Syllabus

Unit 1

Chapter 1: Introduction to Cost Accounting

Meaning and Definition; Need for Cost Accounting; Advantages and limitations; Cost Accounting and Financial Accounting; Cost concepts and cost objects; Elements of cost and classification of costs; methods of costing; Techniques of costing (with emphasis on Uniform costing); Cost centers and Cost units; Installation of good cost accounting system

Unit 2

Chapter 2: Material Accounts – 1

Chapter 3: Material Accounts – 2

Definition of Inventory; Materials and material control; Objectives of material control; Its necessity and advantages; Purchase and stores routine; Control of inventory through EOQ; determination of various stock levels; JIT and ABC system; Methods of pricing of issues of material – FIFO, LIFO, Base stock price, Weighted average price, Periodic weighted average price, Standard price and Replacement price; Meaning and treatment of Waste, Scrap, Spoilage and Defectives.

Unit 3

Chapter 4: Direct Labour

Direct and Indirect labour cost; Labour cost accounting and Labour records; Remuneration methods – Time wage system and Piece wage system; Bonus system (Individual and Group incentive plan) – Halsey premium plan, Rowan plan, Taylor's differential piece rate system, Bedeaux plan, Merrick's multiple piece rate system, Gantt task & bonus system, Profit sharing and Co-partnership; Requisites of good wage incentive plan; Labour turnover; Cost of labour turnover & its treatment; Concept of Idle time & its treatment; Over time premium; Casual worker & out worker; Holiday & Leave with pay; Cost of Apprentice; Employee welfare cost; Fringe benefits; Bonus and Gratuity.

Unit 4

Chapter 5: Accounts of Overheads

Definition; Classification of overheads; Techniques for segregation of Semi variable overheads; Cost allocation and apportionment; Basis of apportionment of Factory overheads and Re apportionment of service center cost; Overhead absorption on the basis of Direct Material cost, Direct Labour cost, Prime cost, Labour Hours and Machine Hours; Concept and Treatment in cost accounts of – Over absorption, Under absorption, Setting up time and Idle time; Absorption of Administration overheads and Selling & Distribution overheads (In theory only); Conceptual Understanding of Activity Based Costing.

CHAPTER 1

INTRODUCTION TO COST ACCOUNTING

Introduction

- There has been tremendously fast development in the accounting world, in keeping pace with the unprecedented growth in trade and industry. The role of accountant has therefore undergone a revolutionary change.
- Management is interested to know,
  - (i) What is the cost of production per unit,
  - (ii) What should be the proper selling price,
  - (iii) Whether the cost incurred is proper and reasonable,
  - (iv) Whether it is possible to reduce cost of production without sacrificing efficiency and so on.

Definition of Cost Accounting

- Cost accounting is a system of accounting which helps in determining cost of production of goods or services with reasonable accuracy, and also tells us how this cost is made up.
- W. W. Bigg: “Cost Accounting is the provision of such analysis and classification of expenditure as will enable the total cost of any particular unit of production to be ascertained with reasonable degree of accuracy and at the same time to disclose exactly how such total cost in constituted.”
- Prof. Van Sickle: “Cost Accounting is the science of recording and presenting business transactions pertaining to the production of goods and services, whereby these records become a method of measurement and a means of control.”

Features of Cost Accounting

- The main object of cost accounting is to ascertain the cost of per unit of goods produced or service rendered.
- It aims to providing data to the management in a manner that would guide them in making decisions.
- The expenses are analyzed in a manner that would give details about the expenses of each department, product, etc.
- Expenses are recorded in accordance with the predetermined classification and then allocated to different departments, processes and products.
- It is useful to control the cost of production, in addition to determining the cost.
- Cost accounts is concerned with the expenses relating to the production of goods and services.

Objectives of Cost Accounting

i. Ascertainment of cost : Involves computation of cost incurred

ii. Estimation of costs : As compared to 'what has been the cost' it emphasizes on 'what is likely to be the cost' or 'what should be the cost'.

iii. Cost Control : Involves i) determination of standard costs and ii) analyzing the cause of variations between standard and actual cost.

iv. Cost Reduction

v. Determining selling price

vi. Facilitating preparation of financial and other statements: A developed cost accounting system provides immediate information regarding stock of raw materials, work-in-progress and finished goods. This helps in speedy preparation of financial statements.

vii. Provides basis for operating policy: ex. make or buy, Shut down or operate at loss etc.

