Paper 8 - Cost Accounting

# **Paper 8- Cost Accounting**

Full Marks: 100 Time allowed: 3 hours

Question No 1 is Compulsory.

Answer any five Questions from the rest.

Working Notes should form part of the answer.

1. (a) Match the statement in Column I with the most appropriate statement in Column II:

 $[1 \times 5 = 5]$ 

| Column I |                                       |                                    | Column II               |  |  |  |
|----------|---------------------------------------|------------------------------------|-------------------------|--|--|--|
| 1.       | Variance Analysis                     | Α.                                 | Master Budget           |  |  |  |
| 2.       | Royalties                             | В.                                 | Income credited only in |  |  |  |
|          |                                       |                                    | cost accounts           |  |  |  |
| 3.       | The summary of all functional budgets | C. Costing profit and loss Account |                         |  |  |  |
| 4.       | Notional rent charged to              | D.                                 | Direct allocation       |  |  |  |
| 5.       | Abnormal loss is transferred to       | E. Management by Exception         |                         |  |  |  |

(b) Choose the correct answer from the given four alternatives:

[1 x10=10]

- (i) What will be the accounting entry for absorption of factory overhead?
  - A. Dr. Works in progress control A/c
    - Cr Factory overhead control A/c
  - B. Dr. Factory overhead
    - Cr. Factory overhead control A/c
  - C. No entry is required
  - D. Dr. Works in progress control A/c
    - Cr Factory overhead control A/c
- (ii) Standard price of material per kg ₹ 20, standards consumption per unit of production is 5 kg. Standard material cost for producing 100 units is
  - A. ₹ 20,000
  - B. ₹12,000
  - C. ₹8,000
  - D. ₹ 10,000
- (iii) Directors remuneration and expenses form a part of
  - A. Production overhead
  - B. Administration overhead
  - C. Selling overhead
  - D. Distribution overhead
- (iv) In which of the following incentive plan of payment, wages on time basis are not guaranteed?
  - A. Halsey plan
  - B. Rowan plan
  - C. Taylor's differential piece rate system

# Postal Test Paper\_P8\_Intermediate\_Syllabus 2016\_Set 4

D. Gantt's task and bonus system

| <ul> <li>(v) Continuous stock taking is a part of</li> <li>A. ABC analysis</li> <li>B. Annual stock taking</li> <li>C. Perpetual Inventory</li> <li>D. None of these</li> </ul>  |                                |
|--|--------------------------------|
| <ul> <li>(vi) In a process 8000 units are introduced during a per Closing work in progress 60% complete is 1000 units are introduced during a per transferred to next process. Equivalent production for A. 9000 units</li> <li>B. 7440 units</li> <li>C. 5400 units</li> <li>D. 7200 units</li> </ul> | nits. 6600 completed units are |
| <ul> <li>(vii) Royalty paid on sales ₹89,000 and Software deventure product is ₹22,000. Calculate Direct Expenses.</li> <li>A. ₹1,11,100</li> <li>B. ₹1,11,000</li> <li>C. ₹1,11,110</li> <li>D. ₹1,10,000</li> </ul>  | elopment charges related to    |
| <ul> <li>(viii) CAS 13 stands for</li> <li>A. Joint Cost</li> <li>B. Interest and financing charges</li> <li>C. Employee Cost</li> <li>D. Cost of Service cost centre</li> </ul>   |                                |
| <ul><li>(ix) Which of the following items is not included in prepar</li><li>A. Carriage inward</li><li>B. Purchase returns</li><li>C. Sales commission</li><li>D. Interest paid</li></ul>  | ation of cost sheet?           |
| <ul><li>(x) Cost Price is not fixed in case of</li><li>A. Cost plus contracts</li><li>B. Escalation clause</li><li>C. De escalation clause</li><li>D. All of the above</li></ul>   |                                |
| (c) Fill in the blanks.  | [1×5 =5]                       |
| (i) Statement of cost per unit of equivalent produc  | tion shows the per unit cost   |
| (ii) Direct Expenses incurred for brought out resources shall  | be determined at               |
| (iii) The product generally has a greater sale (iv) Cost of normal idea time is charged to  (v) The is usually the coordinator of the  |                                |
|  |                                |

# (d) State whether the following statements are TRUE or FALSE.

 $[1 \times 5 = 5]$ 

- (i) Closing stock of work-in-progress should be valued on the basis of prime cost.
- (ii) Marginal Costing follows the behaviors wise classification of costs.
- (iii) Cost control accounts are prepared on the basis of double entry system.
- (iv) Excess of Actual cost over Standards Cost is treated as unfavorable variance.
- (v) Slow moving materials have a high turnover ratio.

