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VIRTUAL COACHING CLASSES
ORGANIZED BY BOS, ICAI

INTERMEDIATE LEVEL
PAPER 3: COST & MANAGEMENT ACCOUNTING
TOPIC COVERED: INTRODUCTION TO COST AND MANAGEMENT ACCOUNTING

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POINTS OF DISCUSSION

Syllabus and Weightage

- Syllabus and Section wise weightage
- Skill wise weightage

Introduction to Cost and Management Accounting

Syllabus and Section wise weightage

Syllabus Contents	Section-wise weightage	Weightage in terms of Marks
1. Overview of Cost and Management Accounting	**10-15%**	**12-19 Marks**
(i) Introduction to Cost and Management Accounting a) Objectives and Scope of Cost and Management Accounting, b) The users of Cost and Management accounting information, Functions of management accounting. c) Role of cost accounting department in an organisation and its relation with other departments. d) Installation of Costing System e) Relationship of Cost Accounting, Financial Accounting, Management Accounting and Financial Management. f) Cost terms and Concepts g) Cost Reduction and Cost Control h) Elements of Costs i) Cost behavior pattern, Separating the components of fixed, variable, semi-variable and step costs. j) Methods of Costing, Techniques of Costing. k) Cost Accounting with use of Information Technology.		
(ii) Elements of Cost and preparation of Cost Sheets a) Functional classification and ascertainment of cost b) Preparation of Cost Sheets for Manufacturing sector and for Service sector		

2. Ascertainment of Cost and Cost Accounting System	35-40%	44- 50 Marks
(i) Material Cost a) Procurement procedures- Store procedures and documentation in respect of receipts and issue of stock, Stock verification, b) Valuation of material receipts, c) Inventory control- - Techniques of fixing level of stocks- minimum, maximum, re-order point, safety stock, determination of optimum stock level, - Determination of Optimum Order quantity- Economic Order Quantity (EOQ), - Techniques of Inventory control- ABC Analysis, Fast, Slow- moving and Non- moving (FSN), High, Medium, Low (HML), Vital, Essential, Desirable (VED), Just-in-Time (JIT)- Stock taking and perpetual inventory system, use of control ratios, d) Inventory Accounting		
(ii) Employee Cost a) Attendance and Payroll procedures- Elements of wages- Basic pay, Dearness Allowance, Overtime, Bonus, Holiday and leave wages, Allowances and perquisites. b) Employee Cost Control c) Employee Turnover- Methods of calculating employee turnover, causes of employee turnover, effects of employee turnover. d) Utilisation of Human Resource, Direct and indirect employee Cost, charging of employee cost, Identifying employee hours with work orders or batches or capital jobs. e) Remuneration systems and incentive schemes- Premium Bonus Method (Halsey Plan and Rowan Plan)		

(iii) Overheads a)Functional analysis- Factory, Administration, Selling, Distribution, Research and Development. b) Behavioral analysis- Fixed, Variable and Semi- Variable. c) Allocation and Apportionment of overheads using Absorption Costing Method. d) Factory Overheads- Primary and secondary distribution, e) Administration Overheads- Method of allocation to cost centres or products, f) Selling & Distribution Overheads- Analysis and absorption of the expenses in products/ customers, impact of marketing strategies, cost effectiveness of various methods of sales promotion. g) Treatment of Research and development cost in cost accounting.		
(iv) Concepts of Activity Based Costing (ABC)		
(v) Recording and Accounting of Costs a) Non-integrated Cost Accounting system- Ledger under non-integral system b) Integrated (Cost and Financial) Accounting system- Ledgers under integral system. c)Difference between the Non- integrated and Integrated Accounting system. d)Reconciliation of profit as per Cost and Financial Accounts (under Non-Integrated Accounting System).		

