MODULE - 6B Elementary Cost Accounting Notes

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BASIC COST CONCEPTS

In the previous lesson you have learnt about cost accounting. If you decide to manufacture say electronic digital meter, you will need raw material, labour and incur other incidental expenses to manufacture. These constitute the cost of manufacturing. You will incur expenses till your products are sold. You need to learn the concept of cost, its elements and types etc. so that you can better learn the accounting of costs. In this lesson you will learn about the basic cost concepts.



After studying this lesson, you will be able to:

- state the meaning of cost;
- explain the elements of cost;
- state the meaning of overheads;
- explain the classification of cost.

28.1 COST: MEANING AND ITS ELEMENTS

The term 'cost' means the amount of expenses [actual or notional] incurred on or attributable to specified thing or activity.

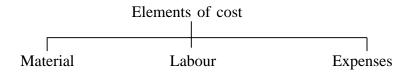
As per Institute of cost and work accounts (ICWA) India, Cost is 'measurement in monetary terms of the amount of resources used for the purpose of production of goods or rendering services.

To get the results we make efforts. Efforts constitute cost of getting the results. It can be expressed in terms of money; it means the amount of expenses incurred on or attributable to some specific thing or activity. The

term cost is used in this very form. In reference to production/manufacturing of goods and services cost refers to sum total of the value of resources used like raw material and labour and expenses incurred in producing or manufacturing of given quantity.

Elements of cost

Cost of production/manufacturing consists of various expenses incurred on production/manufacturing of goods or services. These are the elements of cost which can be divided into three groups: Material, Labour and Expenses.



Material

To produce or manufacture material is required. For example to manufacture shirts cloth is required and to produce flour wheat is required.

All material which becomes an integral part of finished product and which can be conveniently assigned to specific physical unit is termed as "Direct Material". It is also described as raw material, process material, prime material, production material, stores material, etc. The substance from which the product is made is known as material. It may be in a raw or manufactured state. Material is classified into two categories:

- Direct Material
- **Indirect Material**

Direct material

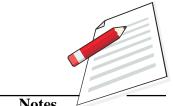
Direct Material is that material which can be easily identified and related with specific product, job, and process. Timber is a raw material for making furniture, cloth for making garments, sugarcane for making sugar, and Gold/ silver for making jewellery, etc are some examples of direct material.

• Indirect material

Indirect Material is that material which cannot be easily and conveniently identified and related with a particular product, job, process, and activity. Consumable stores, oil and waste, printing and stationery etc, are some examples of indirect material. Indirect materials are used in the factory, the office, or the selling and distribution department.

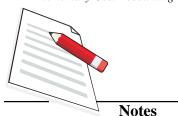
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Labour

Labour is the main factor of production. For conversion of raw material into finished goods, human resource is needed, and such human resource is termed as labour. Labour cost is the main element of cost in a product or service. Labour can be classified into two categories:

- Direct Labour, and
- Indirect labour

• Direct labour

Labour which takes active and direct part in the production of a commodity. Direct labour is that labour which can be easily identified and related with specific product, job, process, and activity. Direct labour cost is easily traceable to specific products. Direct labour costs are specially and conveniently traceable to specific products. Direct labour varies directly with the volume of output. Direct labour is also known as process labour, productive labour, operating labour, direct wages, manufacturing wages, etc. Cost of wages paid to carpenter for making furniture, cost of a tailor in producing readymade garments, cost of washer in dry cleaning unit are some examples of direct labour.

• Indirect labour

Indirect labour is that labour which can not be easily identified and related with specific product, job, process, and activity. It includes all labour not directly engaged in converting raw material into finished product. It may or may not vary directly with the volume of output. Labour employed for the purpose of carrying out tasks incidental to goods or services provided is indirect labour. Indirect labour is used in the factory, the office, or the selling and distribution department. Wages of store-keepers, time-keepers, salary of works manager, salary of salesmen, etc, are all examples of indirect labour cost.

Expenses

All cost incurred in the production of finished goods other than material cost and labour cost are termed as expenses. Expenses are classified into two categories:

Direct expenses, and

Indirect expenses (An item of overheads)

Direct expenses

These are expenses which are directly, easily, and wholly allocated to specific cost center or cost units. All direct cost other than direct material and direct labour are termed as direct expenses.

Direct expenses are also termed as chargeable expenses. Some examples of the direct expenses are hire of special machinery, cost of special designs, moulds or patterns, feed paid to architects, surveyors and other consultants, inward carriage and freight charges on special material, Cost of patents and royalties.

- 1. Cost center means a location, person, or item of equipment or group of these for which costs may be ascertained and used for the purpose of cost control.
- 2. Cost object is anything for which a separate measurement of cost is desired. It may be a product, service, project, or a customer.