Financial & Cost Accounting

No.	Basis	Financial Accounting	Cost Accounting
1.	Objective	Financial performance and position	Ascertain cost and cost control
2.	Costs and profits	Shows overall costs and profit / loss	Shows details for each product, process, job, contract, etc
3.	Control / Report	Emphasis on reporting	Emphasis on control and reporting
4.	Decision making	Limited use	Designed for decision making
5.	Responsibility	Does not fix responsibility	Can effectively fix responsibility
6.	Time frame	Focus on historical data	Focus on present and future
7.	Type of reports	General reports like P&L Account, Balance Sheet, Cash Flow Statement	Can generate special reports and analysis
8.	Legal need	Statutory requirement	Voluntary, except for some cases
9.	Transactions	Records external transactions	Records internal and external transactions
10.	Reader	Everybody	Internal management
11.	Formats	Standard, as per law	Tailor made
12.	Access	Everybody, except for some	Very limited access
13.	Unit of value	Monetary	Monetary and physical

ADVANTAGES OF COST ACCOUNTING

- ASCERTAINMENT OF COST
- DISCLOSURE OF PROFITABLE AND UNPROFITABLE ACTIVITIES
- HELPS IN FIXATION OF SELLING PRICE
- CALCULATION OF TENDER OR QUOTATION PRICE
- DISCLOSES THE COMPONENTS OF COSTS
- COST COMPARISON
- HELPS IN COST CONTROL
- HELPFUL IN PLANNING AND DECISION MAKING
- CHECK ON THE ACCURACY OF FINANCIAL ACCOUNTS

Limitations of cost accounting

The following are the main limitations of cost accounting:

1. Cost accounting lacks a uniform procedure – different cost accountant may have different procedures;
2. There are a large number of conventions, estimates and flexible factors such as classification of costs into its elements, issue of materials on average or standard prices, apportionment of overhead expenses, etc.
3. For getting the benefits of cost accounting, many formalities are to be observed by a small and medium size concerns;
4. The contribution of cost accounting for handling futuristic situations has not been much

Cost Classification

- The costs are classified into various categories according to the characteristics. Generally costs are classified as follows:

  (a) According to Elements of Cost

  (b) According to Functions or Operations

  (c) According to Nature or Behavior

  (d) According to Time

  (e) According to Period or Product

  (f) According to Managerial Decision making

(A) Classification According to Elements:

- According to the elements of which cost is made up, they are classified into two groups:

  (a) Direct Cost and

  (b) Indirect Cost

a) **Direct Costs:** Those expenses which are directly incurred for production and which can directly, specifically and conveniently be identified with a particular job, process or unit of product are known as Direct Costs.

- Direct material, Direct labour and other direct expenses can be directly identified with a unit of cost or with a cost center and can be directly charged to Its cost. Such cost is also called ‘Traceable Cost.’

(i) **Direct Material:** It is the material of which the article is made and which can be charged directly to specific cost unit. E.g., Thread required to manufacture shoes.

(ii) **Direct Labour:** It is that labour which is used for the manufacture of specific article, process, job or contract, which works on the product properly and which may be measured and charged on particular units. E.g., Wages paid to carpenter making furniture.

(iii) **Direct Expenses:** It includes any expenditure other than direct material or direct labour incurred on a specific cost unit. E.g., Cost of special design or moulds.

b) **Indirect Costs:** Indirect expenses or overheads are those expenses which cannot be charged directly to a cost unit, but which are to be allocated to a job, process or a unit of product.

- They are known as Common costs. Such expenses are incurred not for a particular job or a unit but are incurred for the whole department or whole business unit.

(i) **Indirect Material:** It consists of material which does not form the part of product but it is used for the purpose ancillary to production. E.g., Thread used in stiching shoes.

(ii) **Indirect Labour:** Wages and salaries paid to various persons who are not directly engaged in production. E.g., Salary of work manager, supervisor, foremen, etc.

(iii) **Indirect Expenses:** It includes power or fuel such as coal, gas, electricity, water, etc., maintenance, repairs, renewals and depreciation of plant and machinery.

(B) Functional Classification:

- Overheads are broadly classified into three groups on the basis of functions:

  (i) Factory Overheads (or Works Overhead or Production Overhead)

  (ii) Administrative Overheads (or Office Overheads)

  (iii) Selling and Distribution Overheads

a) **Factory or Works Overhead:** The indirect expenses that arise in connection with manufacturing operations within the four walls of the factory are called factory overheads. E.g., Factory rent and rates, Factory lighting and heating, Depreciation of plant and machinery, Salary of work manager, etc.

b) **Administration or Office Overheads:** Indirect expenses which arise in connection with management and administration of an enterprise are known as Administration overhead. E.g., Salaries of Office staff, Office rent and rates, Depreciation of office building, Telephone and Postage, etc.

c) **Selling and Distribution Overheads:** Selling and distribution expenses are incurred in connection with selling function, which includes the delivery of goods to the customers. E.g., Advertising, Catalogue, Price lists, Sales office expenses, Show room expenses, Packing charges, etc.