3. Methods of Costing	25-30%	31-38 Marks
(i) Single Output/ Unit Costing		
(ii) Job Costing: Job cost cards and databases, collecting direct costs of each job, attributing overheads to jobs, Application of job costing.		
(iii) Batch Costing: Determination of optimum batch quantity, Ascertainment of cost for a batch, Preparation of batch cost sheet, Treatment of spoiled and defective work.		
(iv) Contract Costing a) Ascertainment of cost of a contract, Progress payment, Retention money, Escalation clause, Cost- plus contract, Value of work certified, Cost of Work not certified. b) Determination Value of work certified, Cost of work not certified, Notional or Estimated profit from a contact.		
(v) Process/ Operation Costing a) Process cost recording, Process loss, Abnormal gains and losses, Equivalent units of production, Inter-process profit, Valuation of work in process. b) Joint Products- Apportionment of joint costs, Methods of apportioning joint cost over joint products, c) By-Products- Methods of apportioning joint costs over by-products, treatment of By-product cost.		
(vi) Costing of Service Sectors a) Determination of Costs and Prices of services		

4. Cost Control and Analysis	20-25%	25-31 Marks
(i) Standard Costing a) Setting up of Standards, Types of Standards, Standard Costing as method of performance measurement. b) Calculation and Reconciliation of Cost Variances- - Material Cost Variance, employee Cost Variance, Variable Overheads Variance and Fixed Overhead Variance.		
(ii) Marginal Costing a) Basic concepts of marginal costing, Contribution margin, Break-even analysis, Break –even and profit volume charts, Contribution to sales ratio, Margin of Safety, Angle of Incidence, Cost-Volume-Profit Analysis (CVP), Multi- product break- even analysis, Consideration of Limiting factor (key factor), b) Determination of Cost of a product/ service under marginal costing method, determination of cost of finished goods, work-in-progress, c) Comparison of Marginal costing with absorption costing method- Reconciliation of profit under the both methods, d) Short term decision making using the above concepts (basic / fundamental level).		
(iii) Budget and Budgetary Control a) Meaning of Budget, Essentials of Budget, Budget Manual, Budget setting process, Preparation of Budget and monitoring procedures. b) The use of budget in planning and control c) Flexible budget, Preparation of Functional budget for operating and non-operating functions, Cash budget, Master budget, d) Introduction to Principal/ Key budget factor, Zero Based Budgeting (ZBB), Performance budget, Control ratios and Budget variances.		

Skill wise weightage

Skill Level	Weightage
Level-I: **Knowledge and Comprehension** **(Theoretical Questions)**	**20%-30%**
Level-II: **Application and Analysis** **(Numerical Questions)**	**70%-80%**

Cost Concepts

- Introduction

Elements of Costs

- Material
- Employee Cost
- Overheads and Activity Based Costing
- Cost Sheet

Accounting Procedures

- Non-Integrated
- Integrated

Method of Costing

- Job & Contract Costing
- Process & Operation Costing
- Service Costing
- Unit Costing & Batch Costing
- Joint Products and By-Products

Cost Control

- Standard Costing
- Marginal Costing
- Budget & Budgetary Control

Introduction to Cost and Management Accounting

- Objectives of Cost and Management Accounting
- Scope of Cost Accounting
- Relationship of Cost and Management Accounting with other related desciplines
- Role & Functions of Cost and Management Accounting
- Users of Cost and Management Accounting
- Use of IT in Costing
- Cost Objects
- Responsibility Centres
- Cost Classification

Cost

The amount of expenditure incurred on or attributable to a specified article, product or activity

Costing

Costing is defined as "the technique and process of ascertaining costs"

Cost Accounting

it is the process of accounting for cost

Cost Accountancy

Cost Accountancy has been defined as "the application of costing and cost accounting principles, methods and techniques

Management Accounting

Management accounting is the application of the principles of accounting and financial management

Cost Management

It is an application of management accounting concepts, methods of collections, analysis and presentation of data

