaction is recorded in at least two accounts.
- Each transaction results in at least one account being debited and at least one account being credited, with the total debits of the transaction equal to the total credits.
- For example, Mr. B sold goods for cash Rs.1,000 to Mr.C.
- In this case the dual aspects of this transaction for Mr. B and Mr. C are as follows:

Dual Aspects for Mr. B	Dual Aspects for Mr. C
1) Receipt of cash ₹1,000	1) Payment of Cash ₹1,000
2) Foregoing of goods of ₹1,000	2) Receipt of goods ₹1,000

CLASSIFICATION OF ACCOUNTS

- Debits and credits are an integral part of the accounting system.
- Every financial transaction of a business has a double effect.
- That is, each transaction involves at least two accounts.
- One aspect of the transaction is **debited in an account** and the other **credited in another account**.
- The debiting and crediting of the accounts are done on the basis of certain rules.
- These rules are called rules of journalizing i.e., debit and credit.
- There are three accounts for the rules of debit and credit such as follows:



1. PERSONAL ACCOUNT

- Personal account is an account of a person.
- A person can be a natural person such as people like Suresh's account, Raghu account etc.
- An artificial person such as firms, organizations and institutions and a representative person such as debtors and creditors.
- A representative person such as Outstanding, Prepaid, accrued, paid in advance, received in advance etc, which represent a natural or artificial person.

- Since a person, be it a natural, artificial or representative, can be the receiver of benefits or giver of benefits.

Golden Rule:
Debit the “Receiver”, Credit the “Giver”.

2. REAL ACCOUNT

- Real account is a record of an asset.
- An asset can be current asset such as cash, a fixed asset such as building and intangible asset such as goodwill.
- An asset is a current, fixed or an intangible asset, it can either come in the business through its purchase or go out of the business through its sales.
- This rule states that whenever some benefit in the form of asset comes into the business through its purchase, its (asset) account is debited.

Golden Rule:
Debit What “Comes In”, Credit What “Goes Out”.

3. NOMINAL ACCOUNT

- Nominal account is a record of **expenses & losses, incomes & gains**.
- An expense or loss is the sacrifice of benefits in exchange for service used and an income or gain is the benefit earned in exchange for service rendered.
- This rule states that whenever some benefit is sacrificed in exchange for service used, expense made or loss suffered is debited.

Golden Rule:
Debit all Expenses & Losses, Credit all Income & Gains.

JOURNAL & LEDGER

Meaning of Journal

- The word '**journal**' has been derived from the **French word 'JOUR'** meaning **daily records**.
- The journal is an important book under the double-entry system.
- Journal is the first book of systematic record of the financial transactions of the business.
- It is called the book of original or prime entry, because its financial transactions are first of all recorded in this book as and when they take place.
- The journal is prepared with the help of memorandum or waste book, which is a rough and temporary record of the financial transactions of the business.
- The recording of a transaction in the journal is called **journalizing**.
- The record of a business transaction in journal is called a **journal entry**.

Proforma of Journal

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
(1)	(2)	(3)	(4)	(5)

LEDGER

Meaning of Ledger

- When the transactions are recorded from the primary books of accounts on permanent basis under double entry system in a summarized and classified form in different accounts and the same is posted in separate pages, it is called a **Ledger**.
- Since all the transactions are recorded in this book on permanent basis, it is called the **Book of Final Entry**.
- Practically, ledger is the principal book of accounts.
- **According to L.C. Cropper**, "The book which contains a classified and permanent record of all the transactions of a business is called the Ledger".
- **Ledger posting** is the method of transferring the credit and debit entries from the journal entries to the ledger. In the ledger a separate account is opened in every account. All the credit and debit entries are accordingly entered or recorded. Finally, the accounts are correctly balanced.

Format of Account

Date	Particulars	Journal Folio	Amount Dr.	Date	Particulars	Journal Folio	Amount Cr.
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)

1.7.4. Difference between Journal and Ledger

Basis of Difference	Journal	Ledger
1) Nature of Book	It is book of original or prime entry.	It is book of final or secondary entry.
2) Basis for Preparation	It is prepared on the basis of source documents of transactions.	It is prepared on the basis of journal.
3) Stage of Recording	Recording in the journal in the first stage.	Recording in the ledger is the second stage.
4) Object	It is prepared to record all transactions in chronological order.	It is prepared to know the net effect of various transactions affecting a particular account.
5) Balancing	Journal is not balanced.	All ledger accounts (except nominal account) are balanced in the ledger.
6) Narration	Narration is written for each entry.	No narration is given.
7) Name of the Process of recording entries	The process of recording in journal is called 'Journalizing'.	The process of recording in the ledger is called 'Posting'.
8) Basis of Preparation of Final Accounts	Journal directly does not serve as basis for the preparation of final accounts.	Ledger serves the basis for the preparation of final accounts.

Exercises

1. 1998 June 1st Hari Commenced business with cash Rs. 1,00,000. His other transactions during the month were as follows. Pass journal entries.

1998		Rs.
June 2	Cash Sales	10,000
" 4	Cash Purchases	8,000
" 6	Paid Salaries	5,000
" 7	Purchased Machinery	20,000
" 9	Cash Deposited with bank	4,000
" 11	Cash paid to Mahesh	2,000
" 14	Goods sold to Gopal	1,500
" 16	Purchased goods from Rajani	1,000
" 17	Received cash from Bhasker	3,000
" 19	Rent	2,500
" 20	Postage	150
" 27	Cash used for personal use	3,500
" 29	Sold goods to Rama Rao	5,000
" 30	Cash purchases from Jagan	4,000
" 30	Audit Fees	500

2. Pass Journal Entries for the following in the books of Mr. Vasudev.

1998		Rs.
July 1	Cash brought into the business	30,000
" 2	Sold goods to Ashok	10,000
" 4	Bought from Shivaji	3,000
" 6	Purchased Type writer, paid by cheque	8,000
" 8	He withdrew cash for his domestic use	5,000
" 11	Furniture Purchased	14,000
" 14	Goods returned to Shivaji	600
" 17	Goods returned from Ashok	500
" 19	Paid for Advertisement	1,000
" 21	Deposited cash with Andhra Bank	12,000
" 24	Goods utilised for personal use	1,400
" 26	Cash paid to Kiran	8,940
	Discount received	60
" 28	Stationery Expenses	150
" 29	Rent Paid	1,500
" 30	Received Cash from Prasad	6,850
	Discount allowed	150

July 31	Sold goods to Raja Stores	2,000
" 31	Cash withdrawn from Bank for office use	7,000
" 31	Cash paid to Prasanna	1,000
" 31	Goods sold to Diwakar	2,000

3. Journalise the following transactions :

1998

Oct. 1 Venkateswara & Co commenced business with furniture Rs. 25,000 and cash Rs.75,000.

	Rs.
" 3 Sales	10,000
" 4 Purchases	8,000
" 5 Sold goods to Ramakrishna	12,000
" 6 Bought goods from Murali	7,000
" 7 Sold goods to Gangadhar for Cash	6,000
" 9 Ramakrishna Returned goods	2,000
" 11 Commission received	500
" 14 Lighting Expenses	700
" 15 Remitted cash to Prasad	600
" 16 Returned goods to Murali	850
" 17 Took goods for domestic use	400
" 18 Repairs	200
" 22 Cash received from Ramakrishna	9,500
Discount allowed	500
" 24 Interest received	2,500
" 26 Stationery Expenses	750
" 28 Paid cash to Murali	6,000
Discount received	150
" 29 Bought goods from Nazeer for cash	6,000
" 30 Sold goods to Rao	2,000
" 31 Cash paid to Vijay	1,000

4. Journalise the following transactions in the books of Mr. Sai Ram.

1998

	Rs.
Jan . 1 Commenced business with cash	25,000
" 2 Sold Goods to Pradeep	2,000

"	3	Purchased Furniture	1,000
"	4	Bought goods from Santosh	500
"	5	Paid Salaries	800
"	9	Received Interest	750

5. Write Journal Entries with narration for the following.

1998		Rs.
Mar. 9	Started business	10,000
" 11	Cash Sales	2,000
" 13	Purchases	1,500
" 15	Sold Plant & machinery	3,000
" 17	Cash paid to Swaroop	1,200
" 19	Wages	350

6. Journalise the following in the books of Mr. Raheem

1998		Rs.
Apr. 10	Mr. Raheem started business with	25,000
" 12	Sold goods	5,000
" 14	Bought goods from Rajani	3,000
" 15	Purchased Stationery	150
" 17	Received from Kavitha	1,200
" 19	Sold goods to Samatha on credit	2,500

7. Journalise the following with narration :

1998		Rs.
Feb. 1	Sales	3,000
" 2	Sold furniture	2,000
" 4	Purchases	1,500
" 5	Sold goods for cash	1,200
" 7	Sold goods to Raju on credit	1,800
" 8	Purchased goods for cash from Kishore	1,400
" 10	Bought Plant	11,000

8. Write Journal entries in the books of Chandu

1998		Rs.
Aug. 1	Commenced business with	50,000
" 2	Paid into Bank	15,000
" 3	Withdrew cash from bank for personal use	1,200
" 5	Paid for postage	125
" 7	Incurred sundry expenses	40
" 9	Withdrew cash from bank	1,500

9. Journalise the following :

1996		Rs.
Jan. 1	Commenced business with cash	15,000
	Goods	10,000
" 2	Sold goods to Raja for	12,000
	and received a cash of	2,000
" 4	Paid telephone rent	400
" 5	Bought furniture for	15,000
	from Mohan and paid cash	3,000

10. Journalise the following in the books of Naveen.

1998		Rs.
Dec. 1	Commenced business with cash	2,000
	Goods	13,000
	Furniture	5,000
" 2	Sold goods to Chandu	3,000
" 5	Purchased Furniture	3,200
" 7	Paid for wages	1,200
" 9	Sold machinery for cash	8,000
" 13	Received interest	300
" 14	Rent	1,500

DEFINITIONS

COST

"Cost is the amount foregone, incurred or potentially to be incurred, in order to acquire a particular good or a service".

COSTING - "Costing is the process of ascertaining cost".

COST ACCOUNTING: "Cost Accounting is application of accounting principles to costing".

COST ACCOUNTANCY

"Cost Accountancy is a wider term which not only includes Costing, Cost Accounting, but also Cost Audit and Cost Control Techniques".

OBJECTIVES OF COST ACCOUNTING

The main objectives of cost accounting are as follows:

- 1. Ascertainment of cost.** This is the primary objective of cost accounting. For cost ascertainment different techniques and systems of costing are used under different circumstances.
- 2. Control of cost.** Cost accounting aims at improving efficiency by controlling and reducing cost. This objective is becoming increasingly important because of growing competition.
- 3. Guide to business policy.** Cost accounting aims at serving the needs of management in conducting the business with utmost efficiency. Cost data provide guidelines for various managerial decisions like make or buy, selling below cost, utilisation of idle plant capacity, introduction of a new product, etc.
- 4. Determination of selling price.** Cost accounting provides cost estimation on the basis of which selling prices of products or services may be fixed. In periods of depression, cost accounting guides in deciding the extent to which the selling prices may be reduced to meet the situation.
- 5. Measuring and improving performance.** Cost accounting measures efficiency by classifying and analysing cost data and then suggest various steps in improving performance so that profitability is increased.

COST CLASSIFICATION

Cost classification refers to the grouping of costs according to their common features. Costs are classified under the following headings.

1. By nature or elements
2. By functions
3. By behaviour or By changes in activity or volume

4. By degree of traceability or (Direct and Indirect)
5. By Controllability
6. By normality
7. By relationship with accounting period or (Capital and Revenue)
8. By Time
9. By Managerial Decisions.

1. By Nature or Elements:

PRIME COST OR DIRECT COST

It refers to the aggregate of direct material, direct labour, and direct expenses. These terms are briefly discussed below:

Direct material

Those materials which can be identified with the job, unit, process or product are direct materials.

Direct materials include the following:

- ❖ All materials purchased or requisitioned for a process, job or order
- ❖ All materials flowing from one process to another.
- ❖ All charges incurred to prepare the material for use. (e.g.: freight, commission on purchases)

Direct Wages

Direct wages refer to the wages paid to those workers whose hours of work can be linked with a process, product, job, or unit. In the case of enterprises rendering services, direct wages refer to the wages paid to those who render the service.

Direct wages include the following payments.

- ❖ Wages paid to labourers who are engaged in altering the condition or composition of the product.
- ❖ Wages paid to inspectors and analysts who are specifically engaged for the product, process or job.
- ❖ Wages of foreman, driver etc., if such payments can be linked exclusively with the product, process or job.

Direct Expenses

Direct expenses are those expenses (excluding direct material and direct Labour} which can be linked with the job, product or process.

Direct expenses include the following:

- ❖ Cost of moulds, designs or patterns
- ❖ Hiring charges of tool or equipment
- ❖ Consultation fees
- ❖ Cost of patents and royalties.

OVERHEAD OR INDIRECT COST

Overhead refers to the aggregate of indirect material cost, indirect wages and indirect expenses. Overhead includes those costs which cannot be directly linked to a unit, job or process. Overhead is also referred as indirect cost.

Indirect material

Indirect materials are of minor importance and they are not, directly linked with the finished product. E.g.: oil, grease, rags etc. Sometimes, when the cost of direct material is very little or difficult to assign, then it is included in indirect cost.

Indirect wages refer to the wages paid to workers whose services cannot be linked directly with the job, department or process. Auxiliary work is done by indirect labour. Examples of indirect wages are:

Wages paid to inspectors, supervisors, cleaners, mechanics, store keepers, time keepers

Indirect expenses

To be included in indirect expenses, two conditions must be satisfied.

- ❖ The expenses cannot be directly linked with the job, department or process.
 - ❖ Such expenses should not fall in the category of indirect material or indirect wages.
- Examples of indirect expenses are: Rent, rates, taxes, power, lighting, heating, depreciation, repairs, maintenance, insurance, hospitality etc.

2. FUNCTION WISE CLASSIFICATION OF COST

All manufacturing organisations are engaged in production. Administration and sales. Therefore, costs are classified on the basis of the above functions as follows.

1. Production Cost
2. Administration Cost
3. Selling and distribution cost

1. Production Cost

Production cost is also referred to as manufacturing cost. Manufacturing refers to the conversion of raw materials into finished products. Manufacturing cost is the aggregate of prime cost and factory overhead. Therefore, manufacturing cost includes the following:

- ❖ Direct material
- ❖ Direct labour
- ❖ Direct expenses
- ❖ Factory overhead (factory indirect material + indirect labour + indirect expenses).

2. Administration Cost

Administration cost refers to the cost of performance of administrative functions like planning, policy formulation, direction, control etc. Administration cost includes the following.

- ❖ Rent, rates, depreciation
- ❖ Salaries
- ❖ Postage, stationery, telephone
- ❖ General administrative expenses.

3. Selling & Distribution Cost

Selling function is different from distribution function. Selling cost refers to the cost of activities relating to the creation and stimulation of demand for products and the procurement of orders.

Distribution function starts as soon as manufacturing function comes to an end. Selling and distribution costs arise as soon as the goods reach a saleable condition. Examples of selling and distribution costs are

- ❖ Salaries of sales staff.
- ❖ Rent, rate, depreciation, insurance.
- ❖ Advertisement charges.
- ❖ Cost of insurance, packing, freight etc.

3. BEHAVIOURWISE CLASSIFICATION OF COST

As costs behave differently under different circumstances the need for behaviour wise classification of cost arises. On the basis of behaviour, costs are divided into:

- ❖ Variable cost
- ❖ Fixed cost
- ❖ Semi variable cost

Variable Cost

Variable cost is also referred to as direct cost. The cost that varies directly with volume of output is called variable cost.

Examples: Direct material Direct labour Direct expenses

Fixed Cost

Fixed cost is also referred to as period cost. Fixed cost is the cost that remains the same irrespective of the volume of output. This does not mean that the fixed costs remain fixed for ever. It only means that they remain fixed during a given period of time.

Semi Variable Cost

The costs which remain partly fixed or partly variable are referred to as semi variable cost,

- ❖ Building and plant maintenance
- ❖ Plant and machinery depreciation.

4. TRACEABLE OR DIRECT COST & NON-TRACEABLE OR INDIRECT COST

Another method of classification is the division of costs into direct costs and indirect costs. The clearly identifiable cost incurred for a particular cost unit or cost centre are direct costs e.g.: Materials used and labour employed in manufacturing a product.

Indirect costs are those which are incurred for a number of cost units or cost centers and therefore it is not easy to identify such costs with a particular cost unit or cost centre, e.g.: Rent, salary, depreciation. The classification of cost into direct or indirect depends upon the nature of business and the cost unit.

Direct costs are easily identifiable and exact calculation is possible. But indirect costs are apportioned on the basis of certain assumptions.

