

2

Elements of Cost

Analysis of total cost; Elements of total cost.

2.1 ANALYSIS OF TOTAL COST

Total cost of a product is an important element for any business. The performance of an organization depends on proper understanding of this total cost. The value of the product depends on that. If it is understood properly one can take necessary steps to work in such a way that unnecessary elements do not enter and vitiate the total cost of the product. That is why, how the total cost is built up should be the starting point in the study of cost. The following indicates the various elements of cost and their nomenclatures.

Table 2.1 Details of total cost

Direct Material	
Direct Labour	
Direct Expenses	
Prime Cost	
Production/Manufacturing Overhead	
Production Cost/Factory Cost	
Administrative Overhead	
Works Cost	
Selling Overhead	
Distribution Overhead	
Total Cost	

In order to understand clearly, each element of total cost is elaborated as follows.

2.1.1 Direct Material

It is essential to have clear knowledge of direct material. Materials having direct relationship with the number of production should be regarded as direct materials.

8 *Cost Engineering*

The total of three elements above is called overhead. When this happens to be in the production area, it is called Production Overhead/Manufacturing Overhead. It is essential to clarify the different elements.

2.1.6 Indirect Materials

There are a number of materials required to manufacture a product. If the product is manufactured, then it requires machines and to run a machine materials like lubricant oil, grease, spares of the machines and equipment are required. Any of these items costs cannot be ascertained to any particular product and hence considered a part of overhead. Similarly, all the operators require gloves for safety of operation. Operator uses the same for producing a number of different products and cannot be attached with any particular product. Hence, its cost is also a overhead. The following list may help the readers to have better understanding this element of overhead:

1. Consumables like lubricants, grease, and oil for running of machines.
2. Materials, spare parts for repair and maintenance.
3. Tools, dies.
4. Work stationery, hand gloves, soaps.

2.1.7 Indirect Labour

There are some employees who are responsible for production but they may not be for any particular product. As an example, an unskilled worker who is responsible to feed different machines which is manufacturing different products. Their cost is called indirect labour. The foreman and other management personnel are deputed to supervising not only one product but for many more. The cost of them is also considered indirect labour.

2.1.8 Indirect Expenses

There are certain expenses which are also responsible for manufacturing a product. These expenses are known as indirect expenses. As an example, the expenses for rent and freight are one of them. In order to have better idea about these indirect expenses, consider the following examples:

1. Rent and freight
2. Travelling expenses
3. Electricity charges
4. Interest
5. Insurance
6. Canteen expenses
7. Repair and maintenance of plants, building
8. Taxes
9. Medical expenses
10. Store expenses

2.1.9 Production/Manufacturing Cost

The production/manufacturing cost may be defined as the summation of prime cost and production/manufacturing overhead. This may be thought of as the cost of the product at the action area.

2.1.10 Administrative Overhead

Administration is an important aspect for manufacturing a product and it has some costs. This cost has also to be ascertained and is an element of total cost. This cost also includes indirect material, indirect labour and indirect expenses. The following examples provide some input for better understanding.

- **Indirect Material:** Furniture, stationery, postages, books and periodicals, stamps for legal documents, computers, etc.
- **Indirect Labour:** Salary of staff and executives, retirement benefits to executives and staff, perquisite to executives, etc.
- **Indirect Expenses:** Bank charges, hiring charges, telephone expenses, repair and maintenance of office building, rent, rates and taxes, etc.

2.1.11 Works Cost

The summation of production/manufacturing cost and administrative overhead is known as works cost.

2.1.12 Selling Overhead

To produce a good product is not the only objective of any enterprise. The product should be sold to customers also. All expenses required to sell the product is called selling overhead, because it cannot be ascertained to any particular product of the enterprise. The following examples clarify the knowledge regarding selling overhead.

- **Indirect Material:** Furniture, stationery, computers and accessories, postages, etc.
- **Indirect Labour:** Salary of executives, retirement benefits to executives and staff, perquisites to executives, salary of salesmen and sales office staff, etc.
- **Indirect Expenses:** Advertisement, travelling allowances, commission of salesmen, market research; royalty on sales, etc.

2.1.13 Distribution Overhead

The final element of total cost is distribution overhead. The examples will clarify this element.

- **Indirect Material:** Cartons, paper bag, wooden cases, crates, cylinders, waxed paper, corrugated paper, computer and accessories, etc.

Contd...

Prime Cost	1115.00	11.15
Production overhead	$1.50 \times 335.00 = 502.50$	5.03
Administrative overhead	$3.50 \times 335.00 = 1172.50$	11.73
Sales and distribution overhead	$1.25 \times 1115.00 = 1393.75$	13.94
Total Cost	4183.75	41.84
Profit	738.31	7.38
Sale Price	4922.06	49.22

Ans Product Cost is ₹41.84; Sales Price is 49.22 and Profit is 7.38

Note: Cost + Profit = Price; Cost + $0.15 \times$ Sale Price = Sale Price; $4183.75 = 0.85 \times$ Sale price

Sale Price = $4183.75 / 0.85 = 4922.06$ and Profit = $0.15 \times 4922.06 = 738.31$

Objective Type Questions

- Pin point the administrative overhead
 - Warehouse rent
 - Market research
 - Depreciation of machines
 - Materials used
- One of the items is selling overhead
 - Fuel and power
 - Royalty on sales
 - Maintenance of material handling equipment
 - Stamps for legal documents
- Find out the administrative overhead
 - Insurance of finished goods
 - Convertible materials
 - Cost of carton
 - None of the above.
- Find out prime cost element
 - Wages of the operators of machines
 - Rents
 - Depreciation of machines
 - Cost of cylinders
- Find out the distribution overhead
 - Repairs of building
 - Bank charges
 - Warehouse rent
 - Training expenses

Answers

1. (c) 2. (b) 3. (d) 4. (a) 5. (c)

Contd...

Indirect material		
	Production overhead	
	Production cost	
Office salaries		
Bank charges		
Repairs of building		
	Administrative overhead	
	Works cost	
Travellers' commission		
	Sales and distribution overhead	
	Total cost	