Objectives of Cost Accounting

- Ascertainment of Cost
- Determination of Selling Price and Profitability
- Cost Control
  - Determination of pre-determined standard
  - Measurement of actual performance
  - Comparison
  - Analysis of variance and action
- Cost Reduction
- Assisting management in decision making

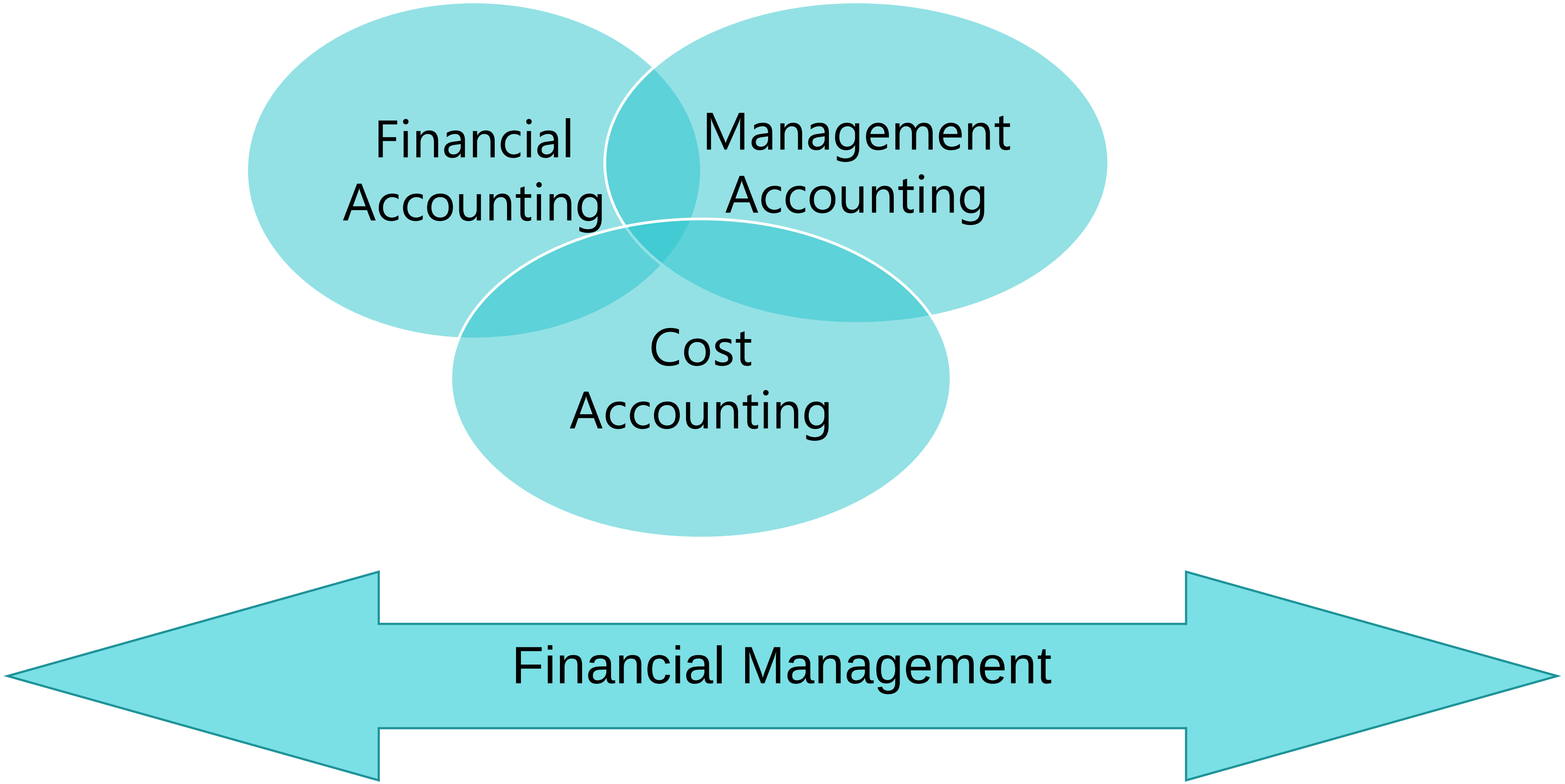
Difference between Cost Control and Cost Reduction