5. BY CONTROLLABILITY

On the basis of controllability, costs are classified into controllable costs and uncontrollable costs.

Controllable costs

Controllable costs are those which are within the control of management at least to some extent. All direct costs fall within this category.

Uncontrollable costs

Uncontrollable costs are those which are not within the control of the management. Most of the fixed costs fall in this category. Rent is not controllable. Similarly salaries are also outside the scope of control.

What is uncontrollable may become controllable for another level of management or over a period of time. Therefore, the distinction between controllable and uncontrollable cost is allowed to be drawn as per discretion of the management.

6. BY NORMALITY

On the basis of normality, 'costs are classified into

- ❖ Normal cost
- ❖ Abnormal cost.

Normal cost:

Normal cost is that which is incurred normally to get a given volume of output. Normal cost forms part of the cost of production.

2. Abnormal cost:

Abnormal cost is that which is not normally incurred to achieve a given volume of output. Abnormal cost is not a part of cost of production.

7. CAPITAL COST & REVENUE COST

Capital Cost is the cost which is incurred for acquiring an **asset** in order to **earn income** or to increase the earning capacity of business.

Any cost incurred for maintaining the earning capacity of the business is revenue cost.

8. BY TIME

On the basis of time, **costs** can be divided into

- ❖ Historical cost and
- ❖ Predetermined costs.

Historical cost:

Historical cost is that which is ascertained after it has occurred. It is available only after the production is over. As such it is not useful for cost control.

Predetermined costs:

Predetermined costs refer to estimated costs which are calculated much before the production takes place. If the predetermined costs are scientifically calculated, they become the standard cost. The Management can compare estimated **costs** with actual **costs** and take steps for cost control.

9. COST CLASSIFICATION FOR MANAGERIAL DECISIONS

For the purpose of managerial decisions, costs are classified as explained below.

1. Marginal cost:

The I.C.M.A., England defines marginal cost as follows. "The amount at any given volume of output by which aggregate **costs** are changed if the volume of output is increased or decreased by one unit".

2. Out of pocket costs:

Out of pocket costs are those which involve cash expenditure.

3. Differential costs:

Differential costs are costs which are incurred due to change in level of activity or method of production. If the cost increases due to the change, it will be called incremental cost. If the change **decreases** the cost, it will be **called**, detrimental **cost**.

4. Sunk costs:

Sunk costs are irrecoverable costs. They arise due to complete abandonment of a plant. Sunk cost = Written down value of plant minus salvage value the volume of output has no influence over sunk costs.

5. Imputed costs:

Imputed costs are also known as notional costs and they appear in cost accounts only. E.g. Interest on capital even though it has not been actually paid, **will** appear in cost accounts.

6. Opportunity cost:

Opportunity cost refers to the earning that might have arisen if the asset or service had been employed for some alternative use E.g. If owned building is used for factory purpose, the rent of the building would fetch if it had been let out is the opportunity **cost**.

7. Replacement cost:

It is the cost at which an existing asset could be replaced at current market price.

8. Avoidable & unavoidable cost:

Avoidable costs are those which can be avoided if a product or department is cut off. (E.g. Salary of clerks).

Unavoidable costs are those which cannot be eliminated even if a product or department is discontinued, e.g. Factory manager's salary or factory rent.

COST CENTER AND COST UNIT

Cost is ascertained by cost centers or cost units or by both. These terms are discussed below:

Cost Centre:

- A cost centre is defined by CIMA of UK as "a location, person, or item of equipment (or group of these) for which costs may be ascertained and used for the purpose of control".
- Thus, a cost centre refers to a section of the business to which costs can be charged.
- It may be a location (a department, a sales area), an item of equipment (a machine, a delivery van), a person (a salesman, a machine operator) or a group of these (two automatic machines operated by one workman).
- The main purpose of ascertaining the cost of a cost centre is control of cost.
- Cost centres are primarily of two types:
 - (a) **Personal cost centre:** this consists of a person or a group of persons.
 - (b) **Impersonal cost centre:** this consists of a location or an item of equipment or group of these.

Cost Unit

- A cost unit is defined by CIMA as a "unit of product, service or time in relation to which cost may be ascertained or expressed".
- Cost units are the 'things', that the business is set up to provide of which cost is ascertained.
- For example, in a sugar mill, the cost per tonne of sugar may be ascertained; in a textile mill the cost per metre of cloth may be ascertained.
- Thus 'a tonne' of sugar and 'a metre' of cloth are cost units.
- In short, cost unit is unit of measurement of cost. Broadly, cost units may be:
 - (i) Units of production, e.g., a kilogram of a chemical, a ream of paper, a tonne of steel, a metre of cable, etc.
 - (ii) Units of service, e.g., a passenger, a mile, a cinema seat, a consulting hour, etc

COST SHEET

- Cost sheet is defined by CIMA, U.K. as "a document which provides for the assembly of the detailed cost of accost centre or cost unit."
- This cost sheet is a periodical statement of cost designed to show in detail the various elements of cost of goods produced like prime cost, factory cost of production and total cost.
- It is prepared at regular intervals, e.g., weekly, monthly, quarterly, yearly, etc. Comparative figures of the previous period may also be shown in the cost sheet so that assessment can be made about the progress of the business.

Illustrative Cost Sheet (Detailed)		
Units produced		
<i>Particulars</i>	<i>Total cost Rs.</i>	<i>Cost per unit Rs.</i>
Opening Stock of Direct Raw Materials		
Add : Purchases	...	...
Add : Carriage Inward	...	...
Add : Octroi and Customs Duty	...	...
Less : Closing Stock of Direct Raw Materials	...	...
<i>Cost of Direct Materials Consumed</i>	...	...
Direct or Productive Wages	...	...
Direct (or Chargeable) Expenses	...	...
Prime Cost	...	...
Add : <i>Works or Factory Overheads :</i>	...	...
Indirect Materials	...	...
Indirect Wages	...	...
Leave Wages	...	...
Overtime Premium	...	...
Fuel and Power	...	...
Coal	...	...
Factory Rent and Taxes	...	...
Insurance	...	...
Factory Lighting	...	...
Supervision	...	...
Works Stationery	...	...
Canteen and Welfare Expenses	...	...
Repairs	...	...
Haulage	...	...
Works Salaries	...	...
Depreciation of Plant & Machinery	...	...
Works Expenses	...	...
Gas and Water	...	...
Drawing Office Salaries	...	...
Technical Director's Fees	...	...
Laboratory Expenses	...	...
Works Telephone Expenses	...	...
Internal Transport Expenses	...	...
Less : Sale of Scrap	...	...
Add : Operating Stock of Work-in-progress	...	...
Less : Closing Stock of Work-in-progress	...	...
Works Cost	...	...

Depreciation and Repairs of Office Equipment	...	
Depreciation of Office Furniture	...	
Subscription to Trade Journals	...	
Office Lighting	...	
Establishment Charges	...	
Director's Travelling Expenses	...	
Postage	...	
Legal Charges	...	
Audit Fees	...	
	Cost of Production	...
Add : Opening Stock of Finished Goods	...	
Less : Closing Stock of Finished Goods	...	
	Cost of Goods Sold	...
Add : <i>Selling and Distribution Overheads :</i>	...	
Advertising	...	
Showroom Expenses	...	
Bad Debts	...	
Salesmen's Salaries and Expenses	...	
Packing Expenses	...	
Carriage Outward	...	
Commission of Sales Agents	...	
Counting House Salaries	...	
Cost of Catalogues	...	
Expenses of Delivery Vans	...	
Collection Charges	...	
Travelling Expenses	...	
Cost of Tenders	...	
Warehouse Expenses	...	
Cost of Mailing Literature	...	
Sales Manager's Salaries	...	
Sales Director's Fees	...	
Showroom Expenses	...	
Sales Office Expenses	...	
Depreciation and Repairs of Delivery Vans	...	
Expenses of Sales Branches	...	
	Cost of Sales (or Total Cost)	...
PROFIT	...	
Sales	...	

Items not included in cost sheet

The following items are of financial nature and thus not included in cost sheet:

- | | |
|---|----------------------------------|
| 1. Cash discount | 2. Interest paid |
| 3. Preliminary expenses written off | 4. Goodwill written off |
| 5. Provision for taxation | 6. Provision for bad debts |
| 7. Transfer to reserves | 8. Donations |
| 9. Income-tax paid | 10. Dividend paid |
| 11. Profit/loss on sale of fixed assets | 12. Damages payable at law, etc. |

PRACTICAL PROBLEMS

1. From the following particulars prepare a Cost Sheet showing the total cost per tonne for the period ended 31st Dec., 2001.

	Rs.		Rs.
Raw Materials	33,000	Rent and taxes (office)	500
Productive wages	38,000	Water supply (works)	1,200
Unproductive wages	10,500	Factory Insurance	1,100
Factory rent and taxes	7,500	Office Insurance	500
Factory lighting	2,200	Legal expenses	400

Factory heating	1,500	Rent of warehouse	300
Motive power	4,400	Depreciation of	
Haulage (works)	3,000	—Plant and Machinery	2,000
Director's fees (works)	1,000	—Office Building	1,000
Director's fees (office)	2,000	—Delivery Vans	200
Factory cleaning	500	Bad Debts	100
Sundry office expenses	200	Advertising	300
Estimating Expenses (works)	800	Sales Department's salaries	1,500
Factory stationery	750	Upkeep of delivery vans	700
Office stationery	900	Bank charges	50
Loose tools written off	600	Commission on Sales	1,500

The total output for the period has been 14,775 tonnes.

Ans. [Cost per tonne Rs. 8]

Hint : Prime cost Rs. 71,000; Factory cost Rs. 1,08,050; Cost of Production Rs. 1,13,600; Total Cost Rs. 1,18,200]

2. The accounts of Z Manufacturing Company for the year ended December, 2001 show the following :

	Rs.		Rs.
Factory Office Salaries	6,500	Travelling Expenses	2,100
General Office Salaries	12,600	Traveller's Salaries & Commission	7,700
Carriage Outward	4,300	Productive Wages	1,26,000
Carriage on Purchases	7,150	Depreciation—Plant, Machinery and Tools	6,500
Bad Debts written off	6,500	—Furniture	300
Repairs of Plant, Machinery and Tools	4,450	Directors' Fees	6,000
Rent, Rates, Taxes & Insurance		Gas and Water—Factory	1,200
—Factory	8,500	—Office	400
—Office	2,000	Manager's Salary (3/4 Factory and 1/4 Office)	10,000
Sales	4,61,100	General Expenses	3,400
Stock of Materials —		Income Tax	500
31st Dec., 2000	62,800	Dividend	1,000
—31st Dec., 2001	48,000		
Materials Purchased	1,85,000		

Prepare statement giving the following information :

(a) Materials Consumed ; (b) Prime Cost ; (c) Factory Cost, (d) Cost of Production ; (e) Total Cost ; (f) Net Profit.

Ans. [(a) Rs. 2,06,950 ; (b) Rs. 3,32,950 ; (c) Rs. 3,67,600 ; (d) Rs. 3,94,800 ; (e) Rs. 4,15,400 ; (f) Rs. 45,700]

3. The following data have been extracted from the books of Sunshine Industries Ltd., for the year 2002 :

	Rs.		Rs.
Opening Stock of Raw Material	25,000	Indirect consumption of material	500
Purchase of Raw Material	85,000	Salary—Office	2,500
Closing Stock of Raw Material	40,000	—Salesmen	2,000
Carriage Inward	5,000	Other Factory Expenses	5,700
Wages—Direct	90,000	Other Office Expenses	900
Wages—Indirect	10,000	Manager's Remuneration	12,000
Rent and Rates—Factory	5,000	Bad Debts written off	1,000
—Office	500	Advertisement Expenses	2,000
Depreciation		Travelling Expenses of Salesmen	1,100
—Plant and Machinery	1,500	Carriage and Freight Outward	1,000
—Office Furniture	100	Sales	2,50,000
		Advance Income-tax paid	15,000

The manager has the overall charge of the company and his remuneration is to be allocated as Rs. 4,000 to the factory, Rs. 2,000 to the office and Rs. 6,000 to the selling operations.

From the above particulars prepare a statement showing (a) Prime cost ; (b) Factory cost ; (c) Cost of production ; (d) Cost of sales ; and (e) Net profit.

Ans. [(a) Rs. 1,65,000 ; (b) Rs. 1,91,700 ; (c) Rs. 1,97,700 ; (d) Rs. 2,10,800 ; (e) Rs. 39,200]

4. A manufacturing concern requires a statement showing the result of its production operation for September, 2001. Cost records give the following information.

	1st Sep., 2001 Rs.	30th Sep., 2001 Rs.
Raw Material	1,00,000	1,23,500
Finished Goods	71,500	42,000
Work-in-Progress	31,000	34,500

Transactions during the month of September 2001 :

	Rs.
Purchase of Raw Materials	88,000
Direct Wages	70,000
Works Expenses	39,500
Administration Expenses	13,000
Sale of Factory Scrap	2,000
Selling and Distribution Expenses	15,000
Sales	2,84,000

Ans. [Raw Material consumed Rs. 64,500 ; Prime cost Rs. 1,34,500 ; Factory cost Rs. 1,68,500 ; Cost of Production Rs. 1,81,500 ; Cost of goods sold Rs. 2,11,000 ; Cost of sales Rs. 2,26,000 ; Profit Rs. 58,000]

5. Following information has been obtained from the records of a Manufacturing Company :

	1-1-2001 Rs.	31-12-2001 Rs.
Stock of Raw Materials	40,000	50,000
Stock of Finished Goods	1,00,000	1,50,000
Stock of Work-in-Progress	10,000	14,000

	Rs.		Rs.
Indirect Labour	50,000	Administration Expenses	1,00,000
Lubricants	10,000	Power	30,000
Insurance on Plant	3,000	Direct Labour	3,00,000
Purchase of Raw Materials	4,00,000	Depreciation on Machinery	50,000
Sale Commission	60,000	Factory Rent	60,000
Salaries of Salesmen	1,00,000	Property Tax on Factory Building	11,000
Carriage Outward	20,000	Sales	12,00,000

Prepare a Statement of Cost and Profit showing (a) Cost of Raw Materials Consumed ; (b) Prime Cost ; (c) Total Manufacturing Cost ; (d) Factory Manufacturing Cost ; (e) Cost of Production ; (f) Cost of Goods Sold ; (g) Cost of Sales ; and (h) Profit.

Ans. [(a) Rs. 3,90,000 ; (b) Rs. 6,90,000 ; (c) 9,04,000 ; (d) Rs. 9,00,000 ; (e) Rs. 10,00,000 ; (f) Rs. 9,50,000 ; (g) Rs. 11,30,000 ; (h) Rs. 70,000]

MEANING AND DEFINITION OF INVENTORY

- Meaning of Inventory:** Inventory constitutes a major portion of the current assets of a trading or manufacturing enterprise. It refers to the stock of tangible property held by an enterprise for the purpose of sale in the ordinary course of business, or for the purpose of using it in the production of goods meant for sale.
- Definition as per AS 2:** According to Accounting Standard 2 (Valuation of Inventories), inventories are assets:
 - Held for sale in the ordinary course of business (Finished Goods);
 - In the process of production for such sale (Work-in-Progress); or
 - In the form of materials or supplies to be consumed in the production process or in the rendering of services (Raw Materials and Stores).

OBJECTIVES OF INVENTORY VALUATION

Following are the main objectives of valuing inventory correctly:

- Determination of True Income:** The primary objective of inventory valuation is to determine the correct operating result (profit or loss) for a period. Based on the matching concept, the cost of goods sold must be matched against revenue. Since unsold goods (closing stock) are not part of the cost of goods sold, they must be deducted from total

costs to ascertain true income.

2. **Determination of Financial Position:** Inventory is a significant item in the Balance Sheet under Current Assets. A correct valuation is essential to exhibit a true and fair view of the financial position of the enterprise at a particular date.
3. **Compliance with Statutory Requirements:** Accounting Standards (like AS 2) and statutes (like the Companies Act) require that financial statements disclose the value of inventory. Proper valuation ensures compliance with these legal and professional requirements.

EFFECT OF WRONG INVENTORY VALUATION

An error in the valuation of inventory has a dual effect on the financial statements:

1. **Impact on Profitability (Income Statement):** Closing stock is credited to the Trading Account. If closing stock is overvalued, the Cost of Goods Sold decreases, resulting in an inflated Gross Profit. Conversely, if closing stock is undervalued, the Gross Profit will be understated.
2. **Impact on Financial Position (Balance Sheet):** Since inventory is a current asset, its valuation directly affects the asset side of the Balance Sheet. Overvaluation leads to an overstated financial position, while undervaluation creates a secret reserve and understates the working capital.
3. **Effect on Subsequent Years:** The closing stock of the current year becomes the opening stock of the next year. Therefore, an error in valuation this year will automatically distort the profit and loss of the subsequent year in the opposite direction.