Indirect expenses

These expenses cannot be directly, easily, and wholly allocated to specific cost center or cost units. All indirect costs other than indirect material and indirect labour are termed as indirect expenses. Thus,

Indirect Expenses = Indirect cost - Indirect material - Indirect labour.

Indirect expenses are treated as part of overheads. Rent, rates and taxes of building, repair, insurance and depreciation on fixed assets, etc, are some examples of indirect expenses.



INTEXT QUESTIONS 28.1

Following are the features of the various elements of cost. Write the name of the element against each statements:

(i)	A substance	from	which	product is	made [

- (ii) material which can be identified and related with specific product.
- (iii) labour which takes active and direct part in the production of the commodity.
- (iv) expenses that are directly and wholly allocated to specific cost centre

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Basic Cost Concepts

28.2 OVERHEADS: MEANING

The term overhead has a wider meaning than the term indirect expenses. Overheads include the cost of indirect material, indirect labour and indirect expenses. This is the aggregate sum of indirect material, indirect labour and indirect expenses.

Overhead = Indirect material + Indirect labour + Indirect expenses

Overheads are classified into following three categories:

- Factory/works/ production overheads
- Office and administrative overheads
- Selling and distribution overheads

Factory/works overheads

All indirect costs incurred in the factory for production of goods is termed as factory/works overheads. Such costs are concerned with the running of the factory or plant. These include indirect material, indirect labour and indirect expenses incurred in the factory. Some examples are as follows:

Indirect materials:

- (i) Grease, oil, lubricants, cotton waste etc.
- (ii) Small tools, brushes for sweeping, sundry supplies etc.
- (iii) Cost of threads, gum, nails, etc.
- (iv) Consumable stores
- (v) Factory printing and stationery

Indirect wages

- (i) Salary of factory manager, foremen, supervisors, clerks etc.
- (ii) Salary of storekeeper
- (iii) Salary and fee of factory directors and technical directors
- (iv) Contribution to ESI, PF., Leave pay etc. of factory employee.

Indirect expenses

(i) Rent of factory buildings and land

- (ii) Insurance of factory building, plant, and machinery
- (iii) Municipal taxes of factory building
- (iv) Depreciation of factory building, plant and machinery, and their repairs and maintenance charges
- (v) Power and fuel used in factory
- (vi) Factory telephone expenses.

• Office and administrative overheads

These expenses are related to the management and administration of the business. They are incurred for the direction and control of an undertaking. These represent the aggregate of the cost of indirect material, indirect labour, and indirect expenses incurred by the office and administration department of an organisation. Some examples are as follows:

Office printing and stationery, Cost of brushes, dusters etc. for cleaning office building and equipments, Postage and stamps. Salary of office manager, clerks, and other employees, Salary of administrative directors, Salaries of legal adviser, Salaries of cost accountants and financial accountants, Salary of computer operator. Rent, insurance, rates and taxes of office building, Office lighting, heating and cleaning, Depreciation and repair of office building, furniture, and Equipment etc., Legal charges, Bank charges, Trade subscriptions, Telephone charges, Audit fee etc.

Selling and distribution overheads

Selling and distribution overheads are incurred for the marketing of a commodity, for securing order for the articles, dispatching goods sold or for making efforts to find and retain customers. These expenses represent the aggregate of indirect material, indirect labour, and indirect expenses incurred by the selling and distribution department of the organisation. These overheads have two aspects (i) procuring orders (ii) executing the order. Based upon this concept the selling and distributions are studied separately.

I. Selling overheads

Indirect costs incurred in relation to the procurement of sale orders are termed as selling overheads. Some of the examples of selling overheads are as follows:

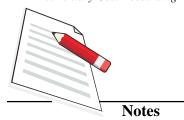
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Indirect material

- (i) Catalogues, price list (ii) Printing and stationery
- (iii) Postage and stamps (iv) cost of sample

Indirect wages

- (i) Salaries of sales managers, clerks and other employees
- (ii) Salaries and commission of salesmen and technical representatives
- (iii) Fees of sales directors

Indirect expenses

- (i) Advertising
- (ii) Bad debts
- (iii) Rent and insurance of showroom
- (iv) Legal charges incurred for recovery of debts
- (v) Travelling and entertainment expenses
- (vi) Expenses of sending samples
- (vii) Market research expenses.

II. Distribution overheads

Indirect costs incurred in relation to the execution of the sales order is termed as distribution overheads. Some of the examples of distribution overheads are as follows:

Indirect material

- (i) Cost of packing material
- (ii) oil, grease, spare parts etc. for maintaining delivery vans

Indirect wages

- (i) Salaries of godown employees
- (ii) Wages of drivers of delivery vans
- (iii) Wages of packers and dispatch staff.