Cost Control	Cost Reduction
1. Cost control aims at ***maintaining*** the costs in accordance with the established standards.	1. Cost reduction is concerned with ***reducing*** costs. It challenges all standards and endeavours to improvise them continuously
2. Cost control seeks to ***attain lowest possible cost*** under existing conditions.	2. Cost reduction recognises no condition as permanent, since a ***change will result in lower cost.***
3. In case of cost control, emphasis is on ***past and present***	3. In case of cost reduction, it is on ***present and future.***
4. Cost control is a ***preventive*** function	4. Cost reduction is a ***corrective*** function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved.	5. Cost reduction has no visible end and is a continuous process.

Scope of Cost Accounting

- Costing
- Cost Accounting
- Cost Analysis
- Cost Comparisons
- Cost Control
- Cost Reports
- Statutory Compliances

RELATIONSHIP OF COST AND MANAGEMENT ACCOUNTING WITH OTHER RELATED DISCIPLINES



Role of a cost and management accounting system

Provide relevant information to management for decision making

Assist management for planning, measurement, evaluation and controlling of business activities

Help in allocation of cost to products and inventories for both external and internal users.

Functions of cost and management accounting System

Collection and accumulation of cost for each element of cost

Assigning costs to cost objects to ascertain cost.

Sets budget and standards for a particular period or activity beforehand and these are compared with the assigned and ascertained cost.

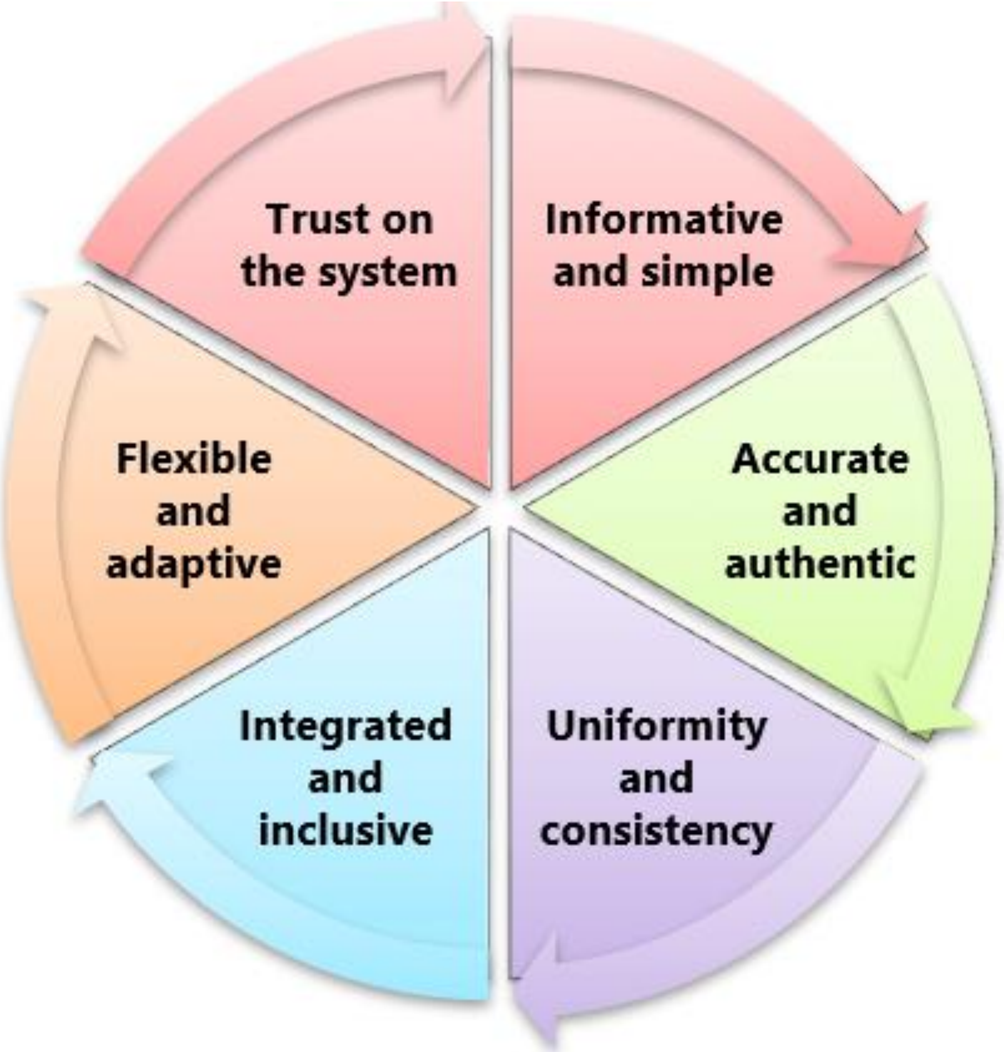
Provision of relevant information to the management for decision making.