Methods for Inventory Valuation

Inventory valuation is the process of assigning a monetary value to a company's unsold goods (ending inventory) and determining the cost of goods sold (COGS) for a specific period. Since the cost of inventory items can fluctuate (due to new purchases, inflation, or discounts), accountants use cost flow assumptions to decide which costs are used first.

The three primary methods are:

INVENTORY VALUATION METHODS (COST FORMULAS) AS PER AS 2

For inventory items that are **ordinarily interchangeable**, AS 2 permits the use of the following cost formulas:

1. **First-In, First-Out (FIFO) Method:**
 - **Concept:** This method is based on the assumption that the items of inventory that were purchased or produced **first** are sold or consumed **first** (First-In, First-Out).
 - **Valuation:** Consequently, the inventory remaining at the end of the period (Closing Stock) is valued at the cost of the **most recent** purchases or production.
 - **Impact (During Inflation):** In periods of rising prices, FIFO results in a lower Cost of Goods Sold (COGS) because it uses the older, lower costs. This leads to a **higher reported profit** and a more accurate (higher) Balance Sheet value for inventory, as it reflects the latest market costs.
 - **Suitability:** This method is preferred when the physical flow of goods follows the FIFO pattern (e.g., perishable goods or items with expiry dates).

Advantages : (1) This method is simple to understand and easy to operate. (2) It is a logical method because it takes into consideration the normal procedure of utilising first those items of inventory which are received or manufactured first. (3) This method is very useful when prices are falling because the cost of goods sold will be high on account of using the earliest lots which are costly. (4) Closing stock is valued at the market price as it would consist of recent purchases of units. (5) This method is useful when transactions are not too many and prices are fairly steady. (6) This method is useful when inventory is deteriorating and obsolescence.

Disadvantages: (1) This method increases the possibility of clerical errors if the prices fluctuate considerably as every time an issue of material is made or goods sold, the store ledger clerk will have to go through his record to ascertain the price to be charged. (2) If the prices fluctuate, comparison between different jobs executed by the concern becomes difficult because one job started a few minutes later than another of the same nature may have consumed the supply of lower priced or higher priced stock. (3) When prices rise, the cost of goods sold does not reflect the market prices as it is calculated keeping in view the earliest lots which were purchased at lower rates.

2) Average Cost Method

The principle on which the average cost method is based is that all items in the stores are so mixed up that consumption of material or sale of finished goods cannot be made from any particular lot of purchases, which may be of featured goods. So, closing stock is valued at the average cost of the various items on hand. Average may be of two types:

(a) Simple Arithmetic Average Price.

(b) Weighted Arithmetic Average Price

- **Concept:** This method calculates a **new average cost** after every purchase or periodic calculation, and all inventory units are valued using this single average cost. It smooths out price fluctuations.
- **Calculation:** The average cost is calculated by dividing the Total Cost of Goods Available for Sale by the Total Number of Units Available for Sale.

$$\text{Weighted Average Cost per Unit} = \frac{\text{Total Cost of Inventory Available}}{\text{Total Units of Inventory Available}}$$

- **Valuation:** Both the Cost of Goods Sold and the Closing Stock are valued using this same weighted average rate.
 - **Suitability:** This method is appropriate when the items of inventory are homogeneous, and their physical flow cannot be distinctly identified (e.g., bulk items like liquids, grains, or raw materials poured into a container).
2. **Last-In, First-Out (LIFO) Method:**
- **Concept:** This method assumes that the items of inventory that were purchased or produced **last** are sold or consumed **first** (Last-In, First-Out).
 - **Valuation:** Consequently, the inventory remaining at the end of the period (Closing Stock) is valued at the cost of the **oldest** purchases or production.
 - **Note on AS 2:** Although historically used internationally, the LIFO method is **prohibited** for use under **Accounting Standard 2 (AS 2)** and is therefore **not permitted** for financial reporting in India for companies adopting AS.

Advantages : (1) Like FIFO method, LIFO method is simple to operate and is useful when transactions are not too many and the prices are fairly steady. (2) Production is charged at the recent prices because materials are issued from the latest consignment. Thus, the effect of current market prices of materials is reflected in the cost of sales provided the materials are recently purchased. (3) In times of rising prices, the higher prices of recent lots are charged to the cost of goods sold. Closing stock is also valued at the lower cost of old purchases. The method thus helps in showing a lower profit and lower profit reduces burden of income tax. No unrealised profit or loss is usually made by using this method.

Disadvantages : (1) Like FIFO this method may lead to clerical errors every time an issue is made: the store ledger clerk will have to go through his record to ascertain the price to be charged. (2) Like FIFO comparison between one job and the other job will become difficult because one job started a few minutes after another of the same type may bear a different charge for materials consumed, merely because the earlier job exhausted the supply of the lower priced or higher priced material in stock. (3) The stock in hand is valued at a price which does not reflect current market price. Consequently, closing stock will be understated or overstated in the balance sheet.

In 1938, The LIFO Method of inventory valuation was permitted for limited classes of tax-payers in the U.S.A. and in 1939 the LIFO privilege was generalised for tax-payers because of inflation. As a result, LIFO method of inventory valuation got the world-wide general acceptance and is made use in a period of rising prices.

MANDATORY VALUATION PRINCIPLE (The Golden Rule)

Regardless of the cost formula (FIFO or WAC) used, AS 2 mandates that inventories must always be valued at:

LOWER OF COST OR NET REALIZABLE VALUE (NRV)

This ensures that assets are not overstated in the financial statements.

Feature	First-In, First-Out (FIFO)	Last-In, First-Out (LIFO)	Weighted Average Cost (WAC)
Cost Flow Assumption	Assumes the oldest inventory items are sold first.	Assumes the newest inventory items are sold first.	Calculates a new average cost after every purchase/production batch.
AS 2 Compliance	Permitted.	NOT Permitted (Under AS 2 and Ind AS).	Permitted.
Cost of Goods Sold (COGS)	Based on older (cheaper) costs.	Based on newer (more expensive) costs.	Based on the average cost of goods available for sale.
Ending Inventory	Based on newer (more expensive) costs.	Based on older (cheaper) costs.	Based on the average cost of goods available for sale.
Effect in Rising Prices (Inflation)	Lowest COGS, Highest Net Income, Highest Inventory Value.	Highest COGS, Lowest Net Income, Lowest Inventory Value.	Results are in between FIFO and LIFO.
Matching Principle	Matches older costs with current revenue. Does not provide a good match of current cost to current revenue.	Matches current costs with current revenue. Provides the best match of current cost to current revenue.	Smooths out price fluctuations, resulting in a moderate match.

Physical Flow	Generally aligns with the actual physical flow of goods (especially for perishable or high-obsolescence items).	Rarely aligns with the actual physical flow of goods.	Does not reflect the actual physical flow of goods.
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ILLUSTRATION 1. HP is a leading distributor of petrol. A detailed inventory of petrol in hand is taken when the books are closed at the end of each month. At the end of the month following information is available:

Particulars	Amount (₹)	Quantity	Rate (₹)
Sales	47,25,000		
General Overheads Costs	1,25,000		
Inventory at Beginning		1,00,000 litres	@ 15 per litre
Purchases (June 1)		2,00,000 litres	@ 14.25
Purchases (June 30)		1,00,000 litres	@ 15.15
Closing Inventory		1,30,000 litres	

Compute the following by the FIFO as per AS 2

(i) Value of Inventory on June, 30. (ii) Amount of cost of goods sold for June (iii) Profit/Loss for the month of June. (CA-IPCE, Nov. 2016)

Particulars	Amount (₹)
(i) Cost of Closing Inventory of 1,30,000 litres as on 30th June	
1,00,000 litres @ ₹ 15.15	15,15,000
30,000 litres @ ₹ 14.25	4,27,500
Total	19,42,500
(ii) Calculation of Cost of Goods Sold	
Opening Inventories (1,00,000 litres @ ₹ 15)	15,00,000
Purchases June 1 (2,00,000 litres @ ₹ 14.25)	28,50,000
Purchases June 30 (1,00,000 litres @ ₹ 15.15)	15,15,000
	58,65,000
Less: Closing Inventories	19,42,500
Cost of Goods Sold	39,22,500
(iii) Calculation of Profit	
Sales (Given) (A)	47,25,000
Cost of Goods Sold	39,22,500
Add: General Overheads	1,25,000
Total Cost (B)	40,47,500
Profit (A - B)	6,77,500

ILLUSTRATION 2. In computing costs, the owner of the filling station 'A' assumed that he was always pumping off the bottom

of his tank. The owner of filling station 'B' assumed that he was always pumping off the top of his tank. On 31st March both had the same inventory of 6,000 litres which cost ₹ 1.10 per litre. In April, each owner bought an additional 6,000 litres at ₹ 1.15 per litre. Sales during April for each station amounted to 8,000 litres at ₹ 1.40 per litre. Determine for each station the net profit for the period, and the value of closing stock.

SOLUTION

Filling Station 'A' uses LIFO method of valuation of issues because petrol received latest is first pumped off. Filling station 'B' uses FIFO method of valuation of issues because petrol received first is pumped off first.

CALCULATION OF THE AMOUNT OF NET PROFIT AND THE VALUE OF CLOSING STOCK

Particulars	Filling Station A (LIFO) - Amount (₹)	Filling Station B (FIFO) - Amount (₹)
Opening stock : 6,000 litres @ ₹ 1.10.	6,600	6,600
Add: Purchases: 6,000 litres @ ₹ 1.15	6,900	6,900
Total	13,500	13,500
Less: Closing stock : 4,000 litres		
(@ ₹ 1.10 per litre as per LIFO Method)	4,400	
(@ ₹ 1.15 per litre as per FIFO Method)		4,600
Cost of petrol sold	9,100	8,900
Sales: 8,000 litres @ ₹ 1.40	11,200	11,200
Less: Cost of petrol sold	9,100	8,900
Profit	2,100	2,300

(a) Simple Arithmetic Average Price. It is obtained by taking the average of the prices without taking into consideration quantities of items in stock. Suppose, following are the three different lots of material in stock at the end of the year when stock taking is done:

1,000 units purchased @ ₹ 10 per unit; 2,000 units purchased @ ₹ 11 per unit; 3,000 units purchased @ ₹ 12 per unit. In this example, simple average price will be calculated as below:

$$\frac{10 + 11 + 12}{3} = 11$$

3

Closing inventory of 6,000 units will be valued at ₹ 11 per unit and it will be valued at ₹ 66,000.

Simple average price should not be followed because this method of inventory valuation does not value inventory at cost. In the above example, the purchase price of the material in stock is ₹ 68,000 (i.e.

1, 000 × 10 + 2, 000 × 11 + 3, 000 × 12) whereas value of inventory is ₹ 66,000 (i.e. 6, 000 units × 11).

(b) Weighted Arithmetic Average Price. This price is obtained by dividing the total cost of items in stock by the total quantity of items in hand. In the above example, the weighted average price is ₹ 11.33 per unit calculated as follows:

$$\frac{1,000 \times 10 + 2,000 \times 11 + 3,000 \times 12}{1,000 + 2,000 + 3,000} = 11.33$$

$$1,000 + 2,000 + 3,000$$

If average cost method of inventory valuation is to be used, weighted average price should be followed because it values inventory at cost. In the cited example, the total purchase price of the material in stock is ₹ 68,000 and the value of inventory at weighted average price is also ₹ 68,000 (i.e. 6, 000 units × 11.33).

ILLUSTRATION 5. A company, started on 1st January, 2023, purchased raw material during 2023 as stated below:

Date	Quantity (kgs.)	Rate (₹ per kg.)	Date	Quantity (kgs.)	Rate (₹ per kg.)
January 2	800 kgs.	@ 62	July 10	3,000 kgs.	@ 56

February 26	1,200 kgs.	@ 57	September 18	1,500 kgs.	@ 60
April 13	2,500 kgs.	@ 59	November 29	1,000 kgs.	@ 65

While preparing its final accounts on 31st December, 2023, the company had 1,300 kgs. of raw material in its godowns.

Calculate the value of closing stock of raw material according to— (i) 'First-in-First-out' basis (ii) 'Last-in-First-out' basis (iii) 'Weighted Average' basis.

SOLUTION

Method	Calculation	Value (₹)
(i) Value of Stock according to FIFO Basis	1,000 kgs * ₹ 65	65,000
	300 kgs * ₹ 60	18,000
	Total	83,000
(ii) Value of Stock according to LIFO Basis	800 kgs * ₹ 62	49,600
	500 kgs * ₹ 57	28,500
	Total	78,100

Particulars	Quantity (Kgs.)	Rate (₹)	Value (₹)
Purchases used for WAC Calculation			
	800	62	49,600
	1,200	57	68,400
	2,500	59	1,47,500
	3,000	56	1,68,000
	1,500	60	90,000
	1,000	65	65,000
Total	10,000		5,88,500
Cost per kg.	5,88,500 / 10,000	58.85	
Value of Stock (1,300 kgs)	58.85 * 1,300		76,505

Therefore, the Value of Closing Stock

Value of Stock = ₹58.85 × 1,300 = ₹76,505

FINAL ACCOUNTS

- Final accounts give a concise idea about the profitability and financial position of the business to management, owners and other interested parties of the business.
- Preparation of final accounts is governed by different acts, laws, standards and principles like Income tax law. Company Act, Partnership Act, Accounting Standards (AS), Generally Accepted Accounting Principles (GAAP), etc.
- Different types of organizations operate under different legal framework; the methodology/procedure for preparation of final accounts will change accordingly.

COMPONENTS OF FINAL ACCOUNTS

- There are three stages of preparing final accounts of a trading concern:
 - 1) Trading account : It is prepared to know the **gross profit or loss**.
 - 2) Profit & loss account : It discloses **net profit or loss** of the business.
 - 3) Balance sheet : It shows the **financial position** of the business

TRADING ACCOUNT

Meaning of Trading Account

- The trading account is an account, which shows the result of buying and selling of goods/services.
- Therefore, it contains, in a summarized form, all the transactions occurring during a trading period which have a direct relation to the goods in which a business deals.
- It is clear that the trading account does not include any item of operating or indirect expenses.
- Every business likes to know, whether the firm has earned gross profit or suffered gross loss. Gross profit or loss is ascertained by preparing Trading Account.
- Proforma of trading accounting as follows.

Trading Account (for the period ending -----)			
Dr.			Cr.
Particulars	₹	Particulars	₹
To Opening stock, or Stock in the beginning, or To Stock:		By Sales	
Raw material		Less: Sales return or Returns inward	
Work in progress....		By Closing stock or Stock at the end of the year	
Finished goods			

To Purchases Less: Purchases return or Returns outward To Carriage or cartage or Carriage on purchases To Octroi or local taxes To Import duty, customs, landing charges, clearing charges To Wages or productive wage or manufacturing wages or direct wages or wages and salaries To Coal gas and water To Fuel To Power or motive power To Manufacturing expenses To Consumable stores To Packing charges To Manufacturing expenses To Direct expenses To Factory expenses To Productive expenses To Royalty To Gross Profit transferred to P/L Account (if credit side exceeds the debit side)	By Stock: Raw material Work in progress.... Finished goods By Gross loss – transferred to P/L Account (if debit side exceeds the credit side)
xxx	xxx

PROFIT AND LOSS ACCOUNT

Meaning of Profit and Loss Account

- The profit and loss account is an account, which is designed to highlight the net profit, earned or net loss incurred by the business entity arising from its transactions during an accounting period.
- It contains all the items of revenue gains, losses and operating expenses pertaining to the accounting period.
- All the nominal accounts which are left after preparing a trading account are to be transferred to this account.
- All expenses and losses will appear on the debit side of this account and all incomes and gains will appear on the credit side of this account with the amount of gross profit or gross loss.
- Net profit is the amount by which revenues exceed expenses.
- Net loss is the amount by which expenses exceed revenues.
- It is also known as Income Statement.
- Proforma of Profit & Loss account as follows.

Profit and Loss Account
(for the year ending ...)