Indirect expenses

- (i) Packing expenses
- (ii) Godown rent, insurance, depreciation, and repair etc.
- (iii) Freight carriage outwards and other transport charges.
- (iv) Running expenses of delivery vans, repair, and depreciation.
- (v) Insurance in transit etc.



INTEXT QUESTIONS 28.2

Complete the equation I.

Overhead = Indirect material + +

- II. Classify the following items into factory, office and administration and selling and distribution overheads:
 - 1. Packing expenses
- 6. Consumable stores
- Advertising
- 7. Cost of normal idle time
- Audit fees 3.
- 8. Travelling and entertainment expenses
- 4.
 - Salary of storekeeper 9. Postage and stamps
- 5. cost of sample
- 10. Market research expenses.

28.3 CLASSIFICATION OF COST

Costs are classified into following categories:

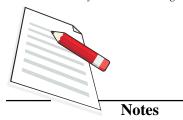
- 1. Cost behavior basis
 - (a) Fixed Cost
 - (b) Variable cost
 - (c) Semi-variable cost
- 2. Cost inventory basis
 - Product cost and
 - (b) Period cost

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3. Cost Relation to Cost Centre basis

- (a) Direct and
- (b) Indirect costs

1. Cost behavior basis

(a) Fixed Cost

A cost that remains constant within a given period of time and range of activity in spite of fluctuations in production. Per unit fixed cost varies with the change in the volume of production. If the production increases, fixed cost per unit decreases and as there is decrease in production, the fixed cost per unit increases. Rent and insurance of building, depreciation on plant and machinery, salary of employees etc., are some examples of fixed costs.

Fixed Cost, Total same but per unit goes on changing.

Table 28.1 Regarding total fixed cost and fixed cost per unit.

Output [units]	Total fixed cost [Rs.] 2	Fixed cost per unit [Rs] 3
0	10,000	10,000
100	10,000	100
1,000	10,000	10
2,000	10,000	5
5,000	10,000	2
10,000	10,000	1

The total fixed cost given in the table is shown on graph paper as follows:

Fig. 28.1 Showing total fixed cost.

Thus, the fixed cost per unit decreases as the total number of output units increase.

(b) Variable cost

Variable costs are those cost which vary directly in proportion to change in volume of production/output. The cost which increases or decreases in the same proportion in which the units produced is termed as variable cost. Direct material, direct labour, direct expenses, variable overheads are some examples of variable cost.

Variable costs, per unit same but total goes on fluctuating depending upon volume of production/level of activity.

Table 28.2: Regarding total variable and variable cost per unit

Output [units]	Total variable cost [Rs] 2	variable cost per unit [Rs.]
0	0	0
100	1000	10
1,000	10000	10
2,000	20000	10
5,000	50000	10
10,000	100000	10

The Variable cost given in the table is shown on graph paper as follows:

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Fig. 28.2 Showing variable cost

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Thus, the variable cost per unit same and doses not change if the total number of output units increases.

(c) Semi-variable cost

A cost contains both fixed and variable component and which is thus partly affected by fluctuations in the level of activity. Semi-variable costs is that cost of which some part remains fixed at the given level of production and other part varies with the change in the volume of production but not in the same proportion of change in production. For example, expenses may not change if output is upto 50% capacity but may increase by 5% for every 20% increase in output over 50% but up to 70%. For example, Telephone expenses of which rent portion is fixed and call charges are variable. The figure 28.3 gives an idea of semivariable cost.

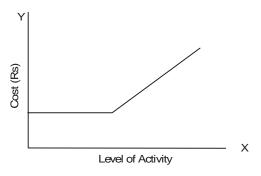


Fig. 28.3

Segregation of semi-variable cost

Semi-variable costs are segregated into fixed and variable cost by using the following formula:

Semi-variable cost = Fixed cost + variable cost Variable cost per unit = change in cost/change in output

For example, if the cost of production of 2000 units is Rs.26,000 and 25000 units is Rs.30,000

Variable cost per unit = (30000 - 26000)/(2500 - 2000)= 4000/500= Rs.8 per unit.