To gather data like time taken, wastages, process idleness etc., analyse the data, prepare reports and take necessary actions

USERS OF COST AND MANAGEMENT ACCOUNTING

- **Internal users**
  - Managers
  - Operational level staffs
  - Employees
- **External users**
  - Regulatory Authorities
  - Auditors
  - Shareholders
  - Creditors and Lenders

ESSENTIALS OF A GOOD COST ACCOUNTING SYSTEM



COST ACCOUNTING USING IT

Enterprise Resource Planning (ERP)

Internet (including intranet and extranet)

Cost Accounting Using IT

Paperless Environment

Just-in-Time (JIT)

COST OBJECTS

Cost Object: Cost object is anything for which a separate measurement of cost is required. Cost object may be a product, a service, a project, a customer, a brand category etc.

Cost Units: It is a unit of product, service or time (or combination of these) in relation to which costs may be ascertained or expressed.

Cost Drivers: A Cost driver is a factor or variable which effect level of cost.

Examples of cost objects are:

Product	Smart phone, Tablet computer, SUV Car, Book etc.
Service	An airline flight from Delhi to Mumbai, Concurrent audit assignment, Utility bill payment facility etc.
Project	Metro Rail project, Road projects etc.
Activity	Quality inspection of materials, Placing of orders etc.
Process	Refinement of crudes in oil refineries, melting of billets or ingots in rolling mills etc.

Examples of cost unit:

Industry Sector	Cost unit
Brewing	Barrel
Brick-making	1,000 bricks
Coal mining	Tonne/ton
Electricity	Kilowatt-hour (kWh)
Engineering	Contract, job
Oil	Barrel, tonne, litre
Hotel/Catering	Room/meal