Dr.		(for the year ending ...)		Cr.	
Particulars		₹		Particulars	₹
To Gross loss-transferred from trading Account				By Gross profit transferred from trading account	
To Salaries or salaries and wages				By Interest received, or	
To Rent, rates and taxes or office rent				Interest (credit), or	
To Godown rent or storage, or warehousing				Interest on investment, or	
To Office expenses, or establishment				Interest on fixed deposits, or	
To Miscellaneous, or sundry expenses				Interest on loans advanced, or	
To Insurance				By Rent received, or	
To Stationery				Rent (credit)	
To Printing and stationery				By Discount received, or	
To Postage and telegrams				Discount (credit)	
To Telephone expenses				By Commission received	
To Law charges, or law cost or litigation expenses, or legal charges				By Dividends received	
To Repairs and renewal, or maintenance or upkeep				By Profit from sale of assets	
To Distribution expenses				By Refund of tax	
To Traveling expenses				By Compensation received	
To General expenses				By Income from Investment	
To Stable expenses				By Apprenticeship premium	
To Selling expenses				By Difference in exchange (credit)	
To Carriage, or freight outward				By Interest on drawings	
To Carriage on sales				By Discount on creditors	
To Indirect or unproductive wages				By Bad debts recovered	
To Audit fee				By Miscellaneous receipts	
To Indirect paid, or interest (debit) or interest on overdraft, or interest on loans borrowed				By Appreciation or increase in the value of assets	
To Discount allowed, or discount on debtors				By Reserve for bad and doubtful debts (old reserve-if not treated at the debit side of P/L Account)	
To Bad debts, or bad debts written off				By Net loss-transferred to Capital Account (if debit side exceeds credit side)	
To Depreciation					
To Interest on capital					
To Discounting charges					
To Bank charges, or collection charges					
To Export charges					
To Administrative expenses					
To Financial expenses					
To Commission paid					
To Advertisement					
To Charity and donation					
To Sample expenses					
To License fee					
To Delivery charges					
To Brokerage					
To Sales tax paid					
To Loss on sale of assets					
To Loss by fire					
To Freight outward					
To Commission					
To Net profit-transferred to Capital Account (if credit side exceeds debit side)					

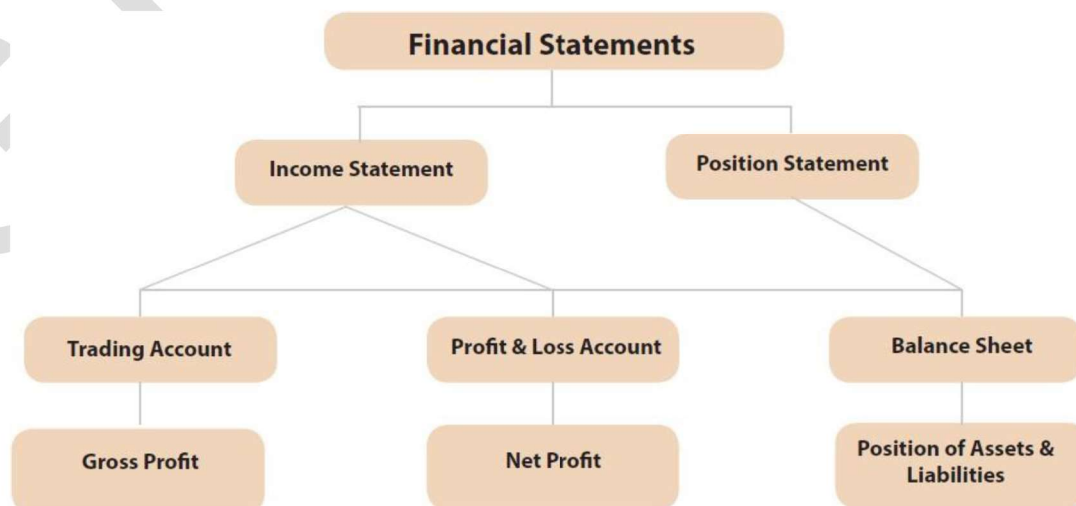
BALANCE SHEET

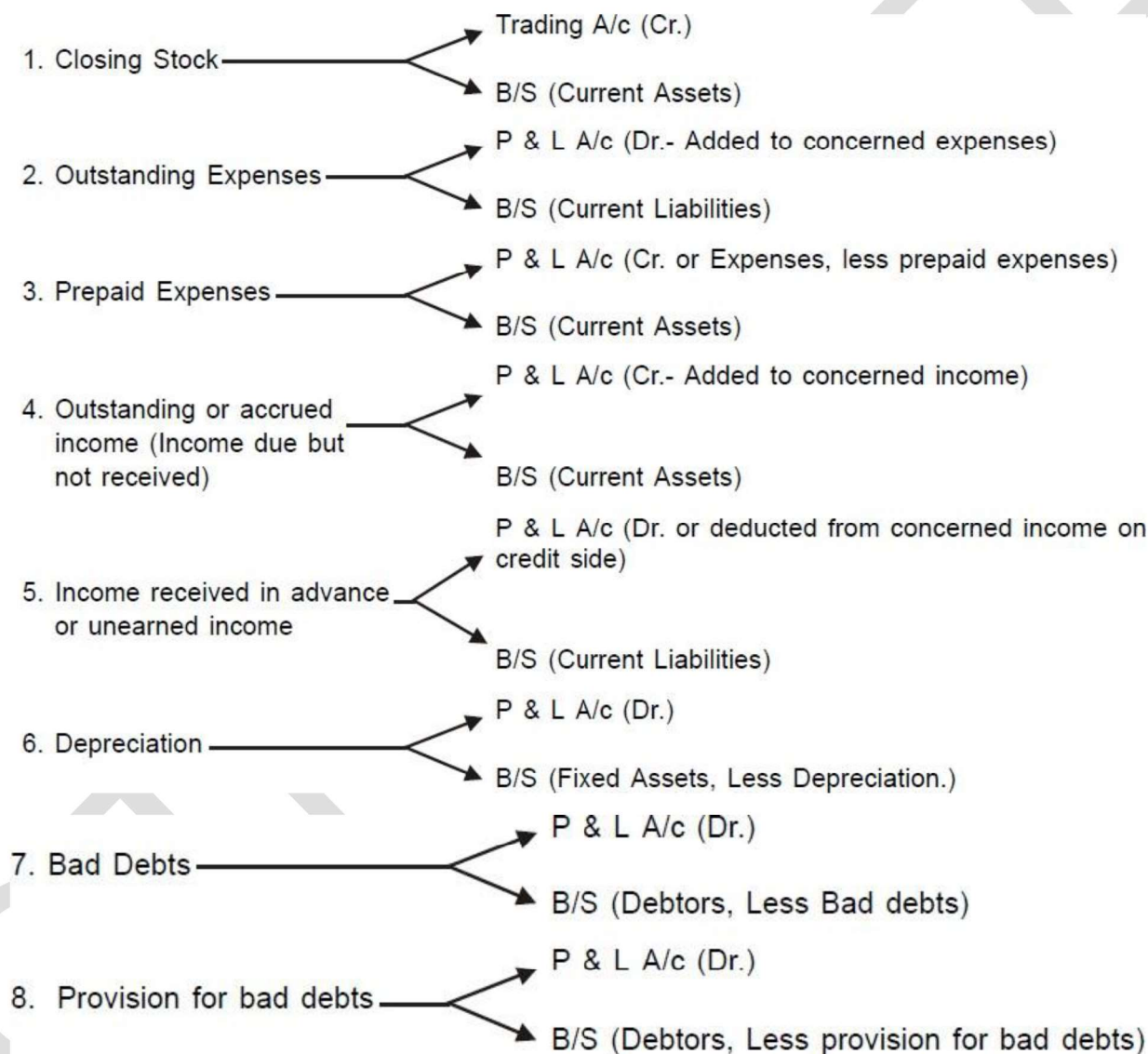
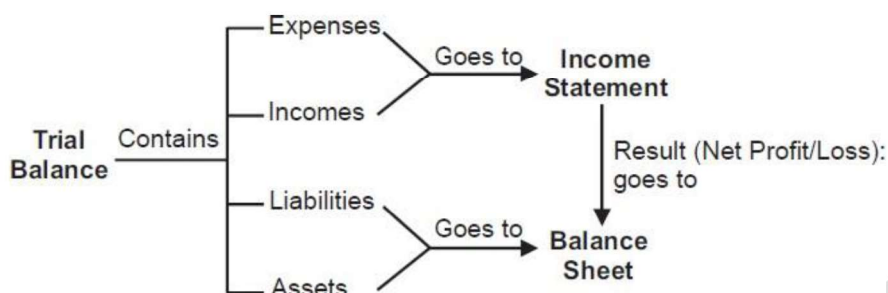
Meaning and Definition of Balance Sheet

- A balance sheet is a statement of assets and liabilities of a business enterprise at a given date.
- It is prepared at the end of the accounting period after the trading account and profit and loss account have been prepared.
- It shows the financial position of the business at the end of the accounting period.
- It is also known as Position Statement.
- 'Marshalling' denotes the order in which assets and liabilities are shown in the balance sheet.
- Assets and liabilities can be marshalled in two ways:
 1. Order of Liquidity
 2. Order of Permanence
- Proforma of Balance Sheet as follows

Balance Sheet of
(as on)

Liabilities	₹	Assets	₹
Capital		Fixed Assets	
Opening balance		Goodwill	
Add: Net profit		Land	
(less net loss)		Building	
Less: Drawings		Plant and machinery	
		Furniture and fixtures	
Long-term Liabilities		Investment	
Loan		Current Assets	
Current Liabilities		Closing stock	
Income received in advance		Accrued income	
Sundry creditors		Prepaid expenses	
Outstanding expenses		Sundry debtors	
Bills payable		Bill receivable	
Bank overdraft		Cash at bank	
		Cash in hand	





9. Provision for discount on debtors
- P & L A/c (Dr.)
 - B/S (Drs., Less provision for discount on debtors)
10. Provision for discount on creditors
- P & L A/c (Cr.)
 - B/S (Crs., Less provision for discount on creditors)
11. Interest on capital
- P & L A/c (Dr.)
 - B/S (Capital, add interest)
12. Interest on drawings
- P & L A/c (Cr.)
 - B/S (Capital, less interest on drawings)
13. Interest on loan (Borrowed)
- P & L A/c (Dr.)
 - B/S: Liability (Loan, add interest on loan)
14. Interest on loan (Advance)
- P & L A/c (Cr.)
 - B/S: Asset (Loan, add interest on loan)
15. Accidental loss of Goods
- Trading A/c (Cr. side or deducted from Purchases A/c on Dr. side)
 - P & L A/c (Dr.) as Loss of stock
16. Goods distributed as free sample
- Trading A/c (deducted from Purchases A/c on Dr. side)
 - P & L A/c (Dr.) as Advertisement A/c
17. Goods given/taken as Charity/Personal use
- Trading A/c (deducted from Purchases A/c on Dr. side)
 - B/S (Capital, less Charity A/c or Drawing A/c)

PROBLEMS

1. A book-keeper has submitted you the following trial balance. You are required to prepare income statement and balance sheet as on 31st March 2002.

Trial Balance as on 31st March 2002

<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
Cash in hand	30	
Purchases	8990	
Cash at bank	885	
Fixtures and fitting	225	
Freehold premises	1500	
Lighting and heating	65	
B/R	825	
Returns inward	30	
Salaries	1075	
Debtors	5700	
Opening stock	3000	
Printing	225	
Rates and taxes insurance	190	
Discount allowed	200	
Capital		7610
Sales		11060
Creditors		1950
B/P		1875
Discount received		445
Total	22940	22940

2. Prepare final accounts from the trial balance given below:

<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
Cash in hand	30	
Purchases	8990	
Cash at bank	885	
Fixtures and fitting	225	
Freehold premises	1500	
Lighting and heating	65	
B/R	825	
Returns inward	30	
Salaries	1075	
Debtors	5700	
Opening stock	3000	
Printing	225	
Rents and taxes insurance	190	
Discount allowed	200	
Capital		7610
Sales		11060
Creditors		1950
B/P		1875
Discount received		445
Total	22940	22940

Additional Information

- Closing stock at the end of year amount Rs. 5000.
- Outstanding wages was Rs. 1000.
- Dep. charges at the rate of 10% on furniture and fixture.

3. Following is the trial balance as on 30th June 2001. Prepare final accounts.

<i>Particulars</i>	<i>Debit</i>	<i>Credit</i>
Land and building	20000	
Machinery	50000	
Furniture and fixtures	4000	
Opening stock	16300	
Purchases	80000	
Salaries	6000	
Carriage on sales	1500	
Freight on purchases	2000	
Custom duty on purchases	8000	
Advertising	5400	
Wages	15000	
Rent	3000	
Postage and stationary	1500	
General expenses	3200	
Repairs to Machinery	2000	
Loan to Kumar @ 9%	5000	
Prepaid insurance	200	
Sundry debtors	20000	
Cash in hand	250	
Cash at bank	3100	
Capital		80000
Sundry creditors		8000
Discount received		400
Outstanding expenses		1550
Sales		150500
Repairs and rewards (provision)		6000
Total	246450	246450

The additional information is as follows:

- Closing stock was worth Rs. 14900.
- Dep. is to be written of @ 3% on land and building, 10% on machinery and 5% on furniture and fixture.
- Provision for repairs and renewals are credited with Rs. 1500 every year.
- Provision for bad debts is 5% on Sundry debtors.

4. From the following Trial Balance of M/s Vikram Brothers prepare Trading and Profit and Loss Account for the year ended 31st March 2006 and Balance Sheet as on that date.

Particulars	Dr. Balances Rs	Particulars	Cr. Balance Rs
Cash in hand	500	Capital	70000
Motor car	25000	Discount Received	2000
Drawings	48000	Sales	230000
Legal charges	1500	Creditors	46000
Plant & Machinery	60000	Interest on investment	5200
Investments	40000	Purchases Return	3800
Opening stock	35000	Bills payable	34000
Sales Returns	2500		
Salaries	12000		
Discount allowed	600		
Carriage Inward	1800		
Wages	21000		
Postage	400		
Debtors	60000		
Interest	1500		
Insurance Premium	1200		
Purchases	80000		
	391000		391000

Closing stock as on 31.3.2006 28000, Prepaid interest 500, Interest received in advance 200

5. The following is the Trial Balance of Ram Lal on March 31, 1998.

Debit Balances:	Rs.		Rs.
Bank	7,500	Bills Receivable	7,500
Purchases (adjusted)	34,96,000	Stock (31 st March, 1998)	3,06,250
Salaries	21,000		
Carriage on Sales	2,500	Credit Balances:	
Carriage on Purchases	2,000	Capital	2,00,000
Lighting	1,500	Bills Payable	50,000
Buildings	1,35,000	Loan	1,00,000
Rate and Taxes	2,000	Sales	36,00,000
Sundry Debtors	40,000	Discount	2,000
Furniture	30,000	Commission	500
Cash in Hand	1,250	Sundry Creditors	1,00,000

Additional Information

- Rates have been prepaid to the extent of Rs.600.
- During the year, bad debts amounted to Rs 2,500.
- A provision @ 5% has to be made on debtors.
- Buildings have to be depreciated at 2% and Furniture at 10%.

Prepare the Trading and Profit & Loss A/c and the Balance Sheet as on March 31, 1998.

Meaning, of Financial Management.

- Financial Management means planning, organizing, directing and controlling the financial activities such as procurement and utilization of funds of the enterprise.
- It means applying general management principles to financial resources of the enterprise.

Scope/Elements of Financial Management

1. **Investment decisions** includes investment in fixed assets (called as capital budgeting). Investments in current assets are also a part of investment decisions called as working capital decisions.
2. **Financial decisions-** They relate to the raising of finance from various resources which will depend upon decision on type of source, period of financing, cost of financing and the returns thereby.
3. **Dividend decision-** The finance manager has to take decision with regards to the net profit distribution. Net profits are generally divided into two:
 - a. *Dividend for shareholders-* Dividend and the rate of it has to be decided.
 - b. *Retained profits-* Amount of retained profits has to be finalized which will depend upon expansion and diversification plans of the enterprise.

Objectives of Financial Management

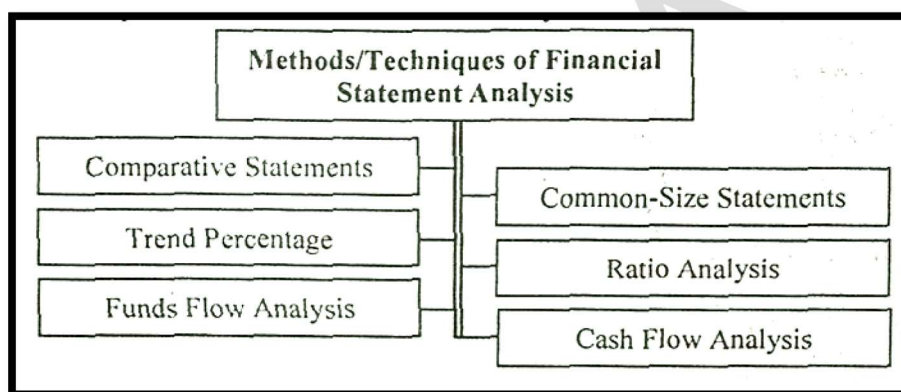
- The financial management is generally concerned with procurement, allocation and control of financial resources of a concern. The objectives can be-
 1. To ensure regular and adequate supply of funds to the concern.
 2. To ensure adequate returns to the shareholders, this will depend upon the earning capacity, market price of the share, expectations of the shareholders.
 3. To ensure optimum funds utilization. Once the funds are procured, they should be utilized in maximum possible way at least cost.
 4. To ensure safety on investment, i.e., funds should be invested in safe ventures so that adequate rate of return can be achieved.
 5. To plan a sound capital structure- so that a balance is maintained between debt and equity capital.

