PART - A

ANSWER ALL QUESTIONS  (10 x 2 = 20)

1. Define the term cost centre.
2. How are costs classified on the basis of time?
3. Fixed cost per unit _________________ with increase in output.
4. The quantity of material to be ordered at one time is called ________.
5. Joint costs are allocated according to the __________ value of individual products under the market value method.
6. Define Machine Hour Rate.
7. Dhoni Ltd. produces four products in a manufacturing process. The company produced 10,000 units of A, 20,000 units of B, 15,000 units of C and 25,000 units of D. The cost before split off point for the four products was Rs. 1,40,000. Using the average unit cost method apportion the joint cost among the products.
8. Calculate Material turnover ratio:
   Material in hand on 1.1.2001       Rs. 25,000
   Material in hand on 31.12.2001    Rs. 15,000
   Material purchased during the year Rs. 1,90,000
9. Calculate the Economic Order Quantity:
   Annual usage: Rs. 1,20,000
   Cost of placing and receiving one order: Rs. 60
   Annual carrying cost: 10% of inventory value.
10. Calculate Labour turnover rate by replacement method:
    No of workers at the beginning of the month – 500
    No of workers at the end of the month – 600
    During the month, 5 workers left, 20 persons were discharged and 75 workers were recruited. Of these, 10 workers were recruited in the vacancies of those leaving, while the rest were engaged for an expansion scheme.

PART – B

ANSWER ANY FOUR QUESTIONS  (4 x 10 = 40)

11. Distinguish between job costing and contract costing.
12. Write the meaning of the following terms: (a) EBQ     (b) JIT Approach     (c) Notional Profit    (d) Quotation    (e) Stores Ledger.
13. Explain the merits and demerits of time rate system and piece rate system.

14. The following is the summary of the Trading & Profit & Loss Account of M/s Saina Ltd. for the year ended 31st March, 2001:

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To material consumed</td>
<td>27,40,000</td>
<td>By sales (1,20,000 Units) 60,00,000</td>
</tr>
<tr>
<td>To wages</td>
<td>15,10,000</td>
<td>By finishes stock(4,000 units) 1,60,000</td>
</tr>
<tr>
<td>To factory expenses</td>
<td>8,30,000</td>
<td>By work in progress: Materials 64,000 Wages 36,000 Factory exp 20,000 1,20,000</td>
</tr>
<tr>
<td>To administration expenses</td>
<td>3,82,400</td>
<td>To dividend received 18,000</td>
</tr>
<tr>
<td>To selling &amp; distribution expenses</td>
<td>4,50,000</td>
<td></td>
</tr>
<tr>
<td>To preliminary expenses (written off)</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>To goodwill (written off)</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>To net profit</td>
<td>3,25,600</td>
<td>TOTAL 62,98,000 62,98,000</td>
</tr>
</tbody>
</table>

The company manufactures a standard unit. In cost accounts:

1. Factory expenses have been recovered from production at 20% on prime cost.
2. Administration expenses at Rs. 3 per unit on units produced.
3. Selling and distribution expenses at Rs. 4 per unit on units sold.

You are required to prepare a statement of cost and profit in cost books of the company and to reconcile the profit disclosed with that shown in the Financial accounts.
15. Sania Ltd. has purchased and issued the material ‘M’ in the following order:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Quantity</th>
<th>Unit cost (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Dec</td>
<td>Purchase</td>
<td>300</td>
<td>3</td>
</tr>
<tr>
<td>4th Dec</td>
<td>Purchase</td>
<td>600</td>
<td>4</td>
</tr>
<tr>
<td>6th Dec</td>
<td>Issue</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>10th Dec</td>
<td>Purchase</td>
<td>600</td>
<td>4</td>
</tr>
<tr>
<td>15th Dec</td>
<td>Issue</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>20th Dec</td>
<td>Purchase</td>
<td>400</td>
<td>5</td>
</tr>
<tr>
<td>23rd Dec</td>
<td>Issue</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Which of the methods of pricing issue of materials would you recommend in the above case? Ascertain the quantity of closing stock as on 31st December and state what will be its value (in each case) if issues are made under the (i) method recommended by you and (ii) weighted average method.