(C) Behaviourwise Classification:

- On the basis of variability, the overheads fall into two main groups:
  - (i) Fixed Overheads,
  - (ii) Variable Overheads.
- A third group may also be mentioned comprising overheads which are partly variable. They are known as Semi-variable overheads.

a) **Fixed Overheads:** These are expenses which are not affected by level of output, at least in the short run. They are known as fixed overheads. They do not change even when there are variations in volume of production. E.g., Rent and rates of factory and office, Manager's Salary, Insurance premium, Audit fees, Bank charges, etc.

b) **Variable Overheads:** There are certain expenses which vary directly with the volume of output. They are known as variable overheads. E.g., Power and Fuel, Depreciation of plant and machinery, Repairs to machinery, etc.

c) **Semi-variable Overheads:** Expenses which change with the volume of output but not in direct proportion to it, are semi-variable overheads. Thus these expenses are partly fixed and partly variable. E.g., Telephone expenses are fixed upto certain number of calls but they would increase in proportion to the number of calls made, after the fixed limit is exceeded.

(D) Classification According to Time:

- On the basis of time, costs are divided into two categories:
  - (i) **Historical Costs:** The costs which are determined after they are incurred are called historical costs. Such costs can be determined only after production is completed.
  - (ii) **Pre-determined Costs:** The costs which are estimated and fixed before the production starts are called predetermined costs. Generally they are based on past experience.

(E) Classification According to Period or Product:

- The costs are classified as,
  - (i) <u>**Product Costs:**</u> They are those costs which are identified with the product and included in inventory values. In other words the production cost or cost of manufacturing or factory cost is product cost. E.g., direct material, direct labour, factory cost, etc.
  - (ii) <u>**Period Costs:**</u> These are the costs incurred on the basis of time and are not identified with product or job. They are deducted as expense of the period during which they are incurred.
- Generally it is believed that expenses upto production costs are considered as product costs and administrative and selling expenses are treated as period costs.

(F) Classification for Managerial Decision-making:

- The following costs are classified as costs useful for decision making.
  - (i) Marginal Costs
  - (ii) Relevant Costs
  - (iii) Differential Costs
  - (iv) Sunk Cost and
  - (v) Opportunity Cost

- **Marginal Costs:** Marginal cost is that which includes only variable costs and does not include fixed costs. “At any given level of output, when an unit of product is added or deducted, the difference in the total cost is marginal cost.”

- **Relevant Costs:** Relevant cost is any cost which is affected by a decision. While taking decision about selecting an alternative from three or four alternatives, there are certain costs which must be taken into consideration which are relevant costs. E.g., If a company closes down a branch, then staff salaries, wages, electricity, telephone charges etc. are stopped and are not to be paid. So they are relevant costs for taking a decision to close down a branch.

- **Differential Costs:** The concept of differential cost plays an important role in decision-making. “It is a technique used in the preparation of data which only cost and income difference between alternatives courses of action are taken into consideration.”

When costs increases due to a particular decision, it is called ‘Incremental Cost’. When costs decreases due to a decision, is called ‘Decremental Cost’.

- **Sunk Cost:** The costs which have been incurred in the past and which is irrecoverable in a given situation is a sunk cost or historical cost. E.g., when a proposal for replacement of a machine is considered, the capital loss or depreciated book value of the machine is a sunk cost and is not to be taken into consideration.

- **Opportunity Cost:** Opportunity cost is a very useful concept in managerial decision-making. When a manager is considering two alternatives and selects one, he has thus foregone the income from the second alternative. Thus the income foregone from second alternative is the opportunity cost of the first alternative, which is selected.

Methods of Costing

- Several methods of costing are used to suit the requirements of various business conditions which are as follows:
  - (1) Unit Costing (Output or Single Costing)
  - (2) Job Costing
  - (3) Contract or Terminal Costing
  - (4) Batch Costing
  - (5) Process Costing
  - (6) Operating Costing
  - (7) Multiple or Composite Costing

- **Unit Costing (Output or Single Costing):** The method of unit costing is applicable in a manufacturing unit, (i) where manufacturing is continuous, (ii) only a single product or two or more products of similar types are manufactured, (iii) all the units of the product are similar and (iv) the product can be measured in definite units. The method is generally used in brick-making, paper mills, dairies, cement industries, etc.