RATIO ANALYSIS

FINANCIAL STATEMENT ANALYSIS

- ❖ Financial statements analysis is also referred as Financial Analysis. The term 'financial analysis', also known as an 'analysis and interpretation of financial statements', refers to the process of determining financial strengths and weakness of firm by establishing strategic relationship between the items of balance sheet, profit and loss account and other operative data.
- ❖ According to Hampton, "Analysis of financial statement is the process of determining the significant operating and financial characteristics of a firm from accounting data".

METHODS/TECHNIQUES OF FINANCIAL STATEMENT ANALYSIS



RATIO ANALYSIS.

- A ratio is a simple arithmetical expression of the relationship of one number to another.
- It may be defined as the indicated quotient of two mathematical expressions.
- In simple language ratio is one number expressed in terms of another and can be worked out by dividing one number into the other.
- Ratios may be expressed in any one or more of the following ways:
 1. In Proportion: A ratio may be expressed as a proportion, e.g. profit sharing ratio between X and Y is 3:2
 2. In Rate or Times or Coefficient: It is indeed a ratio between two numerical facts covering generally a definite period of time, e.g., the stock turnover is 4 times a year.
 3. In Percentage: It is a special type of ratio which expresses the relation between two numerical facts per hundred, e.g., gross profit is 30% of sales.
- Ratio analysis is a technique of analysis and interpretation of financial statements.
- It is the process of establishing and interpreting various ratios for helping in making certain decisions.

- According to Myers, "Ratio analysis is a study of relationship among the various financial factors in a business".
- Thus, ratio analysis measures the profitability, efficiency and financial soundness of the business.

OBJECTIVES OF ACCOUNTING RATIOS

- The objectives of accounting ratios are as follows:
 1. **Measuring the Profitability:** The profitability of the business can be measured by calculating gross profit, net profit, expenses ratio and other.
 2. **Judging the Operational Efficiency of Business:** The operational efficiency of the business can be ascertained by calculating operating ratio.
 3. **Assessing the Solvency of the Business:** It can be ascertained whether the firm is solvent or not by calculating solvency ratio. Solvency ratios show relationship between total liabilities and total assets. If total assets are lesser than the total liabilities it shows unsound position of the business.
 4. **Measuring Short and Long-Term Financial Position of the Company:** Ratio analysis helps in knowing the short term and long term financial position of the business by calculating various ratios. Current and liquid ratio indicates short-term financial position, whereas debt equity ratio, fixed asset ratio and proprietary ratio shows long-term financial positions.
 5. **Facilitating Comparative Analysis of the Performance:** Every firm has to compare its present performance with the previous and discover the plus and minus points.

ADVANTAGES OF ACCOUNTING RATIOS

- Following are the advantages of accounting ratio:
 1. **Helpful in Financial Analysis:** Financial analysis is easier if accounting ratios are used to analyze the different financial statements relating to financial positions of the business, whether it is relating to short term solvency or long term solvency of the enterprise. Balance sheet and profit and loss account are to be analyzed by the users.
 2. **Helpful in Explaining Financial Health of the Enterprise:** Ratio analysis is used to indicate financial health of the business, i.e., Debt/Equity ratio can be calculated.
 3. **Helpful in Locating Shortcomings/A Weaknesses:** The financial analyst can also point out the deficiencies of the business so that corrective steps may be taken accordingly.
 4. **Helpful in Future Forecasting:** Accounting ratios are very important tools in the hands of management. They are also helpful in predicting future forecasts, preparing budgets etc.

5. **Helpful in Comparing Inter-Firm Performance:** Inter firm comparison is possible through ratio analysis.
6. **Helpful in Simplifying Accounting Figures:** The absolute figures carry no useful information such as, profits of X Co. are 5 lack, but if profits are related to capital employed or sales, then it gives a useful and meaningful information. Ratio analysis helps in making or simplifying such figures.
7. **Helpful in Assessing Operating Efficiency of the Business:** Operating efficiency of the enterprise can be judged by calculating certain accounting ratios. These ratios are related to solvency, liquidity and profitability of the business enterprise. Thus, it can be seen that ratio analysis plays a vital role in the field of business finance in order to provide quick and accurate results; analysis of financial statements is possible through accounting ratios.

DISADVANTAGES OF ACCOUNTING RATIOS

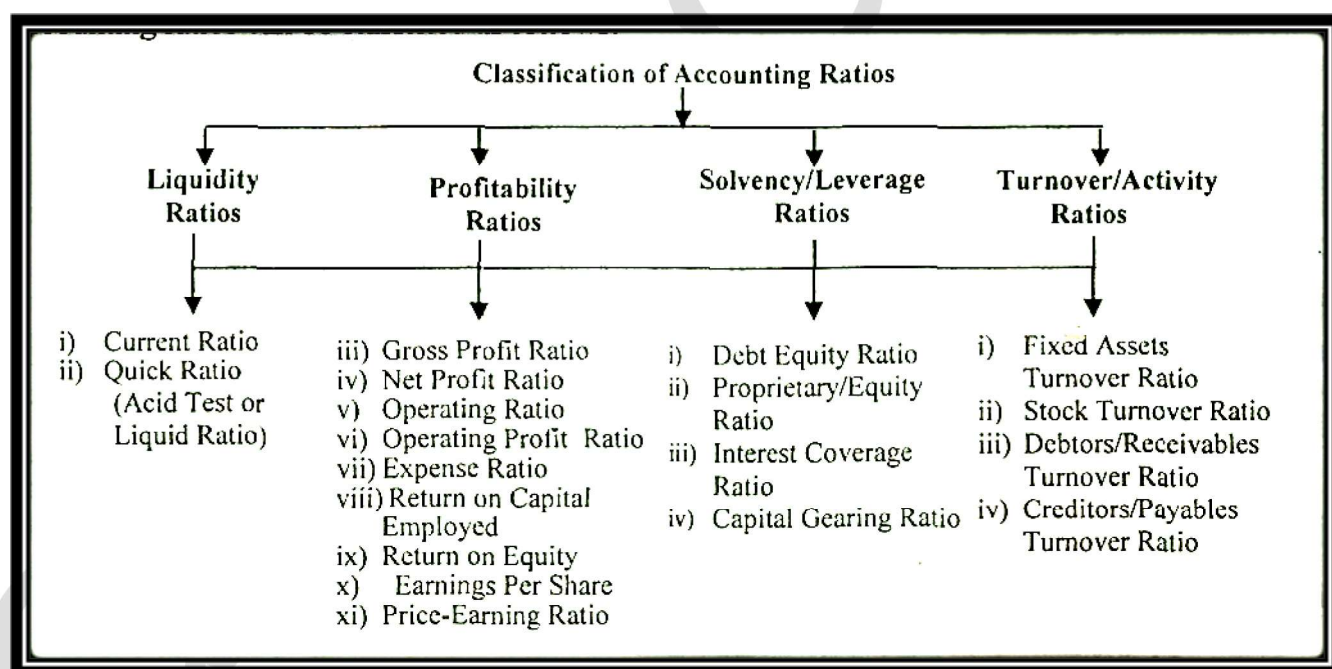
➤ Following are the disadvantages of accounting ratio:

1. **False Results:** Ratios are based upon the financial statement. In case financial ratio is incorrect or the data upon which ratios are based is incorrect, ratio calculated will also be false and defective.
2. **Limited Use of Single Ratio:** A single ratio, usually, does not convey much of a sense. To make a better interpretation, a number of ratios have to be calculated which is likely to confuse the analyst then help him in making any meaningful conclusion.
3. **Absence of Standard Universally Accepted Terminology:** Different meanings are given to particular term such as some firms take profit before interest and after tax; others may take profit before interest and tax. This ratio can be comparable only when both the firms adopt uniform terminology.
4. **Ignoring Qualitative Factors:** Ratio analysis is the quantitative measurement of the performance of the business. It ignores the qualitative aspect of the firm. It shows that ratio is only one sided to measure the efficiency of business.
5. **Ignoring Price Level Changes:** The comparability of ratios suffers if the prices of the commodities in two different years are not same. Change in price affects the cost of production, sales and also the value of assets. It means that it will not be meaningful for comparison if the price of commodities is different
6. **Misleading Result in Absolute Data:** In the absence of actual data the size of the business cannot be known. If gross profit ratio of two firms is 25%, it may be just possible that the gross profit of one is 2,500 and sale 10,000. Whereas the gross profit and sales of other is 5,00,000

and 20,00,000, Profitability of two firms is same but the magnitude of their business is quite different.

7. **Window Dressing:** Financial statements can easily be window dressed to present a better picture of its financial and profitability position to outsiders. Hence, one has to be very careful in making a decision from ratios calculated from such financial statements. But it may be very difficult for an outsider to know about the window dressing made by a firm.
8. **Personal Bias:** Ratios are only means of financial analysis and not an end in itself. Ratios have to be interpreted and different people may interpret the same ratio in different ways.
9. **Incomparable:** Not only industries differ in their nature but also the firms of the similar business widely differ in their size and accounting procedures, etc. It makes comparison of ratios difficult and misleading. Moreover, comparisons are made difficult due to differences in definitions of various financial terms used in the ratio analysis.
10. **Ratios no Substitutes:** Ratio analysis is merely a tool of financial statements. Hence, ratios become useless if separated from the statements from which they are computed.

CLASSIFICATION OF ACCOUNTING RATIOS



Liquidity Ratio: These are the ratios, which measures the short-term solvency or financial position of a firm. These ratios are calculated to comment upon the short-term paying capacity of a concern or the firm's ability to meet its current obligations. The various liquidity ratios are current ratio, liquid ratio and absolute liquid ratio. Further to see the efficiency with which the liquid resources have been employed by a firm, debtor's turnover and creditor's turnover ratios are calculated.

Profitability Ratio: These ratios measure the result of business operations or overall performance and effectiveness of the firm, e.g., gross profit ratio, operating ratio or return on capital employed. The various profitability ratios have been given in the chart exhibiting the classification of ratios according to test. Generally, two types of profitability ratios calculated are: i) In relation to sales, and ii) In relation to investments.

Leverage Ratio: Leverage ratios are the financial statement ratios which show the degree to which the business is leveraging itself through its use of borrowed money. By using a combination of assets, debt, equity, and interest payments, leverage ratios are used to understand a company's ability to meet its long term financial obligations.

Activity Ratio: Activity ratios are calculated to measure the efficiency with which the resources of a firm have been employed. These ratios are also called **turnover ratios** because they indicate the speed with which assets are being turned over into sales, e.g., debtor's turnover ratio. The various activity or turnover ratios have been named in the chart classifying the ratios.

SUMMARY OF RATIOS AND THEIR PURPOSE

(1)	(2) Ratio	(3) Computation Formula	(4) Purpose
1	Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Measures short-term debt paying ability.
2	Quick (Acid Test) Ratio	$\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	A refined measure of the short-term debt-paying ability of the firm. Measures short-term solvency.
3	Gross Profit Ratio	$\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$	Measures efficiency of company's operations, production and trading activities.
4	Net Profit Ratio	$\frac{\text{Net Profit}}{\text{Net Sales}} \times 100$	Shows net margin on sales. One of the important indicators of management's efficiency.
5	Operating Expenses Ratio	$\frac{\text{Operating Costs}}{\text{Net Sales}} \times 100$	A yardstick to measure operating efficiency of management's ability to keep / contain operating expenses for level of sales achieved.
6	Earning per Equity Share	$\frac{\text{Profits Available for Equity Shareholders}}{\text{No. of Equity Shares}} \times 100$	Shows the amount of earnings available for each equity share.
7	Dividend Yield	$\frac{\text{Dividend per Equity Share}}{\text{Market Price Share}} \times 100$	Shows the rate of return to equity shareholders, in the form of dividends, based on the market price of the share.
8	Price Earning Ratio	$\frac{\text{Market Price of Equity Share}}{\text{Earning per Equity Share}} \times 100$	A guide to buy /sell at that price.
9	Interest Coverage	$\frac{\text{EBDIT}}{\text{Interest}}$	A test for firm's debt servicing capacity. Useful to long-term lenders.
10	Debt Equity Ratio	$\frac{\text{Total Debt}}{\text{Net Worth}}$	Depicts extent of total debt financing in business.
11	Total Debt Ratio	$\frac{\text{Total Debt}}{\text{Total Assets}}$	Shows the proportion of total assets financed by total liabilities.

12	Inventory Turnover Ratio	$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory, at cost}}$	Evaluation of efficiency in producing and selling goods and adequacy of controls on inventory holding.
13	No. of days inventory holding	$\frac{360}{\text{Inventory Turnover Ratio}}$	Shows the inventory holding, in days, and control on inventory management.
14	Accounts Receivable (Debtors) Turnover	$\frac{\text{Credit sales}}{\text{Average debtors}}$	Measures liquidity of debtors and effectiveness of the credit policy.
15	Debtors Collection Period	$\frac{360}{\text{Debtors' Turnover Ratio}}$	Shows period of holding of debtors and indicates effectiveness of collection department.
16	Working Capital Ratio	$\frac{\text{Cost of Sales or Sales}}{\text{Average Working Capital}}$	Shows velocity of utilisation of working capital.
17	Return on Investment, before tax (i) ROCE (ii) ROTA	(i) $\frac{\text{EBIT}}{\text{Capital Employed}}$ (ii) $\frac{\text{EBIT}}{\text{Total Assets}}$	Measures the overall efficiency of business, before tax.
18	Return on investment, after tax (ROCE, ROTA)	$\frac{\text{EBIT}(1-T)}{\text{Capital employed or Total Assets}}$	Shows overall efficiency of business, after tax.
19	Return on Equity	$\frac{\text{Net Profit after tax} - \text{Preference Dividend}}{\text{Equity Shareholders' funds}}$	Measures earning power of Equity Share holders funds. Management's main responsibility is to take care of the interests of the owners. They try to maximize ROE. This ratio is the index of performance of management.
20	Pay –Out Ratio	$\frac{\text{Dividend per equity share}}{\text{Earnings per equity share}}$	Shows proportion of payment of dividend out of earnings and stability of dividend policy.
21	Capital Gearing Ratio	$\frac{(\text{Preference share capital} + \text{Debentures} + \text{Long -Term Loan})}{(\text{Equity share capital} + \text{Reserves and surplus})}$	Refers to the proportion between fixed commitment funds to non-fixed commitment funds in the total capital employed that influences the variability of profits.

PROBLEMS

Problem 1:

The following is the Balance Sheet of a company as on 31st March:

Liabilities	Rs.	Assets	Rs.
Share Capital	2,00,000	Land and Buildings	1,40,000
Profit & Loss Account	30,000	Plant and Machinery	3,50,000
General Reserve	40,000	Stock	2,00,000
12% Debentures	4,20,000	Sundry Debtors	1,00,000
Sundry Creditors	1,00,000	Bills Receivable	10,000
Bills Payable	50,000	Cash at Bank	40,000
	8,40,000		8,40,000

Calculate :

- (1) Current Ratio
- (2) Quick Ratio
- (3) Inventory to working Capital
- (4) Debt to Equity Ratio
- (5) Proprietary Ratio
- (6) Capital Gearing Ratio
- (7) Current Assets to Fixed Assets

Problem:

2

The following Trading and Profit and Loss Account of Fantasy Ltd. for the year 31-3-2000 is given below:

Particular	Rs.	Particular	Rs.
To Opening Stock	76,250	By Sales	5,00,000
" Purchases	3,15,250	" Closing stock	98,500
" Carriage and Freight	2,000		
" Wages	5,000		
" Gross Profit b/d	2,00,000		
	5,98,500		5,98,500
To Administration expenses	1,01,000	By Gross Profit b/d	2,00,000
" Selling and Dist. expenses	12,000	" Non-operating incomes:	
" Non-operating expenses	2,000	" Interest on Securities	1,500
" Financial Expenses	7,000	" Dividend on shares	3,750
Net Profit c/d	84,000	" Profit on sale of shares	750
	2,06,000		2,06,000

Calculate:

1. Gross Profit Ratio
2. Expenses Ratio
3. Operating Ratio
1. Net Profit Ratio
5. Operating (Net) Profit Ratio
6. Stock Turnover Ratio.

Problem:3

The Balance Sheet of Punjab Auto Limited as on 31-12-2002 was as follows:

Particular	Rs.	Particular	Rs.
Equity Share Capital	40,000	Plant and Machinery	24,000
Capital Reserve	8,000	Land and Buildings	40,000
8% Loan on Mortgage	32,000	Furniture & Fixtures	16,000
Creditors	16,000	Stock	12,000
Bank overdraft	4,000	Debtors	12,000
Taxation:		Investments (Short-term)	4,000
Current	4,000	Cash in hand	12,000
Future	4,000		
Profit and Loss A/c	12,000		
	1,20,000		1,20,000

From the above, compute (a) the Current Ratio, (b) Quick Ratio, (c) Debt-Equity Ratio, and (d) Proprietary Ratio.