RESPONSIBILITY CENTRES

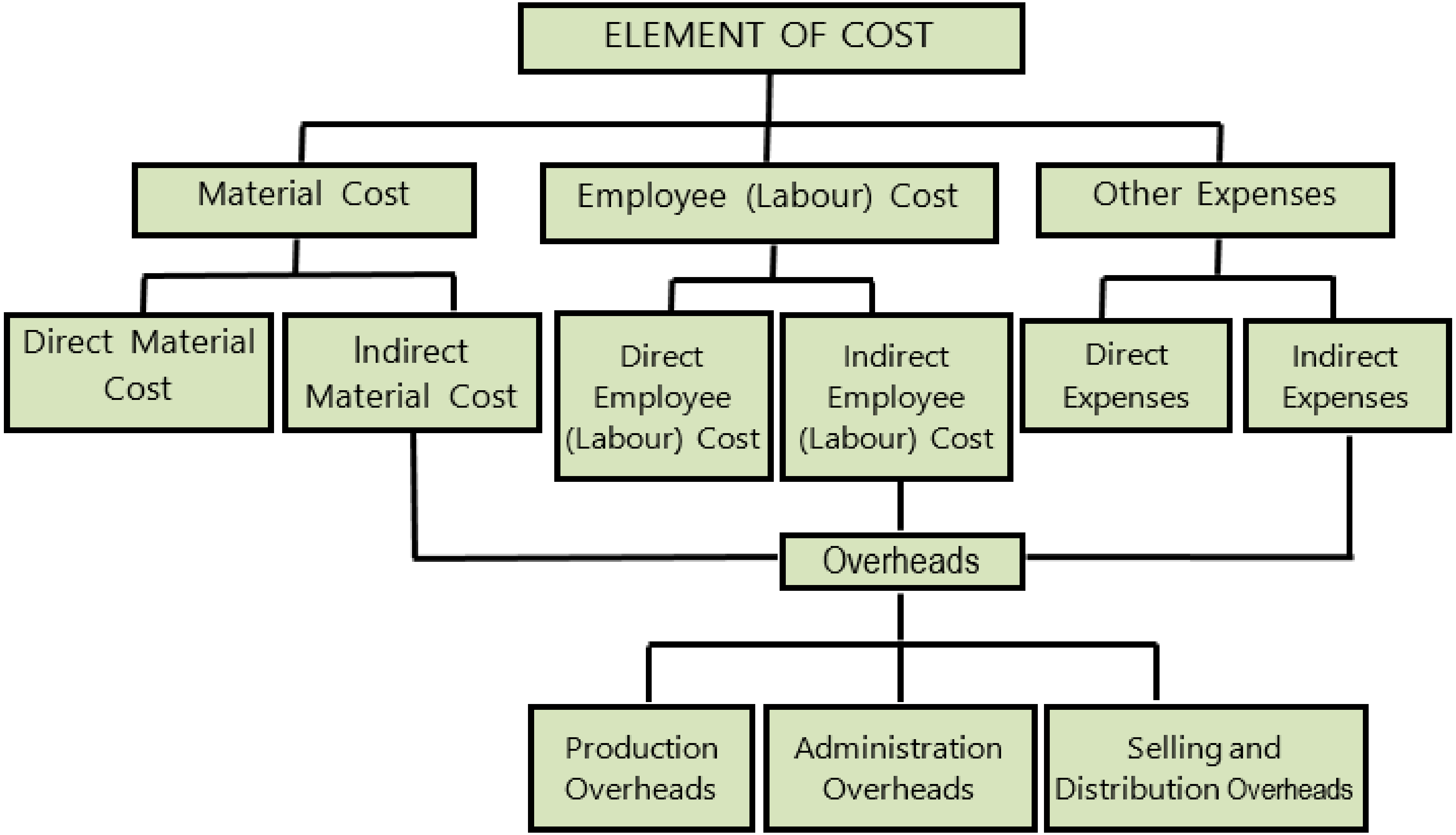
Types of responsibility centres

- **Cost Centres**
  - **Standard Cost Centre** — *output is measurable and input required for the output can be specified*
  - **Discretionary Cost Centre** — *input-output ratio cannot be defined*; *Advertisement department*
- **Revenue Centres** — *Sales Department*
- **Profit Centres** — *decentralised branches*
- **Investment Centres** — Maharatna, Navratna

