

## **ABSORPTION COSTING**

Q. 1. ABC Ltd. manufactures a single product and absorbs the production overheads at a predetermined rate of ₹10 per machine hour.

At the end of financial year 2014-15, it has been found that actual production overheads incurred were  $\ref{6,00,000}$ . It included  $\ref{45,000}$  on account of 'written off' obsolete stores and  $\ref{30,000}$  being the wages paid for the strike period under an award :

The production and sales data for the year 2014-15 is as under :

Production:

Finished goods 20,000 units

Work - in - progress 8,000 units

(50% complete in all respects)

Sales:

Finished goods 18,000 units

The actual machine hours worked during the period were 48,000. It has been found that one - third of the under - absorption of production overheads was due to lack of production planning and the rest was attributable to normal increase in costs.

## You are required to:

- (i) Calculate the amount of under absorption of production overheads during the year 2014-15; and
- (ii) Show the accounting treatment of under absorption of production overheads.
- **Q. 2.** SWEAT DREAMS Ltd. uses a historical cost system and absorbs overheads on the basis of predetermined rate. The following data are available for the year ended 31st March, 2015.

|                         | ₹        |
|-------------------------|----------|
| Manufacturing overheads |          |
| Amount actually spent   | 1,70,000 |
| Amount absorbed         | 1,50,000 |
| Cost of goods sold      | 3,36,000 |
| Stock of finished goods | 96,000   |
| Work - in - progress    | 48,000   |

Using two methods of disposal of under - absorbed overheads show the implication on the profits of the company under each method.

Q. 3. E-books is an on-line book retailer. The Company has four departments. The two sales departments are Corporate Sales and Consumer Sales. The two support – departments are Administrative (Human Resources Accounting) and Information Systems each of the sales departments conducts merchandising and marketing operations independently.

The following data are available for October, 2014:

| Departments        | Revenues    | Number of        | Processing   |
|--------------------|-------------|------------------|--------------|
|                    |             | <b>Employees</b> | Time used    |
|                    |             |                  | (in minutes) |
| Corporate Sales    | ₹ 16,67,750 | 42               | 2,400        |
| Consumer Sales     | ₹ 8,33,875  | 28               | 2,000        |
| Administrative     |             | 14               | 400          |
| Information system |             | 21               | 1,400        |

Cost incurred in each of four departments for October, 2014 are as follows:

| Corporate Sales     | ₹ 12,97,751 |
|---------------------|-------------|
| Consumer Sales      | ₹ 6,36,818  |
| Administrative      | ₹ 94,510    |
| Information systems | ₹ 3,04,720  |

The company uses number of employees as a basis to allocate Administrative costs and processing time as a basis to allocate Information systems costs.

## Required:

- (i) Allocate the support department costs to the sales departments using the direct method.
- (ii) Rank the support departments based on percentage of their services rendered to other support departments. Use this ranking to allocate support costs based on the step-down allocation method.
- (iii) How could you have ranked the support departments differently?
- (iv) Allocate the support department costs to two sales departments using the reciprocal allocation method.
- **Q. 4.** A company has three production departments and two service departments. Distribution summary of overheads is as follows:

**Production Departments** 

| ₹ | 13,600 |
|---|--------|
| ₹ | 14,700 |
| ₹ | 12,800 |
|   |        |
| ₹ | 9,000  |
| ₹ | 3,000  |
|   | ₹      |

The expenses of service departments are changed on a percentage basis which is as follows:

|          | Α   | В   | С   | X   | Y   |
|----------|-----|-----|-----|-----|-----|
| X Deptt. | 40% | 30% | 20% |     | 10% |
| Y Deptt. | 30% | 30% | 20% | 20% |     |

Apportion the cost of Service Departments by using the Repeated Distribution method.

Q. 5. A jobbing factory has undertaken to supply, on average, 200 pieces of a component per month for the ensuing six months any surplus to be sold in the normal market at ₹ 8 p.u. Every month a batch order is opened against which materials and labour hours are booked at actuals. Overheads are levied at a rate per labour hour. The selling price contracted for is ₹ 8 per piece. From the following data present the cost and profit per piece of each batch order and overall position of the order for 1,200 pieces.

| Month    | Batch  | Material | Direct | Direct       |
|----------|--------|----------|--------|--------------|
|          | Output | cost     | wages  | labour hours |
|          |        | ₹        | ₹      |              |
| January  | 210    | 650      | 120    | 240          |
| February | 200    | 640      | 140    | 280          |
| March    | 220    | 680      | 150    | 280          |
| April    | 180    | 630      | 140    | 270          |
| May      | 200    | 700      | 150    | 300          |
| June     | 220    | 720      | 160    | 320          |

The other details are:

| Month    | Chargeable expenses | Direct labour |
|----------|---------------------|---------------|
|          | ₹                   | hours         |
| January  | 12,000              | 4,800         |
| February | 10,560              | 4,400         |
| March    | 12,000              | 5,000         |
| April    | 10,580              | 4,600         |
| May      | 13,000              | 5,000         |
| June     | 12,000              | 4,800         |