Verification:

Variable cost of 2000 units $= 2000 \times 8 = \text{Rs. } 16,000$

Fixed cost = Total cost- variable cost

= Rs.26,000-Rs. 16,000

= Rs.10,000

Alternatively:

Variable cost of 2500 units = $2500 \times 8 = Rs.20,000$

Fixed cost = Total cost - variable cost

= Rs.30,000 - Rs.20,000

= Rs.10,000

The fixed cost shown on graph paper is as follows:

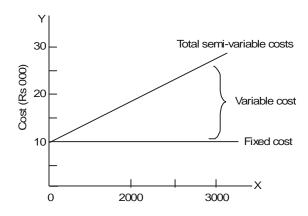


Fig. 28.3

For example,

Semi variable cost Rs.150000 are constant upto 70 % capacity [7,000 units] But increase by 10% over 70 % but upto 80% and then increase by 20% over 80% but upto 100% capacity.

Capacity	Output[units]Total	semi-variable cost (Rs.)	Semi-variable cost per unit (Rs.)
	1.	2	3
50%	5000	1,50,000	30.00
60%	6000	1,50,000	25.00
70%	7000	1,50,000	21.43
80%	8000	1,65,000	20.62
90%	9000	1,95,000	21.67
100%	10000	1,95,000	19.50

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2. Costs by inventory: Product cost and period cost

Product costs are those cost which are charged and identified with the product and included in stock value. In other words, the costs that are the cost of manufacturing a product are called product cost. Product cost includes direct material, direct labour, direct expenses, and manufacturing overheads.

Period costs are those costs which are not charged to products but are written off as expenses against revenue of the period during which these are incurred. They are not transferred as a part of value of stock to the next accounting year. They are charged against the revenue of the relevant period. Period costs include all fixed costs and total administration, selling and distribution costs.

3. Cost Relation to Cost Centre: Direct and Indirect costs

All costs are subdivided into direct and indirect costs. The concept of direct and indirect cost is of basic importance in costing. Costs which are easily and directly allocated to products or units are termed as direct cost. Direct costs include all traceable costs. In the process of manufacturing of a product, materials are purchased, wages are paid to labour, and certain other expenses are also incurred directly. All these expenses are called as direct costs.

The expenses incurred on those items which are not directly charged to a single product because they are incurred for many products are termed as indirect Costs. The example of indirect costs are Oil and scrap materials, [indirect materials], salary of factory supervisors [indirect labour],rent rates and depreciation [indirect expenses]. Indirect costs, often referred to as overheads have to be apportioned to different products on suitable criterion/criteria.



INTEXT QUESTIONS 28.3

Fill in the blanks with suitable correct word/words:

- (i) Fixed costs are those cost which tend to be at any volume of production output
- (ii) Variable costs are those cost which vary in to change in volume of production/output.
- (iii)costs are those cost of which some portion remains fixed at the given level of production.

- (iv) The costs that are the cost of a product are called product cost.
- (v) Period costs are charged against the of the relevant period.
- (vi) The concept of and cost is of basic importance in costing.



WHAT YOU HAVE LEARNT

- The term 'cost' means the amount of expenses [actual or notional] incurred on or attributable to specified thing or activity.
- Elements of cost are divided into three groups: Material, Labour, and Expenses.
- The term overhead has a wider meaning than the term indirect expenses. Overheads include the cost of indirect material, indirect labour and indirect expenses. Overheads are classified into following three categories:
 - 1. Factory/works/production overheads
 - 2. Office and administrative overheads
 - 3. Selling and distribution overheads
- Costs are classified into following categories:
 - 1. Cost behavior basis
 - (a) Fixed Costs
 - (b) Variable costs
 - (c) Semi-variable costs
 - 2. Cost inventory basis
 - (a) Product costs and period costs
 - 3. Cost Relation to Cost Centre basis
 - (a) Direct and indirect costs

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Basic Cost Concepts



- 1. State the meaning of Cost. Explain the various elements of cost.
- 2. State the meaning of overheads.
- 3. Explain the classification of overheads.
- 4. Classify the cost into various categories.
- 5. Differentiate between Product costs and period costs.
- 6. Explain the fixed cost with suitable example.



ANSWERS TO INTEXT OUESTIONS

Intext Question 28.1

- (i) Material, labour, Expense
- (ii) Direct material

(iii) Direct labour

(iv) Direct expenses

Intext Question 28.2

- I. Factory overheads: 4, 6.7
- II. Office and Administra

Selling and Distributi

verheads: 3, 9

rheads: 1, 2, 5, 8, 10.

Intext Question 28.3

(i) constant,

(ii) proportion,

(iii) Semi-variable,

(iv) manufacturing/work

(v) revenue,

(vi) direct, indirect



Do you know?

What is substance abuse?

Substance abuse is 'the use of illicit drugs or the abuse of prescription or over the counter drugs for purposes other than those for which they are indicated or in a manner or in quantities other than directed.

Alcohol, prescription and over-the-counter medicines, inhalants and solvents, and even coffee and cigarettes can be used to harmful excess. Theoretically, almost any substance can be abused.