16. Mr. Kashyap owns a fleet of taxis and the following information is available from the records maintained by him:

- Number of taxis: 10
- Cost of each taxi: Rs. 54,600
- Salary of the manager: Rs. 700 p.m.
- Salary of the accountant: Rs. 500 p.m.
- Salary of the cleaner: Rs. 200 p.m.
- Salary of the mechanic: Rs. 400 p.m.
- Garage rent: Rs. 600 p.m.
- Insurance premium: 5% p.a.
- Annual tax: Rs. 900 per taxi
- Driver’s salary: Rs. 350 p.m. per taxi
- Annual repairs: Rs. 1,000 per taxi

Total life of a taxi is about 2,00,000 kms. A taxi runs in all 3,000 kms. in a month and 30% of this distance has to be run without passenger. Petrol consumption is one litre for every 10 kms. @ Rs. 4.41 per litre. Oil and other sundries are Rs. 10.50 per 100 kms.

17. From the following particulars work out the earnings for the week of a worker under:

(a) Straight piece rate
(b) Differential piece rate
(c) Halsey premium system
(d) Rowan system

- Number of working hours per week: 48
- Wages per hour: Rs. 3.75
- Rate per piece: Rs. 1.50
- Normal time per piece: 20 minutes
- Normal output per week: 120 pieces
- Actual output per week: 150 pieces
PART – C

ANSWER ANY TWO QUESTIONS: \( (2 \times 20 = 40) \)


19. M/s Gopichand Company under look a contract for erecting sewerage treatment plant for Prosperous Municipality for a total value of Rs. 24,00,000. It was estimated that the job would be completed by 31st January 2001.

You are required to prepare the Contract Account for the year ending 31st January 2001 from the following particulars:

1. Materials Rs. 3,00,000
2. Wages Rs. 6,00,000
3. Overhead charges Rs. 1,20,000
4. Special plant Rs. 2,00,000
5. Work certified was for Rs. 16,00,000 and 80% of the same was received in cash.
6. Material lying on site as on 31.1.2001 Rs. 40,000.
7. Depreciate plant by 10%.
8. 5% of the value of material issued and 6% of wages may be taken to have been incurred for the portion of the work completed, but not yet certified. Overheads are charged as a percentage of direct wages.
9. Ignore depreciation of plant for use on uncertified portion of work.
10. Ascertain the amount to be transferred to Profit and Loss A/c on the basis of realised profit.

20. Sindhu Ltd. has three production departments P1, P2, P3 and two service departments S1 and S2, the details pertaining to which are as under:

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct wages (Rs.)</td>
<td>30,000</td>
<td>20,000</td>
<td>30,000</td>
<td>15,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Working hours</td>
<td>3,070</td>
<td>4,475</td>
<td>2,419</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Value of machine (Rs.)</td>
<td>6,00,000</td>
<td>8,00,000</td>
<td>10,00,000</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>H.P. of machine</td>
<td>60</td>
<td>30</td>
<td>50</td>
<td>10</td>
<td>-</td>
</tr>
</tbody>
</table>
The following figures extracted from the accounting records are relevant:
Rent – Rs. 15,000; General lighting – Rs. 6,600; Indirect wages – Rs. 20,000; Power – Rs. 15,000; Depreciation on machines Rs. 1,00,000; and Sundries – Rs. 10,000.

The expenses of service departments are allocated as under:

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>S2</td>
<td>40%</td>
<td>20%</td>
<td>30%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Find out the works cost of Product ‘X’ which is processed for manufacture in departments P1, P2 and P3 for 4, 5 and 3 hours respectively, given that its direct material is Rs. 500 and direct labour cost is Rs. 430.

21. In respect of a factory the following figures have been obtained for the year 2001:
Cost of material – Rs. 6,00,000; Direct wages – Rs. 5,00,000; Factory overheads – Rs. 3,00,000; Administrative overheads – Rs. 3,36,000; Selling overheads – Rs. 2,24,000; Distribution overheads – Rs. 1,40,000. A work order has been executed in 2002 and the following expenses have been incurred: Materials – Rs. 8,000 and Wages – Rs. 5,000.

Assuming that in 2002 the rate of factory overheads has increased by 20%, distribution overheads have gone down by 10% and selling & administration overheads have each gone up by 12½%, at what price should the product be sold so as to earn the same rate of profit on the selling price as in 2001?