Classification of Costs

- **By Nature or Element**
  - Direct Materials
  - Direct Labour
  - Direct Expenses
  - Indirect Materials
  - Indirect Labour
  - Indirect Expenses
  - Overheads
- **By Functions**
  - Direct Material Cost
  - Direct Employee (labour) Cost
  - Direct Expenses
  - Production/ Manufacturing Overheads
  - Administration Overheads
  - Selling Overheads
  - Distribution Overheads
  - Research and Development costs etc.
- **By Variability or Behaviour**
  - Fixed Cost
  - Variable Cost
  - Semi-variable Cost
- **By Controllability**
  - Controllable Cost
  - Uncontrollable Cost
- **By Normality**
  - Normal Cost
  - Abnormal Cost
- **By Costs for Managerial Decision Making**

By Nature or Element



By Functions

Direct Materials Direct Employees (Labours) Direct Expenses		**Prime Cost**
Indirect Material	Factory Overheads	**Factory Cost or Works Cost**
Indirect Labour	Administration Overheads	**Cost of Goods Sold**
Indirect Expenses	Selling and Distribution Overheads	**Cost of Sales**

SEGREGATION OF SEMI-VARIABLE COSTS

The segregation of semi-variable costs into fixed and variable costs can be carried out by using the following methods:

(a) Graphical method
(b) High-Low method
(c) Analytical method
(d) Comparison by period or level of activity method
(e) Least squares method

ILLUSTRATION 1: (Segregation of fixed cost and variable cost)

	Sales value	Total cost
	(₹)	(₹)
At the Highest volume	1,40,000	72,000
At the Lowest volume	80,000	60,000
	60,000	12,000

Thus, Variable Cost (₹ 12,000/₹ 60,000)

= 1/5 or 20% of sales value = ₹ 28,000 (at highest volume)

Fixed Cost ₹ 72,000 – ₹ 28,000 i.e., (20% of ₹ 1,40,000) = ₹ 44,000.

Alternatively, ₹ 60,000 – ₹ 16,000 (20% of ₹ 80,000) = ₹ 44,000.

ILLUSTRATION 2: (Segregation of fixed cost and variable cost)

Suppose last month the total semi-variable expenses amounted to ₹ 3,000.

If the degree of variability is assumed to be 70%, then variable cost = 70% of ₹ 3,000 = ₹ 2,100.

Fixed cost = ₹ 3,000 – ₹ 2,100 = ₹ 900.

Now in the future months, the fixed cost will remain constant, but the variable cost will vary according to the change in production volume.

Thus, if in the next month production increases by 50%, the total semi-variable expenses will be:

Fixed cost of ₹ 900, plus variable cost viz., ₹ 3,150 i.e., (₹ 2,100 (V.C.) plus 50% increase of V.C. i.e., ₹ 1,050) =, ₹ 4,050.

ILLUSTRATION 3: (Segregation of fixed cost and variable cost)

	Level of activity	
Capacity %	60%	80%
Volume (Labour hours) or 'x'	150	200
Semi-variable expenses (maintenance of plant) or 'y'	₹ 1,200	₹ 1,275

Substituting the values of 'x' and 'y' in the equation, y = mx + c, at both the levels of activity, we get

$$1,200 = 150\ m + c$$

$$1,275 = 200\ m + c$$

On solving the above equations, we get the value of 'c'

Fixed cost or 'c' = ₹ 975 and Variable cost or 'm' = ₹ 1.50 per labour hour.

By Costs for Managerial Decision Making

(a) Pre determined Cost	• A cost which is computed in advance before production or operations start.
(b) Standard Cost	• A pre-determined cost, which is calculated from managements 'expected standard of efficient operation' and the relevant necessary expenditure
(c) Marginal Cost	• 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
(d) Estimated Cost	• The expected cost of manufacture, or acquisition, often in terms of a unit of product computed on the basis of information available in advance of actual production or purchase"
(e) Differential Cost	• It represents the change (increase or decrease) in total cost (variable as well as fixed) due to change in activity level, technology, process or method of production, etc.