- **Job Costing:** Job is a special work undertaken at the instance of a customer or for stock purpose. For example, printing of 5,000 copies of book on behalf of a publisher, is a job for a printing press. The method is used in printing industries, garages, etc.

- **Contract or Terminal Costing:** Another variant of Job costing is known as Contract Costing, where building or construction contracts are carries out. A contract is a big job. For example, the method of costing used to ascertain cost of constructing a building, a ship, a bridge is contract costing.

- **<u>Batch Costing:</u>** A variation of job costing is known as batch costing where unit of cost is a batch. It is employed where orders or jobs are arranged in batches convenient for production. E.g., Pharmaceutical company manufactures number of drugs may produce say 10,000 tablets of a particular drug at one time.

- **<u>Process Costing:</u>** In industries were production can be divided into distinct stages or processes, it is desirable to ascertain the cost of production at each stage. The method of costing used for the purpose is Process Costing. For example, production of cloth can be divided into three distinct stages like spinning, weaving and finishing.

- **Operating Costing:** Where goods are not manufactured, but services are rendered, the method of ascertaining cost per unit of service rendered is known as operating costing. In power house, transport companies, water works, hospitals, etc. operating costing is used.

- **Multiple or Composite Costing:** In industries where the final product consists of assembly of number of spare-parts, the multiple costing is used. It is actually a combination of various systems of costing used in relation to different components of the product, i.e., two or more methods of costing are used in the same business unit. For example, job costing may be used for one part, process costing may be used for another part and so on. The method is used in manufacture of motor cars, radios, cycles, typewriters, etc.

Table showing methods of Costing & Industries to which applicable

Method of Costing	*Name of Industries to which suitable or applicable*
1. Unit, Output or Single Costing	1. Mines and quarries 2. Brick works 3. Dairies 4. Poultry 5. Flour mills 6. Breweries 7. Paper mills 8. Cement industries 9. Steel plants
2. Job Costing	1. Printing press 2. Garage and repair shops 3. Painting and Decorating 4. Production of made to order articles
3. Contract Costing	1. Construction of building, road, bridge etc. 2. Ship-building industry 3. Manufacture of large and complicated machines

4. Batch Costing	1. Pharmaceutical Industry 2. Hardware making (like bolts, nuts, screw etc.) 3. Bicycle parts
5. Process Costing	1. Chemical works 2. Oil- refineries 3. Paints manufacturing 4. Textile industry 5. Soap works 6. Confectionery 7. Sugar mills
6. Operating Costing	1. Railway 2. Road Transport 3. Electricity companies 4. Water supply companies 5. Gas supply companies 6. Hospitals 7. Hotels
7. Multiple or Composite Costing	1. Automobile industry 2. Bicycle making industry 3. Radio & Television making industry 4. Sewing machine making industry 5. Typewriter making industry.

Costing Techniques

- There are certain other costing techniques used for guidance of management in decision making or controlling cost etc. These techniques can be used alongwith any of the above costing methods. Some of these techniques are as under:

  (1) Uniform Costing

  (2) Historical Costing

  (3) Standard Costing

  (4) Marginal Costing

(1) Uniform Costing

- Uniform costing is the use by several undertaking of the same costing principles and/or practices.
- Uniform costing can be adopted in following two cases:
  - Where several undertakings are engaged in same type of business. In such cases uniformity in various practices can be laid down. E.g., the trade association may lay down that all members must recover factory overheads on the basis of certain percentage on direct wages.
  - Where the same group of industrialist controls several business undertaking. In such a case the central office may lay down uniform costing practices for all undertakings. E.g., Tata group may adopt uniform costing for all enterprises under its hold.

Objectives of Uniform Costing

- Improving Efficiency
- Fixing Selling Price
- Useful in Making Representation
- Cost Control
- Avoids Rivalry
- Helps Introduce Efficient Costing Methods

Advantages of Uniform Costing

- Best System at least cost
- Standard Selling Price
- Customers Readily Accept Price
- Improvement through Comparison
- Enough Data with Association
- Benefits of Research to Small Units
- Benefits to New Units

Limitations of Uniform Costing

- Practical Difficulties
- Encouragement to Monopoly
- Expensive
- Lack of Sufficient Information