### 2. a) Distinguish between fixed budget and flexible budget.

[5]

(b) Calculate the variances from the following:

| STANDARD |               |        |        | ACTUAL |              |        |        |
|----------|---------------|--------|--------|--------|--------------|--------|--------|
| INPUT    | MATERIAL      | (₹)/KG | TOTAL  | INPUT  | MATERIAL     | (₹)/KG | TOTAL  |
| 400      | Α             | @ 50   | 20,000 | 420    | Α            | @ 45   | 18,900 |
| 200      | В             | @ 20   | 4,000  | 240    | В            | @ 25   | 6,000  |
| 100      | С             | @ 15   | 1,500  | 90     | С            | @ 15   | 1,350  |
| 700      |               |        | 25,500 | 750    |              |        | 26,250 |
|          | LABOUR HOURS  |        |        |        | LABOUR HOURS |        |        |
|          | 100 @ ₹ 2 PER | 200    |        |        | 120 @ ₹2.50  | 300    |        |
|          | HOUR          |        |        |        | PER HOUR     |        |        |
|          | 200 woman @   | 300    | 500    |        | 240 woman    | 384    | 684    |
|          | ₹ 1.50        |        |        |        | @ ₹ 1.60     |        |        |
| 25       | Normal loss   |        |        | 75     | Actual loss  |        |        |
| 675      |               |        | 26,000 | 675    |              |        | 26,934 |

[10]

- **3.(a)** Present the following information to show to management:
  - (i) The marginal product cost and the contribution p.u.
  - (ii) The total contribution and profits resulting from each of the following sales mix results.

| Particulars      | Product | Per unit ₹ |
|------------------|---------|------------|
| Direct Materials | A       | 10         |
| Direct Materials | В       | 9          |
| Direct wages     | A       | 3          |
| Direct wages     | В       | 2          |

Fixed Expenses – ₹ 800

(Variable expenses are allotted to products at 100% Direct Wages)

Sales Price ---- A ₹ 20 Sales Price ---- B ₹ 15

Sales Mixtures:

- (a) 100 units of Product A and 200 of B.
- (b) 150 units of Product A and 150 of B.
- (c) 200 units of Product A and 100 of B.

[10]

**(b)** Explain the factors to be considered in preparing Sales Budget.

[5]

**4. (a)** Distinguish between Financial Accounting and Cost accounting.

- [7]
- **(b)** In a tailoring shop the standard output of a tailor making collars of a shirt is 20 units per hour for an 8 hour shift. The output of Tailor X for one week is as under:

| Day       | Units |
|-----------|-------|
| Monday    | 150   |
| Tuesday   | 160   |
| Wednesday | 180   |
| Thursday  | 180   |
| Friday    | 190   |
| Saturday  | 200   |

You are required to calculate the earnings of Tailor X for the week under:

- (i) Halsey Premium Plan with a guaranteed wage rate of ₹10 per hour and a premium of 60% of the time saved over standard.[4]
- (ii) Taylor Differential Rate system with the following rates of payment: ₹ 0.50 per unit at standard and up to 20% over standard, ₹ 0.40 per unit at production below standard and ₹0.60 per unit when daily output exceeds standard by 20%. [4]
- **5. (a)** From the following information, calculate the machine hour rate for recovery of overhead for a drilling machine installed in a machine shop.
  - (i) The machine operates for 8 hours a day and 300 days a year.
  - (ii) 400 hours of machine time in a year is used for repairs and maintenance.
  - (iii) Setting up time of the machine is 200 hours per annum and is to be treated as production time.
  - (iv) Annual cost of repairs and maintenance of the machine is ₹40,000.
  - (v) Power used is 10 units per hour at a cost of ₹ 8 per unit. No power is consumed during repair and setting up time.
  - (vi) A coolant is used to operate the machine at ₹12,000 per annum.
  - (vii) An operator, whose monthly wages is ₹8,000, devotes 75% of his time exclusively to operate the machine.
  - (viii) Depreciation is ₹2,40,000 per annum and insurance is ₹ 25,000 per annum.
  - (ix) Other indirect expenses chargeable to the machine are ₹12,000 per month. [8]
  - (b) PC Company purchases a specialized item and the quantity to be purchased is 2,500 pieces at a price of ₹ 200 per piece. Ordering cost per order is ₹ 200 and carrying cost is 2% per year of the inventory cost. Normal lead time is 20 days and safety stock is nil. Assume yearly working days as 250.
    - (i) Calculate the Economic Ordering Quantity.
    - (ii) Re-order Inventory Level.
    - (iii) If a 2% discount on price is given for order quantity 1,250 pieces or more in a lot, should the company accept the offer of discount? [2+2+3]
  - **6. (a)** A pharmaceutical drug manufacturing company's three products A, B and C emerge at a single split off stage in department P. Product A is further processed in department Q, product B in department R and product A and product C in department S. There is no loss in further Processing of any of the three products. The cost data for a month are as under:

# Postal Test Paper\_P8\_Intermediate\_Syllabus 2016\_Set 4

Cost of raw materials introduced in Department P ₹ 12,68,800

Direct Wages Department P 3,84,000

Q 96,000 R 64,000 S 36,000

Factory overheads of ₹ 4,64,000 are to be apportioned to the departments on direct wage basis.

During the month under reference, the company sold all three products after processing them further as under:

| Products             | Α      | В      | С      |
|----------------------|--------|--------|--------|
| Output sold kg.      | 44,000 | 40,000 | 20,000 |
| Selling price per kg | 32     | 24     | 16     |

There are no Opening or Closing Stocks if these products were sold at the split off stage, that is, without further processing, the selling prices would have been ₹ 20, ₹ 22 and ₹ 10 each per kg respectively for A, B and C.

#### Required:

- (i) Prepare a statement showing the apportionment of joint costs to joint products:
- (ii) Present a statement showing product-wise and total profit for the month under reference as per the company's current processing policy.
- (iii) What processing decision should have been taken to improve the profitability of the company?
- (iv) Calculate the product-wise and total profit arising from your recommendation in (iii) above. [3+3+2+3]
- **(b)** Write a short note on the following, with reference to contract accounting.
  - (i) Surveyor's Certificate and Retention Money
  - (ii) Escalation Clause [2+2]

# 7. (a) X Ltd. provides you the following figures for the year 2015-16:

| Particulars                                       | Amount(₹) |
|---|-----------|
| Direct Material                                   | 3,20,000  |
| Direct Wages                                      | 8,00,000  |
| Production Overheads (25% variable)               | 4,80,000  |
| Administration Overheads (75% Fixed)              | 1,60,000  |
| Selling and Distribution Overheads (2/3 rd Fixed) | 2,40,000  |
| Sales @ ₹ 125 per unit                            | 25,00,000 |

For the year 2016-17, it is estimated that:

- 1. Output and sales quantity will increase by 20% by incurring additional Advertisement Expenses of ₹ 45,200.
- 2. Material prices will go up by 10%
- 3. Wage Rate will go up by 5% along with, increase in overall direct labour efficiency by 12%.
- 4. Variable Overheads will increase by 5%
- 5. Fixed Production Overheads will increase by 33 1/3 %

# Postal Test Paper\_P8\_Intermediate\_Syllabus 2016\_Set 4

# Required:

- a) Calculate the Cost of Sales for the year 2015-16 and 2016-17.
- b) Find out the new selling price for the year 2016-2017.
  - (i) If the same amount of profit is to be earned as in 2015-16.
  - (ii) If the same percentage of profit to sales is to be earned as in 2015-16.
  - (iii) If the existing percentage of profit to sales is to be increased by 25%.
  - (iv) If profit per unit ₹ 10 is to be earned.

[8]

(b) Distinguish between Job Costing and Contract costing.

[7]

# 8. Write Short note on the following (any three)

[3x5=15]

- (a) Advantages of Budgetary Control
- (b) ABC Analysis
- (c) The reasons for difference in profit as per financial accounts and cost accounts
- (d) Essential pre-requisites and advantages of integrated accounting system
- (e) Time and Motion Study