(f) Imputed Costs	• These costs are notional costs which do not involve any cash outlay
(g) Capitalised Costs	• These are costs which are initially recorded as assets and subsequently treated as expenses.
(h) Product Costs	• These are the costs which are associated with the purchase and sale of goods (in the case of merchandise inventory).
(i) Opportunity Cost	• This cost refers to the value of sacrifice made or benefit of opportunity foregone in accepting an alternative course of action
(j) Out-of-pocket Cost	• It is that portion of total cost, which involves cash outflow

(k) Shut down Costs

- Those costs, which continue to be, incurred even when a plant is temporarily shut-down *e.g.* rent, rates, depreciation, etc

(l) Sunk Costs

- Historical costs incurred in the past are known as sunk costs. They play no role in decision making in the current period.

(m) Absolute Cost

- These costs refer to the cost of any product, process or unit in its totality.

(n) Discretionary Costs

- Such costs are not tied to a clear cause and effect relationship between inputs and outputs.

(o) Period Costs

- These are the costs, which are not assigned to the products but are charged as expenses against the revenue of the period in which they are incurred.

(p) Engineered Costs

- These are costs that result specifically from a clear cause and effect relationship between inputs and outputs

(q) Explicit Costs

- These costs are also known as out of pocket costs and refer to costs involving immediate payment of cash. Salaries, wages, postage and telegram, printing and stationery, interest on loan etc.

(r) Implicit Costs

- These costs do not involve any immediate cash payment

METHODS OF COSTING

- Single or Output Costing
- Batch Costing
- Job Costing
- Contract Costing
- Process Costing
- Operating Costing
- Multiple Costing

State the method of costing and the suggestive unit of cost for the following industries

(a) Transport (b) Power
(c) Hotel (d) Hospital
(e) Steel (f) Coal
(g) Bicycles (h) Bridge Construction
(i) Interior Decoration (j) Advertising
(k) Furniture (l) Brick-works
(m) Oil refining mill (n) Sugar company having its own sugarcane fields
(o) Toy making (p) Cement
(q) Radio assembling (r) Ship building

	Industry	Method of Costing	Suggestive Unit of Cost
(a)	Transport	Operating Costing	Passenger k.m. or tonne k.m.
(b)	Power	Operating Costing	Kilo-watt (kw) hours
(c)	Hotel	Operating Costing	Room day
(d)	Hospital	Operating Costing	Patient-day
(e)	Steel	Process Costing/ Single Costing	Tonne
(f)	Coal	Single Costing	Tonne
(g)	Bicycles	Multiple Costing	Number
(h)	Bridge Construction	Contract Costing	Project/ Unit
(i)	Interior Decoration	Job Costing	Assignment
(j)	Advertising	Job Costing	Assignment
(k)	Furniture	Job Costing	Number
(l)	Brick Works	Single Costing	1000 units/ units
(m)	Oil refining mill	Process Costing	Barrel/ Tonne/ Litre
(n)	Sugar company having its own sugarcane field	Process Costing	Tonne
(o)	Toy Making	Batch Costing	Units
(p)	Cement	Single Costing	Tonne/ per bag
(q)	Radio assembling	Multiple Costing	Units
(r)	Ship Building	Contract Costing	Project/ Unit

State the types of cost in the following cases

(i)Interest paid on own capital not involving any cash outflow.
(ii) Withdrawing money from bank deposit for the purpose of purchasing new machine for expansion purpose.
(iii) Rent paid for the factory building which is temporarily closed
(iv) Cost associated with the acquisition and conversion of material into finished product.

Type of costs

(i) Imputed Cost

(ii) Opportunity Cost

(iii) Shut Down Cost

(iv) Product Cost

TECHNIQUES OF COSTING

- **Uniform Costing**
- **Marginal Costing**
- **Standard Costing and Variance Analysis**
- **Historical Costing**
- **Absorption Costing**

Please post your Answer

Q1 :What Is the Cost unit of Chemical Industry

Q2 :Give an example of Cost Control technique used in cost accounting.

THANK YOU