Problem:4

Liabilities	Rs.	Assets	Rs.
Equity Share Capital	2,00,000	Machinery	5,92,000
12% Preference share capital	3,60,000	Investment	2,24,000
General Reserve	1,40,000	Stock	2,02,000
16% debentures	2,40,000	Bills Receivable	40,000
Trade payable	2,44,000	S. Debtors	98,000
Bank overdraft	40,000	Cash and Bank	76,000
Provision for Income Tax	36,000	Profit & Loss A/c	28,000
	12,60,000		12,60,000

Calculate Following Ratios from the above balance sheet:

1. Current Ratio
2. Liquid Ratio
3. Proprietary Ratio
4. Capital Gearing Ratio
5. Debt Equity Ratio

Problem:5

Liabilities	Rs.	Assets	Rs.
Equity Share Capital	1,00,000	Furniture	2,96,000
10% Preference share capital	1,80,000	Trademarks	1,12,000
General Reserve	70,000	Stock	1,01,000
15% debentures	1,20,000	Bills Receivable	20,000
Trade payable	1,22,000	Trade Receivables	49,000
Bank overdraft	20,000	Cash and Bank	38,000
Provision for Tax	18,000	Profit & Loss A/c	14,000
	6,30,000		6,30,000

Calculate Following Ratios from the above balance sheet:

1. Current Ratio
2. Liquid Ratio
3. Proprietary Ratio
4. Capital Gearing Ratio
5. Debt Equity Ratio

Problem:6

Following is the profit and loss account of x ltd as 30/12/2014

	₹		₹
To Opening Stock	76,250	By Sales	5,00,000
To Purchases	3,15,250	By Closing stock	98,500
To Factory Expenses	7,000		
To Gross Profit c/d	<u>2,00,000</u>		
	<u>5,98,500</u>		<u>5,98,500</u>
To Administrative Expenses	1,01,000	By Gross Profit b/d	2,00,000
To Selling and Distribution Expenses	12,000	By Non-operating income	6,000
To Non-Operating Expenses	9,000		
To Net Profit	<u>84,000</u>		
	<u><u>2,06,000</u></u>		<u><u>2,06,000</u></u>

You are required to calculate:

- (a) Expenses ratios (b) Gross profit ratio (c) Operating ratio (d) Operating profit ratio (e) Net Profit ratio.

UNIT – IV

WORKING CAPITAL MANAGEMENT

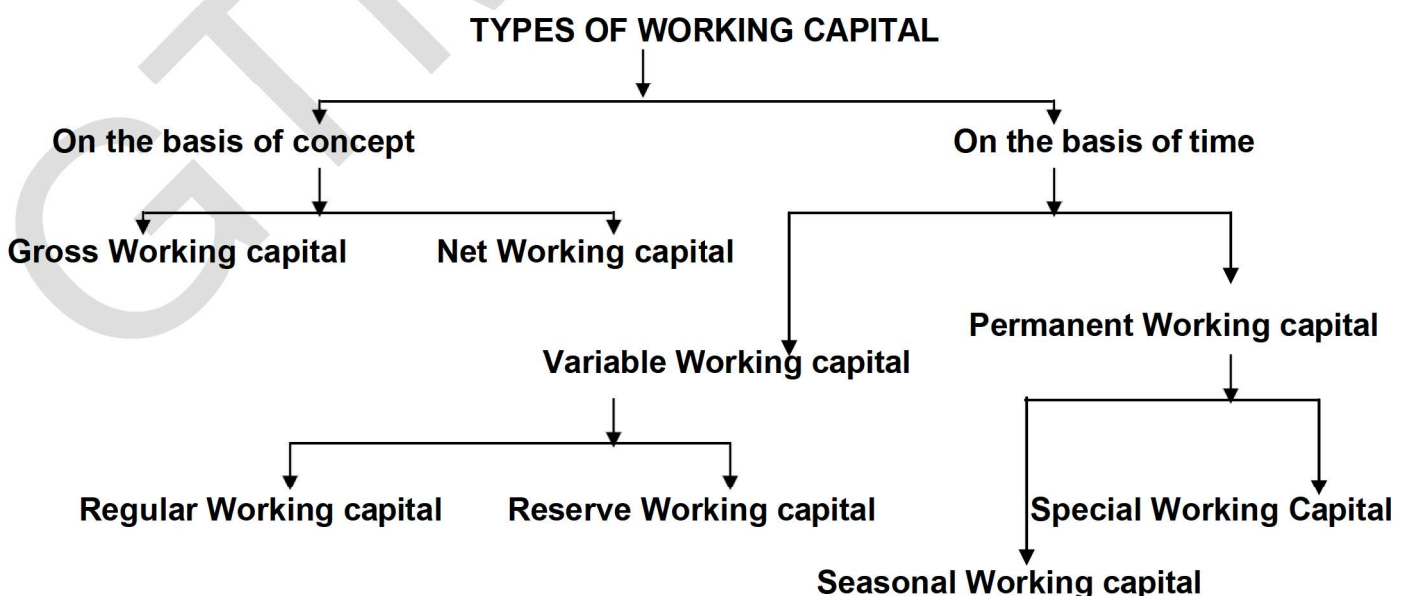
- Working capital management is a significant in financial management due to the fact that it plays a pivotal role in keeping the wheels of a business enterprise running.
- Working capital management is concerned with short-term financial decisions.
- A firm invests a part of its permanent capital in fixed assets and keeps a part of it for working capital that is for meeting the day to day requirements.
- The requirement of working capital varies from firm to firm depending upon the nature of business, production policy, market conditions; condition of supply etc...
- Working capital to a company is like the blood to human body.
- Working capital management if carried out effectively, efficiently and consistently, will assure the health of an organization.

DEFINATION

- According to **smith** “working capital Management is concerned with the problems that arise in attempting to manage the current assets, current liabilities, and the inter-relationship that exists between them”.

COMPOSITION OR COMPONENTS OF WORKING CAPITAL

- The individual composite items of working capital consist of current asset and current liabilities
- **WORKING CAPITAL = CURRENT ASSETS – CURRENT LIABILITIES.**
- Current assets are those, which can be converted into cash within one year without effecting the operations of the firm.



1. On the basis of Concept:

- On the basis of concept the working capital may be divided into
 - a) Gross Working Capital
 - b) Net Working Capital

a) Gross Working Capital:

- The Gross Working Capital represented by the total current assets and the net working capital in the excess of current assets over current liabilities.

b) Net Working Capital:

- Net working capital can be positive or negative if current liabilities exceed total current assets of is negative net working capital; these two types of working capital have already been explained earlier in the concept of working capital

2. On the basis of Time:

- On the basis of Time the working capital may be divided in to
 - a) Permanent or Fixed working capital
 - b) Variable or Temporary working capital

(a) Permanent or Fixed Working Capital:

- The need for current assets arises because of the operating cycle. The operating cycle is a continuous process and therefore, the need for the current assets is felt constantly. But the magnitude of current assets needed is not always a minimum level of current assets, which is continuously required by the firm to carry on its business operations. This minimum level of current assets is referred to as permanent or fixed working capital.

Permanent working capital can be further divided into:

1. Regular Working Capital
2. Reserve Working Capital

1. Regular Working Capital:

- It is the minimum amount of liquid capital needed to keep up the circulation of the capital from cash to inventories to receivables and again to cash. This would include sufficient minimum bank balance to discount all bills, maintain adequate supply of raw materials etc...

2. Reserve Working Capital:

- It is the excess over the needs or regular working capital that should be kept in reserve for contingencies that may arise at any time these contingencies include rising prices business depression strikes special operations such as experiments with new products.

b) Variable or Temporary Working Capital:

- Depending upon the changes in production and sales, the need for working capital over and above permanent working capital, will have to be maintained to support the peak proceeds of sale and investment in receive may also increase during such periods.
- On the other hand, investment in raw material, working in progress and finished goods will fall if the market is slack.
- The extra working capital needed to support the changing production and sales activities is called fluctuating, or variable or temporary working capital.
- The firm to meet liquidity measurement that will last only temporarily creates temporary working capital.

Temporary working capital can be further divided into:

1. Seasonal Working Capital
2. Special Working Capital

1. Seasonal Working Capital

- The working capital required to meet the seasonal needs of the industry is known as seasonal working capital.

2. Special Working Capital

- Special working capital is that part of the variable working capital which is required to finance the special operations such as extensive marketing campaigns experiments with the products or methods of production carry of special job etc.

ADVANTAGES OF ADEQUATE WORKING CAPITAL

1. **Solvency of the business:** Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.
2. **Goodwill:** Sufficient working capital enables a business concern to make prompt payments and hence helps in creating and maintaining goodwill.
3. **Easy loans:** A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and others on easy and favorable terms.
4. **Cash discounts:** Adequate working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.
5. **Regular supply of raw materials:** Sufficient working capital ensures regular supply of raw materials and continuous production.
6. **Regular payment of salaries, wages and other day-today commitments:** A company which has ample working capital can make regular payment of salaries, wages and other day-to-day commitments which raises the morale of its employees, increases their efficiency, reduces wastages and costs and enhances production and profits.

7. **High morale:** Adequacy of working capital creates an environment of security, confidence, and high moral and creates overall efficiency in a business.

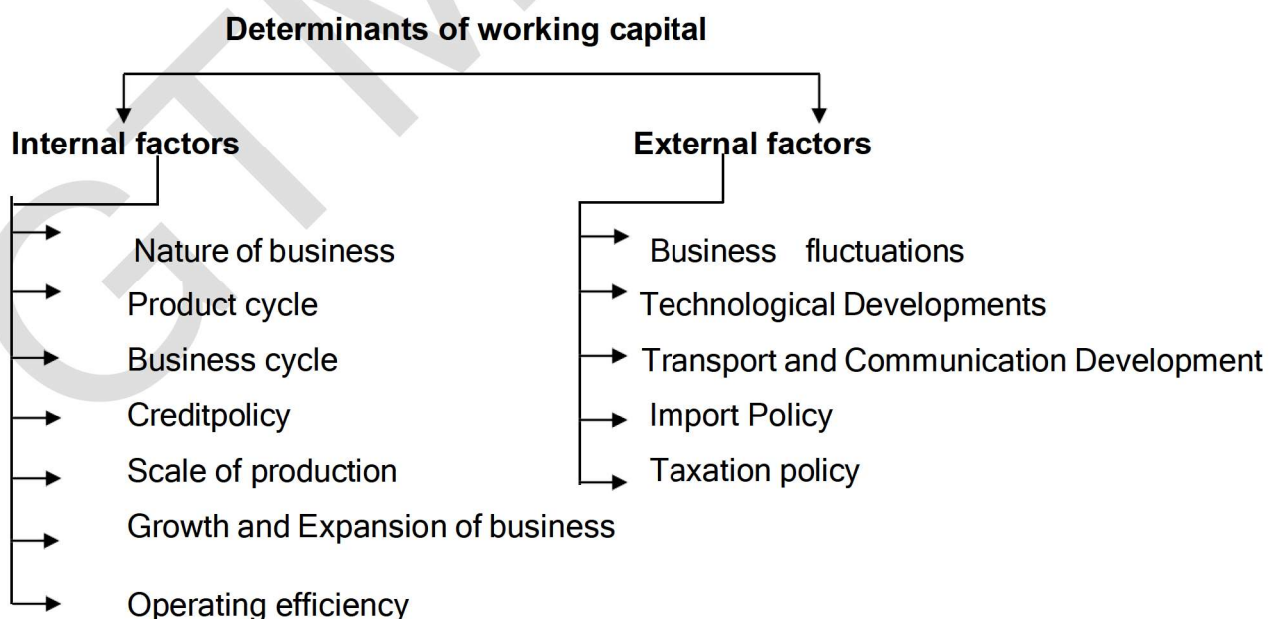
DISADVANTAGES OF EXCESSIVE WORKING CAPITAL

- Excessive Working Capital means idle funds which earn no profits for the business and hence the business cannot earn a proper rate of return on its investments.
- When there is a redundant working capital, it may lead to unnecessary purchasing and accumulation of inventories causing more chances of bad debts.
- Excessive working capital implies excessive debtors and defective credit policy which may cause higher incidence of bad debts.
- It may result into overall inefficiency in the organization.
- When there is excessive working capital, relations with banks and other financial institutions may not be maintained.

DISADVANTAGES OR DANGERS OF INADEQUATE WORKING CAPITAL

- A concern which inadequate working capital cannot pay its short-term liabilities in time. Thus, it will lose its reputation and shall not be able to get good credit facilities.
- It cannot buy its requirements in bulk and cannot avail of discounts, etc.
- It becomes difficult for the firm to exploit favorable market conditions and undertake profitable projects due to lack of working capital
- It becomes impossible to utilize efficiently the fixed assets due to non-availability of liquid funds.

DETERMINANTS OF WORKING CAPITAL OR FACTORS AFFECTING



INTERNAL FACTORS

1. NATURE OF BUSINESS:-

- The working capital requirements of enterprises are basically related to the conduct of business.
- Public utilities have certain features which have a bearing on their working capital needs.
- They do not maintain big inventories and have, therefore, probably the least requirement of working capital.
- On the other hand trading and manufacturing concern required large amount of working capital to maintain a sufficient amount of cash inventories and book debts.

2. PRODUCTION CYCLE: -

- The term production or manufacturing cycle refers to the span between the procurement of raw materials and completion of the manufacturing process leading to the production of finished goods.
- In other words, there is a some time gap before raw materials become finished goods. Therefore the longer the time span, the larger will be the working capital needed and vice versa.

3. BUSINESS CYCLE:-

- The business fluctuations influence the size of working capital mainly during updated phase when boom conditions prevail, the need for working capital is likely to cover the lag between increases sales and receipt of cash as well as invest in plant and machinery to meet the increased demand.
- The down swing an opposite effect on the level of working capital requirement.

4. CREDIT POLICY:-

- The credit policy relating to sales and purchases also affects the working capital. The credit policy in influences the requirements of working capital in two ways:
- Though credit terms granted by the firm to its customers/buyers of goods credit terms available to the firm from its creditors.
- A firm, which more credit sales and cash purchase required high working capital than a firm having more credit purchase and cash sales.

5. SCALE OF PRODUCTION:-

- A concern carrying on activities on a small scale of needs less working capital.
- On the other hand a concern undertaking activities on large scale needs large amount of working capital.

6. GROWTH AND EXPANSION OF BUSINESS:-

- The growth and expansion of business also affect the working capital requirement.
- When there is growth and expansion in the business of a firm the working capital needs of the firm will also increase.

7. OPERATING EFFICIENCY:-

- The operating efficiency of the management is also important determinant of the level of working capital.
- A firm enjoying operating efficiency can eliminate wastage and use its resources efficiently and thereby reduce its working capital needs considerably.

EXTERNAL FACTORS

1. BUSINESS FLUCTUATIONS:-

- Business enterprises usually experience fluctuations in demand for their products and services because of changes in economic conditions.
- In view of this, working capital requirements of these enterprises are affected.
- Thus, in the event of economic prosperity, general demand of the goods and services tends to shoot up.
- To cope with increased demand and consequently increased production, the firm will require additional working capital.

2. TECHNOLOGICAL DEVELOPMENTS:-

- Technological developments in the area of production can have sharp effects on the need for working capital.
- If a firm switches over to new manufacturing process and installs new equipments with which it is able to cut period involved in converting raw materials into finished goods, permanent working capital requirements of the firm will decrease.

3. TRANSPORT AND COMMUNICATION DEVELOPMENTS:-

- Where the means of transport and communication in a country are not well developed, industries may need additional funds to maintain big inventory of raw materials and other accessories which would otherwise not be needed where the transport and communications systems are highly developed.

4. IMPORT POLICY:-

- Import policy of the government may also have its bearing on the levels of working capital of the enterprises since they have to arrange funds for importing goods at specified times.

5. TAXATION POLICY:-

- Working capital needs of business enterprises are affected sharply by taxation policy of the government.
- In the event of regressive taxation policy of the government, as it exists today in India, imposing heavy tax burdens on business enterprises leaves very little profits for distribution and retention purposes.

I. METHODS FOR ESTIMATING WORKING CAPITAL REQUIREMENTS

Three widely used methods for determining working capital requirements of a firm are:

- Percentage of sales Method
- Regression Analysis Method
- Operating Cycle Method ✓

➤ I.1 Percentage of Sales Method

In this method, level of working capital requirement is decided on the basis of past experience. The past relationship between sales and working capital is taken as a base for determining the size of working capital requirements for future. It is, however, presumed

3. Operating cycle:-

- Operating cycle is the time duration required to convert sales after the conversion of resources into inventories into cash. In other words, an operating cycle refers to length of time necessary to complete.
- The following Cycle of events.
 - 1) Conversion of cash into raw materials
 - 2) Conversion of raw materials into work in progress.
 - 3) Conversion of work - in - progress into finished goods.
 - 4) Conversion of finished goods into accounts receivables.
 - 5) Conversion of accounts receivables into cash.

➤ 1.3 Operating Cycle Approach

According to this approach, size of working capital requirements of a firm is determined by multiplying the duration of the operating cycle by cost of operations. The duration of the operating cycle may be found with the help of the following formula:

$$O = R + W + F + A - P \quad \dots(2)$$

Where, O = Duration of operating cycle

R = Duration of raw materials

W = Duration of work-in-process

F = Duration of finished goods inventory

A = Duration of accounts receivable

P = Duration of accounts payable

Duration of raw materials reflects the number of days for which raw materials remain in inventory before they are issued for production. The following formula can be used to determine duration of raw materials:

$$R = \frac{\text{Average stock of raw materials}}{\text{Per day consumption of raw materials}} \quad \dots(3)$$

Duration of the work-in-process denotes the number of days required in the work-in-process stage. It may be ascertained with the help of the following formula:

$$W = \frac{\text{Average work-in-process inventory}}{\text{Average production per day}} \quad \dots(4)$$

Duration of finished goods refers to the number of days for which finished goods remain in inventory before they are sold. This can be computed by the following formula:

$$F = \frac{\text{Average finished goods inventory}}{\text{Per day sale of goods}} \quad \dots(5)$$

Duration of the accounts receivable represents the number of days required to collect the accounts receivable. This may be calculated as under:

$$A = \frac{\text{Average book debts}}{\text{Average credit sales per day}} \quad \dots(6)$$

Duration of accounts payable refers to the number of days for which the suppliers of raw materials offer credit. This may be measured with the help of the following formula:

$$P = \frac{\text{Average trade creditors}}{\text{Average credit purchases per day}} \quad \dots(7)$$

With the help of the following illustration we can explain how the level of working capital requirement can be calculated under operating cycle approach..

PROBLEMS

Modern Alpha Limited plans to sell 96,000 units next year commencing from June, 2006. The expected cost of goods sold is as follows:

	Unit Cost	Monthly Cost*
Raw Material Cost	Rs. 40	Rs. 3,20,000
Manufacturing Expenses	16	1,28,000
Selling, Administration, Financial Expenses	12	96,000
	Rs. 68	Rs. 5,44,000
The selling price per unit is expected to be Rs. 85/-		

* At a monthly sales level of 8,000.

The durations at various stages of the operating cycle are expected to be as follows:

Raw materials stage = 3 months

Work-in-process stage = 1 month

Finished goods stage = 1 month

Debtors stage = 2 months

Estimate working capital requirements of the Company for the next year.

Sangam Textiles Ltd. has asked its finance manager to estimate the working capital requirements for the organization for a level of activity of 3,12,000 units of production for the period 2006-07. The following information are available about the organization:

	Rs. per unit
Raw materials	45
Direct Labour	20
Overheads	40
Profit	30
Selling Price per unit	135

- (i) Raw materials are in stock on average: 1 month
- (ii) Materials are in process on average: 2 weeks
- (iii) Finished goods are in stock on average: 1 month
- (iv) Credit allowed by suppliers: 1 month
- (v) Time lag in payment from debtors: 2 months
- (vi) Lag in payment of wages: 1½ weeks
- (vii) Lag in payment of overheads: 1 month.

UNIT – V

BUDGETARY CONTROL

BUDGET & BUDGETING

Budget:

- ❖ The terms „budget“ as “Quantitative expression of a plan for a defined period of time. It may include planned sales volumes and revenues; resource quantities, costs and expenses; assets, liabilities and cash flows.”

Budgeting:

- ❖ It is an art of building budgets and using them for future planning, coordinating and control purposes.
- ❖ In short, it is the process of preparing a detailed statement of financial applications and results that are likely to happen in a future period of time.

“The entire process of preparing the budget is known as budgeting.” Batty

BUDGETARY CONTROL, DEFINITION & OBJECTIVES

Definitions:

- “According to Brown and Howard, “Budgetary control is a system of controlling costs which includes the preparation of budgets, coordinating the departments and establishing responsibilities, comparing actual performance with the budgeted and acting upon results to achieve maximum profitability.”
- From the above given definitions it is clear that budgetary control involves the follows:
 - a. The objects are set by preparing budgets.
 - b. The business is divided into various responsibility centres for preparing various budgets.
 - c. The actual figures are recorded.
 - d. The budgeted and actual figures are compared for studying the performance of different cost centres.
 - e. If actual performance is less than the budgeted norms, a remedial action is taken immediately.

OBJECTIVES OF BUDGETARY CONTROL:

- **The main objectives of budgetary control are the follows:**
 1. To ensure planning for future by setting up various budgets, the requirements and expected performance of the enterprise are anticipated.
 2. To operate various cost centres and departments with efficiency and economy.

3. Elimination of wastes and increase in profitability.
4. To anticipate capital expenditure for future.
5. To centralise the control system.
6. Correction of deviations from the established standards.
7. Fixation of responsibility of various individuals in the organization.

GTMT-GATE

INTRODUCTION:

A budget is an accounting plan. It is a formal plan of action expressed in monetary terms. It could be seen as a statement of expected income and expenses under certain anticipated operating conditions. It is a quantified plan for future activities – quantitative blue print for action.

Every organization achieves its purposes by coordinating different activities. For the execution of goals efficient planning of these activities is very important and that is why the management has a crucial role to play in drawing out the plans for its business. Various activities within a company should be synchronized by the preparation of plans of actions for future periods. These comprehensive plans are usually referred to as budgets. Budgeting is a management device used for short-term planning and control. It is not just accounting exercise.

MEANING AND DEFINITION:

Budget:

According to CIMA (Chartered Institute of Management Accountants) UK, a budget is

—A plan quantified in monetary terms prepared and approved prior to a defined period of time, usually showing planned income to be generated and, expenditure to be incurred during the period and the capital to be employed to attain a given objective.¶

In a view of Keller & Ferrara, —a budget is a plan of action to achieve stated objectives based on predetermined series of related assumptions.¶

A budget is a financial plan for a business, prepared in advance. A budget may be set in money terms, eg a sales budget of £500,000, or it can be expressed in terms of units, eg a purchases budget of 5,000 units to be bought. Budgets can be **income** budgets for money received, eg a sales budget, or **expenditure** budgets for money spent, eg a purchases budget.

The budget we shall be focusing on in this chapter is the **cash budget**, which combines both income and expenditure, estimating what will happen to the bank balance during the time period of the budget.

BUDGETARY CONTROL

Budgetary Control is the process of establishment of budgets relating to various activities and comparing the budgeted figures with the actual performance for arriving at deviations, if any. Accordingly, there cannot be budgetary control without budgets. Budgetary Control is a system which uses budgets as a means of planning and controlling.

According to I.C.M.A. England Budgetary control is defined by Terminology as the establishment of budgets relating to the responsibilities of executives to the requirements of a policy and the continuous comparison of actual with the budgeted results, either to secure by individual actions the objectives of that policy or to provide a basis for its revision.

Brown and Howard defines budgetary control is "a system of controlling costs which includes the preparation of budgets, co-ordinating the department and establishing

responsibilities, comparing actual performance with the budgeted and acting upon results to achieve maximum profitability."

The above definitions reveal the following essentials of budgetary control:

- (1) Establishment of objectives for each function and section of the organization.
- (2) Comparison of actual performance with budget.
- (3) Ascertainment of the causes for such deviations of actual from the budgeted performance.
- (4) Taking suitable corrective action from different available alternatives to achieve the desired Objectives.

BUDGETARY CONTROL

Budgetary Control is planned to assist the management for policy formulation, planning, controlling and co-ordinating the general objectives of budgetary control and can be stated in the following ways:

- (1) *Planning*: A budget is a plan of action. Budgeting ensures a detailed plan of action for a business over a period of time.
- (2) *Co-ordination*: Budgetary control co-ordinates the various activities of the entity or organization and secure co-operation of all concerned towards the common goal.
- (3) *Control*: Control is necessary to ensure that plans and objectives are being achieved. Control follows planning and co-ordination. No control performance is possible without predetermined standards. Thus, budgetary control makes control possible by continuous measures against predetermined targets. If there is any variation between the budgeted performance and the actual performance, the same is subject to analysis and corrective action.

PREPARATION OF BUDGET

Definition of objectives:

A budget being a plan for the achievement of certain operational objectives, it is desirable that the same are defined precisely. The objectives should be written out; the areas of control demarcated; and items of revenue and expenditure to be covered by the budget stated. This will give a clear understanding of the plan and its scope to all those who must cooperate to make it a success.

Location of the key(or budget) factor:

There is usually one factor (sometimes there may be more than one) which sets a limit to the total activity. For instance, in India today sometimes non-availability of power does not allow production to increase inspite of heavy demand. Similarly, lack of demand may limit production. Such a factor is known as key factor. For proper budgeting, it must be located and estimated properly.

Appointment of controller:

Formulation of a budget usually required whole time services of a senior executive; he must be assisted in this work by a Budget Committee, consisting of all the heads of department along with the Managing Director as the Chairman. The Controller is responsible for coordinating and development of budget programmes and preparing the manual of instruction, known as Budget manual.

Budget Manual:

Effective budgetary planning relies on the provision of adequate information to the individuals involved in the planning process. Many of these information needs are contained in the budget manual. A budget manual is a collection of documents that contains key information for those involved in the planning process.

Budget period:

The period covered by a budget is known as budget period. There is no general rule governing the selection of the budget period. In practice the Budget Committee determines the length of the budget period suitable for the business. Normally, a calendar year or a period co-terminus with the financial year is adopted. The budget period is then subdivided into shorter periods; it may be months or quarters or such periods as coincide with period of trading activity.

Standard of activity or output:

For preparing budgets for the future, past statistics cannot be completely relied upon, for the past usually represents a combination of good and bad factors. therefore, though results of the past should be studied but these should only be applied when there is a likelihood of similar conditions repeating in the future. Also, while setting the targets for the future, it must be remembered that in a progressive business, the achievement of a year must exceed those of years. Therefore, what was good in the past is only fair for the current year.

CHARACTERISTICS OF BUDGET

The main characteristics of budget are as follows:

A budget is concerned for a definite future period.

A budget is a written document.

A budget is a detailed plan of all the economic activities of a business.

All the departments of a business unit co-operate for the preparation of a business budget.

Budget is a mean to achieve business and it is not an end in itself.

Budget needs to be updated, corrected and controlled every time when circumstances change. Therefore, it is a continuous process.

Budget helps in planning, coordination and control.

Different types of budgets are prepared by industries according to business requirements. A

budget acts as a business barometer.

Budget is usually prepared in the light of past experiences. Budget is a constant endeavour of the Management.

ADVANTAGES OF BUDGETARY CONTROL:

Points		Descript ion
1	Efficiency •	The use of budgetary control system enables the management of a business concern to conduct its business activities in the efficient manner.
2	Control on expenditure •	It is a powerful instrument used by business houses for the control of their expenditure. It in fact provide's a yardstick for measuring and evaluating the performance of individuals and their departments.
3	Finding deviations •	It reveals the deviations to management, from the budgeted figures after making a comparison with actual figures.
4	Effective utilisation of resources •	Effective utilisation of various resources like—men, material, machinery and money—is made possible, as the production is planned after taking them into account.
5	Revision of plans •	It helps in the review of current trends and framing of future policies.
6	Implementation of Standard Costing system •	It creates suitable conditions for the implementation of standard costing system in a business organisation.
7	Cost Consciousness •	Budgets are studied by outside fund providers also such as banking and financial institutions, realising that management encourages cost consciousness and maximum utilisation of available resources.
8	Credit Rating •	Management which have developed a well ordered budget plans and which operate accordingly, receive greater favour from credit agencies.

ESSENTIALS OF A BUDGET

An analysis of the above said definitions reveal the following essentials of a budget:

- (1) It is prepared for a definite future period.
- (2) It is a statement prepared prior to a defined period of time.
- (3) The Budget is monetary and / or quantitative statement of policy.
- (4) The Budget is a predetermined statement and its purpose is to attain a given objective.
- (5) A budget, therefore, be taken as a document which is closely related to both the managerial as well as accounting functions of an organization
- (6) Establishment of budgets for each purpose of the business.

- (7) Revision of budget in view of changes in conditions.
- (8) Comparison of actual performances with the budget on a continuous basis.
- (9) Taking suitable remedial action, wherever necessary.
- (10) Analysis of variations of actual performance from that of the budgeted performance to know the reasons thereof.

OBJECTIVES OF BUDGETARY CONTROL:

Budgeting is a forward planning. It serves basically as a tool for management control; it is rather a pivot of any effective scheme of control. The objectives of budgeting may be summarized as follows:

1. **Planning:** Planning has been defined as the design of a desired future position for an entity and it rests on the belief that the future position can be attained by uninterrupted management action. Detailed plans relating to production, sales, raw-material requirements, labour needs, capital additions, etc. are drawn out. By planning many problems estimated long before they arise and solution can be thought of through careful study. In short, budgeting forces the management to think ahead, to foresee and prepare for the anticipated conditions. Planning is a constant process since it requires constant revision with changing conditions.
2. **Co-ordination:** Budgeting plays a significant role in establishing and maintaining coordination. Budgeting assists managers in coordinating their efforts so that problems of the business are solved in harmony with the objectives of its divisions. Efficient planning and business contribute a lot in achieving the targets. Lack of co-ordination in an organization is observed when a department head is permitted to enlarge the department on the specific needs of that department only, although such development may negatively affect other departments and alter their performances. Thus, co-ordination is required at all vertical as well as horizontal levels.
3. **Measurement of Success:** Budgets present a useful means of informing managers how well they are performing in meeting targets they have previously helped to set. In many companies, there is a practice of rewarding employees on the basis of their accomplished low budget targets or promotion of a manager is linked to his budget success record. Success is determined by comparing the past performance with previous period's performance.
4. **Motivation:** Budget is always considered a useful tool for encouraging managers to complete things in line with the business objectives. If individuals have intensely participated in the preparation of budgets, it acts as a strong motivating force to achieve the goals.
5. **Communication:** A budget serves as a means of communicating information within a firm. The standard budget copies are distributed to all management people provide not only sufficient understanding and knowledge of the programmes and guidelines to be followed but also give knowledge about the restrictions to be adhered to.
6. **Control:** Control is essential to make sure that plans and objectives laid down in the budget are being achieved. Control, when applied to budgeting, as a systematized effort is to keep the management informed of whether planned performance is being achieved or not.

Limitations of Budgetary Control System

Points	Description
Based on Estimates	Budgets are based on series of estimates which are based on the conditions prevailed or expected at the time budget is established. It requires revision in plan if conditions change.
Time factor	Budgets cannot be executed automatically. Some preliminary steps are required to be accomplished before budgets are implemented. It requires proper attention and time of management. Management must not expect too much during the development period.
Co-operation Required	Staff co-operation is usually not available during budgetary control exercise. In a decentralised organisation each unit has its own objective and these units enjoy some degree of discretion. In this type of organisation structure coordination among different units are required. The success of the budgetary control depends upon willing co-operation and teamwork,
Expensive	Its implementation is quite expensive. For successful implementation of the budgetary control proper organisation structure with responsibility is prerequisite. Budgeting process start from the collection of requirements to budget and performance analysis. It consumes valuable resources for these purpose, hence, it is an expensive process.
Not a substitute for management	Budget is only a managerial tool and must be applied correctly for management to get benefited. Budgets are not a substitute for management.
Rigid document	Budgets are considered as rigid document. But in reality, an organisation is exposed to various uncertain internal and external factors. Budget should be flexible enough to incorporate ongoing developments in the internal and external factors affecting the very purpose of the budget.

REQUISITES FOR EFFECTIVE BUDGETARY CONTROL

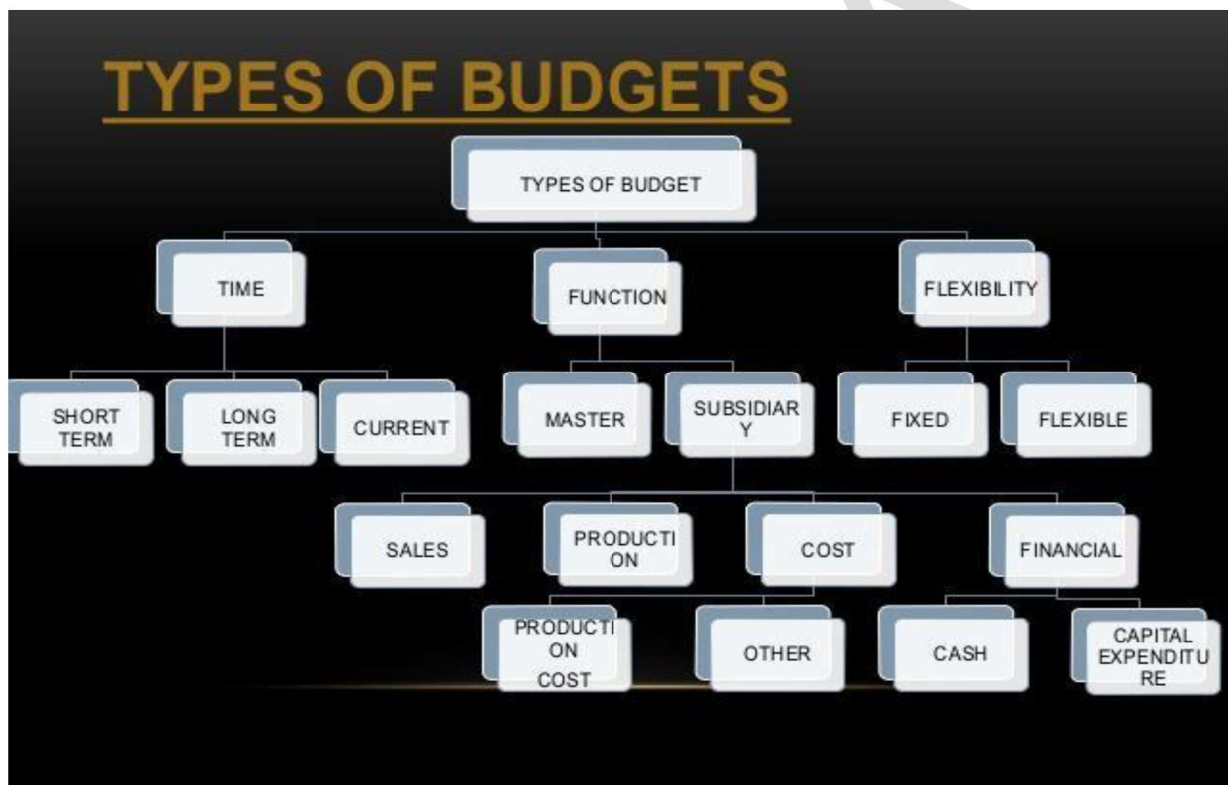
The following are the requisites for effective budgetary control :

- (1) Clear cut objectives and goals should be well defined.
- (2) The ultimate objective of realising maximum benefits should always be kept uppermost.
- (3) There should be a budget manual which contains all details regarding plan and procedures for its execution. It should also specify the time table for budget preparation for approval, details about responsibility, cost centers etc.
- (4) Budget committee should be set up for budget preparation and efficient execution of the plan.
- (5) A budget should always be related to a specified time period.
- (6) Support of top management is necessary in order to get the full support and co-operation of the system of budgetary control.

- (7) To make budgetary control successful, there should be a proper delegation of authority and responsibility.
- (8) Adequate accounting system is essential to make the budgeting successful.
- (9) The employees should be properly educated about the benefits of budgeting system.
- (10) The budgeting system should not cost more to operate than it is worth.
- (11) Key factor or limiting factor, if any, should consider before preparation of budget.
- (12) For budgetary control to be effective, proper periodic reporting system should be introduced.

TYPES OF BUDGETS

As budgets serve different purposes, different types of budgets have been developed. The following are the different classification of budgets developed on the basis of time, functions, and flexibility or capacity.



1. Long-Term Budgets: Long-term budgets are prepared for a longer period varies between five to ten years. It is usually developed by the top level management. These budgets summarise the general plan of operations and its expected consequences. Long-Term Budgets are prepared for important activities like composition of its capital expenditure, new product development and research, long-term finance etc.

2. Short-Term Budgets: These budgets are usually prepared for a period of one year. Sometimes they may be prepared for shorter period as for quarterly or half yearly. The scope of budgeting activity may vary considerably among different organization.

3. **Current Budgets:** Current budgets are prepared for the current operations of the business. The planning period of a budget generally in months or weeks. As per ICMA London, "Current budget is a budget which is established for use over a short period of time and related to current conditions."

MASTER BUDGET –

It is defined as summary budget which includes different functional budgets and which is finally approved adopted and employed. It is defined as a budget which summarises all functional budgets when all functional budgets are prepared they are summarized to produce.

- i. Profit & Loss Account and Profit & Loss Appropriation Account.
- ii. Balance Sheet. Master Budget takes the form of budgeted Profit & Loss Account and Balance Sheet.

It is overall business plan and familiar to financial statements. The only difference is that the accountant here deals with expected future data rather than historical data. The budget committee will prepare the master budget based on the functional budget. Once it is approved by the committee it becomes the target for the firm during the budget period.

FUNCTIONAL BUDGET

SALES BUDGET

The sales budget is an estimate of total sales which may be articulated in financial or quantitative terms. It is normally forms the fundamental basis on which all other budgets are constructed. In practice, quantitative budget is prepared first then it is translated into economic terms. While preparing the Sales Budget, the Quantitative Budget is generally the starting point in the operation of budgetary control because sales become, more often than not, the principal budget factor. The factor to be consider in forecasting sales are as follows:

- Study of past sales to determine trends in the market.
- Estimates made by salesman various markets of company products.
- Changes of business policy and method.
- Government policy, controls, rules and Guidelines etc.
- Potential market and availability of material and supply.

PRODUCTION BUDGET

The production budget is prepared on the basis of estimated production for budget period. Usually, the production budget is based on the sales budget. At the time of preparing the budget, the production manager will consider the physical facilities like plant, power, factory space, materials and labour, available for the period. Production budget envisages the production program for achieving the sales target. The budget may be expressed in terms of quantities 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.**

PURCHASE BUDGET

Strategic planning of purchases offers one of the most important areas of reduction cost in many concerns. This will consist of direct and indirect material and services. The purchasing budget may be expressed in terms of quantity or money. The main purposes of this budget are:

It designates cash requirement in respect of purchase to be made during budget period; and It facilitates the purchasing department to plan its operations in time in respect of purchases

It designates cash requirement in respect of purchase to be made during budget period
It facilitates the purchasing department to plan its operations in time in respect of purchases

so that long term forward contract may be organized.

COST OF PRODUCTION BUDGET

After Preparation of production budget, this budget is prepared. Production Cost Budgets show the cost of the production determined in the production budget. Cost of Production Budget is grouped in to Material Cost Budget, Labour Cost Budget and Overhead Cost Budget. Because it breaks up the cost of each product into three main elements material, labour and overheads. Overheads may be further subdivided in to fixed, variable and semi-fixed overheads. Therefore separate budgets required for each item

CASH BUDGET –

A Cash Budget is a projected cash transaction in future that is utilized in controlling actual receipts and payments by mending for the variances. It starts with a given ‘Cash Balance’ which may be either big or small. But the said balance is, in any case, desired to be ‘the optimum balance’. The sign of optimality for a given cash balance is obviously its ability to produce the highest rate of return for the minimum cost for mainly the said cash balance.

The main aim of Cash Budget is to ascertain whether there is excess or deficit of cash. It involves different steps.

- i. The First element is selection of time period to be covered which is known as planning horizon. This coverage will differ from firm to firm depending upon its nature and degree of accuracy.
- ii. The Second element is the factors affecting the cash flows. Non cash items such as, depreciation are excluded from Cash Budget. The cash flow is affected by two factors operating and financial. The operating category includes cash flow generated by operations of the firm and are known as operating cash flows. The other category is known as financial cash flow.

a) Operating Cash Flow contains the following.

INFLOW

1. Cash Sales
2. Collection from Debtors
3. Sale of Assets

OUTFLOW

1. Cash Purchases
2. Payment to Creditors
3. Purchase of Assets.
4. Operating Expenses Paid

b) Financial Cash Flow contains the following.

INFLOW

1. Loans taken
2. Sale of Investments
3. Issue of Shares
4. Interest, Dividend, Rent Received.

- #### OUTFLOW
1. Repayment of Loan
 2. Purchase of Investment
 3. Redemption of Shares
 4. Interest, Dividend, Rent Paid

METHODS OF PREPARATION OF CASH BUDGET

Methods used for cash forecasting – There are two recognized ways of preparing a cash forecasting.

1 The Receipt & Payment Method.

2 The Income Statement Cash Flow Method (Adjusted Profit & Loss method)

1 THE RECEIPT AND PAYMENT METHOD –

Under this method, all expected cash receipts and payments during the period; under consideration are taken into account. The expected cash balance of a week or month will be equivalent to the difference between total expected Cash Receipts including opening balance, if any, and total expected Cash Payment during that period. The budget is generally prepared from various plans.

- i. Cash Receipts from Customers, based on sales forecast, the term of sale, lag in

- payment etc. are generally taken into consideration.
- ii. Cash Receipts from other sources, such as dividend on trade investments, rent, issue of capital, sale of; investment and fixed assets etc.
 - iii. Cash requirements for materials, wages and salaries and overhead expenses based on purchasing, personnel and overhead budgets. The policy of the business with regard to the payment of supplier's accounts, the term of cash discount, the lag in payment of wages etc. are given due consideration.
 - iv. Cash requirements for capital expenditure as per capital expenditure budget.
 - v. Cash requirement for other purposes, such as payment of dividend, income tax, fines, penalties etc.

ADJUSTED PROFIT AND LOSS ACCOUNT:

This method is based on cash and non-cash transactions. This method estimates closing cash balance by converting profit into cash. The hypothesis of this method is that the earning of profit brings equal amount of cash into the business. The net profit shown by profit and loss account does not signify the actual cash flow into the business. This also leads to another assumption, that is the business will remain static, i.e. there will be no wearing out or increase of assets and changes of working capital so that the total cash on hand for the business would be equal to the profit earned.

Model of Cash Budget

Particular	January	February	March
Opening Balance	-	-	-
Add: Receipts:			
Cash Sales	-	-	-
Receipts from Debtors	-	-	-
Interest and Dividend	-	-	-
Sale of fixed assets	-	-	-
Sale of Investments	-	-	-
Bank Loan	-	-	-
Issue Shares & Debenture	-	-	-
Others	-	-	-
Total Receipts (A)	-	-	-
Less: Payments			
Cash Purchases	-	-	-
Payment to creditors	-	-	-
Salaries & wages	-	-	-
Administrative expenses	-	-	-
Selling expenses	-	-	-
Dividend payable	-	-	-
Purchase of Fixed Assets	-	-	-
Repayment of Loan	-	-	-
Payment of taxes	-	-	-
Total Payments (B)	-	-	-
Closing Balance (A - B)	-	-	-

FIXED AND FLEXIBLE BUDGET:

1. FIXED BUDGET:

A fixed budget is prepared for one level of output and one set of condition. This is a budget in which targets are tightly fixed. It is known as a static budget. It is firm and prepared with the assumption that there will be no change in the budgeted level of motion. Thus, it does not provide room for any modification in expenditure due to the change in the projected conditions and activity. Fixed budgets are prepared well in advance. This budget is not useful because:

- The conditions go on the changing and cannot be expected to be firm.
- The management will not be in a position to assess, the performance of different heads on the

basis of budgets prepared by them because to the budgeted level of activity.

- It is hardly of any use as a mechanism of budgetary control because it does not make any difference between fixed, semi-variable and variable costs
- It does not provide any space for alteration in the budgeted figures as a result of change in cost due to change in the level of activity

Merits (Advantages)	Demerits (Disadvantages)
1. Very simple to understand	1. It is misleading. A poor performance may remain undetected and a good performance may go unrealised. ²
2. Less time-consuming	2. It is not suitable for long period.
	3. It is also found unsuitable particularly when the business conditions are changing constantly.
	4. Accurate estimates are not possible.

2. FLEXIBLE BUDGET:

This is a dynamic budget. In comparison with a fixed budget, a flexible budget is one—which is designed to change in relation to the level of activity attained. An equally accurate use of the flexible budgets is for the purposes of control.

Flexible budgeting has been developed with the objective of changing the budget figures so that they may correspond with the actual output achieved. It is more sensible and practical, because changes expected at different levels of activity are given due consideration. Thus a budget might be prepared for various levels of activity in accord with capacity utilization.

Flexible budget may prove more useful in the following conditions:

- Where the level of activity varies from period to period.
- Where the business is new and as such it is difficult to forecast the demand.
- Where the organization is suffering from the shortage of any factor of production. example, material, labour, etc. as the level of activity depends upon the availability of such a factor.
- Where the nature of business is such that sales go on changing.
- Where the changes in fashion or trend affects the production and sales. Where the organization introduces the new products or changes the patterns and designs of its products frequently.
- Where a large part of output is intended for the export.
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Merits	Demerits
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1. With the help of flexible budget, the sales, costs and profit may be calculated easily by the business at various levels of production capacity.	1. The formulation of flexible budget is possible only when there is proper accounting system maintained, perfect knowledge about the factors of production and various business circumstances is available.
2. In flexible budget, adjustment is very simple according to change in business conditions.	2. Flexible Budget also requires the system of standard costing in business.
3. It also helps in determination of production level as it shows budgeted costs with classification at various levels of activity along with sales. Hence the management can easily select the level of production which shows the profit predetermined by the owners of the business.	3. It is very expensive and labour oriented.
4. It also shows the quantity of product to be produced to earn determined profit.	

Model of Flexible Budget

Particulars	Capacity Utilization		
	60%	80%	100%
1. Prime Cost:			
- Direct Material	-	-	-
- Direct Labour	-	-	-
- Direct expenses (if any)	-	-	-
Total (A)	-	-	-
2. Variable overheads:			
- Maintenance & repairs	-	-	-
- Indirect Labour	-	-	-
- Indirect Material	-	-	-
- Factory overheads	-	-	-
- Administrative Overheads	-	-	-
- Selling & distribution O/H	-	-	-
Total (B)	-	-	-
3. Marginal Cost (A + B)	-	-	-
4. Sales	-	-	-
5. Contribution (Sales - MC)	-	-	-
6. Fixed cost			
- Factory overheads	-	-	-
- Administrative Overheads	-	-	-
- Selling & distribution O/H	-	-	-
Total (C)	-	-	-
7. Profit or Loss (C- FC)	-	-	-

Difference between Fixed and Flexible Budgets:

Sl. no.	Fixed Budget	Flexible Budget
1.	It does not change with actual volume of activity achieved. Thus it is known as rigid or inflexible budget	It can be re-casted on the basis of activity level to be achieved. Thus it is not rigid.
2.	It operates on one level of activity and under one set of conditions. It assumes that there will be no change in the prevailing conditions, which is unrealistic.	It consists of various budgets for different levels of activity
3.	Here as all costs like - fixed, variable and semi-variable are related to only one level of activity so variance analysis does not give useful information.	Here analysis of variance provides useful information as each cost is analysed according to its behaviour.
4.	If the budgeted and actual activity levels differ significantly, then the aspects like cost ascertainment and price fixation do not give a correct picture.	Flexible budgeting at different levels of activity facilitates the ascertainment of cost, fixation of selling price and tendering of quotations.
5.	Comparison of actual performance with budgeted targets will be meaningless specially when there is a difference between the two activity levels.	It provides a meaningful basis of comparison of the actual performance with the budgeted targets.

PROBLEMS

1. Prepare Flexible Budget. for production at 80 per cent and 100 per cent activity on the basis of the following information:

Production at 50% capacity	5,000 units
Raw materials	Rs. 80 per unit.
Direct labour	Rs. 50 per unit.
Direct Expenses	Rs. 15 per unit.
Factory Expenses	Rs. 80,000 (50% fixed)
Administration Expenses	Rs. 1,60,000 (60% variable)

2. Draw up a flexible budget for production at 75% and 100% capacity on the basis of the following data for a 50% activity.

	Per unit in Rs.
Materials	100
Labour	50
Variable expenses (direct)	10
Administrative expenses (50% fixed)	40,000
Selling and Distribution expenses (60% fixed)	50,000

= Present production (50% activity) 1,000 units

Cash Budget

1. S. K. Brothers wish to approach the bankers for temporary overdraft facility for the period from October 2010 to December 2010. During the period of this period of these three months, the firm will be manufacturing mostly for stock. You are required to prepare a cash budget for the above period.

Month	Sales (Rs.)	Purchases (Rs.)	Wages (Rs.)
August	3,60,000	2,49,600	24,000
September	3,84,000	2,88,000	28,000
October	2,16,000	4,86,000	22,000
November	3,48,000	4,92,000	20,000
December	2,52,000	5,36,000	30,000

- (a) 50% of credit sales are realized in the month following the sales and remaining 50% in the second following.
- (b) Creditors are paid in the month following the month of purchase
- (c) Estimated cash as on 1-10-2010 is Rs.50,000.