# SECOND SEMESTER M.Com. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, APRIL 2023 

(CBCSS)<br>M.Com.<br>MCM 2C 08—STRATEGIC COST ACCOUNTING

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

## Part A

Answer any four questions. Each question carries 2 weightage.

1. What are the features of marginal costing ?
2. State the objectives of Activity based Costing.
3. What are the steps involved in implementing JIT ?
4. Brief the phases of project life cycle.
5. State the differences between main products and By- products.
6. Define :
a) Waste; and
b) Scrap.
7. Differentiate between throughput costing and absorption costing.
( $4 \times 2=8$ weightage)

## Part B

Answer any four questions.
Each question carries 3 weightage.
8. Briefly explain the different methods of apportionment of joint cost.
9. The Joint Products A, B, C, and D are produced at a total joint production cost of Rs. 1,20,000. Quantities produced are A-20,000 units, B-15,000 units, C $-10,000$ units and D-15,000 units. Product A sells for Rs. 16 ; B Rs. 4 ; C Rs. 8 and D for Rs. 4. These figures are at the split off point. Required to show the apportionment of joint costs by using Sale price per unit method.
10. X Ltd., fixes the inter divisional transfer prices for its product on the basis of cost plus a return on investment in the division. The budget for Division A for 2020-21 is as follows :

| Fixed assets | - | $2,50,000$ |
| :--- | :---: | :---: |
| Current assets | - | $1,50,000$ |
| Debtors | - | $1,00,000$ |
| Annual fixed cost of the division | - | $4,00,000$ |
| Variable cost/unit of product | - | 10 |
| Budgeted volume | - | $2,00,000$ units/year |
| Desired ROI | - | $28 \%$ total investment |

Determine the transfer price for division $A$.
11. From the following information relating to KKN Company Ltd. Prepare Statement of equivalent production.

| Opening Stock in Process II | - | 5000 units of Rs. 36,000 |
| :--- | :--- | :--- |
| Transfer from Process I | $-\quad 2,13,000$ units of Rs. $8,27,000$ |  |
| Direct Material added in Process II | $-\quad$ Rs. $4,01,800$ |  |
| Direct Wages $-\quad$ Rs. $1,98,100$ | Production Overhead | Rs. 99,050 |
| Units Scrap $-11,000$ units | Transferred to Process III $-\quad 1,89,000$ units |  |
| Closing Stock $-18,000$ units |  |  |
| Degree of Completion : |  |  |


|  | Opening Stock | Closing Stock | Scrap |
| :--- | :---: | :---: | :---: |
| Material | $70 \%$ | $80 \%$ | $100 \%$ |
| Labour | $50 \%$ | $60 \%$ | $80 \%$ |
| Overhead | $50 \%$ | $60 \%$ | $80 \%$ |

There was a normal loss of $5 \%$ production and unit scraped were sold at Rs. 1.50.
12. Nelco Co produces 3 products, $\mathrm{P}, \mathrm{Q}$ and R , details of which are shown below :

|  | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ |
| :--- | :---: | :---: | :---: |
| Selling price per unit | 100 | 90 | 110 |
| Direct material cost per unit | 65 | 75 | 90 |
| Maximum demand (units) | 32,000 | 28,000 | 37,000 |
| Time required on the bottleneck | 5 | 3 | 2 |
| resource (hours per unit) |  |  |  |

There are 2,00,000 bottleneck hours available each month.
Calculate the throughput per unit for each product. Rank the products in order of the priority in which they should be produced, starting with the product that generates the highest return per hour first.
13. In the manufacture of main product, 300 units of a certain by-product were produced. The market value of the by-product was Rs. 50/unit. The by-product required further processing costs amounting to Rs. 5,000 and selling and distribution overheads amounting to Rs. 750 are incurred. Calculate the amount to be credited to the process account in respect of by-product.
14. A Ltd. is engaged in production of three types of ice-cream products : Coco, Strawberry and Vanilla. The Company presently sells 50,000 units of Coco at Rs. 25 per unit, Strawberry 20,000 at Rs. 20 per unit and Vanilla 60,000 at Rs. 15 per unit. The demand is sensitive to selling price ; and it has been observed that every reduction of' 1 per unit in selling price increases the demand for each product by $10 \%$ to the previous level. The Company has the production capacity of 60,500 units of Coco, 24,200 units of Strawberry and 72,600 units of Vanilla. The Company marks up $25 \%$ on cost of the product.

The Company management decides to apply ABC analysis. For this purpose, it identifies four activities and the rate as follows :

Activity
Ordering
Delivery
Shelf Stocking
Customer Support and Assistance

## Cost Rate

- Rs. 800 per purchase Order
- $\quad$ Rs. 700 per Delivery
- Rs. 199 per Hour
- $\quad$ Rs. 1.10 per unit sold

The other relevant information for the products is as follows :

| Particulars | Coco | Strawberry | Vanilla |
| :--- | :---: | :---: | :---: |
| Direct Material p.u. | 8 | 6 | 5 |
| Direct Labour p.u. | 5 | 4 | 3 |
| No. of Purchase Orders | 35 | 30 | 15 |
| No. of Deliveries | 112 | 66 | 48 |
| Shelf Stocking Hours | 130 | 150 | 160 |

Under the traditional costing system, Store Support Costs are changed at $30 \%$ of Prime Cost. In ABC these costs are coming under Customer Support and Assistance. Calculate Target Cost for each product after a reduction of selling price required to achieve the sales equal to the production capacity.
$(4 \times 3=12$ weightage $)$

## Part C

Answer any two questions.
Each question carries 5 weightage.
15. Define backflush accounting. Explain its procedures and advantages
16. Define cost accounting. Explain its scope and objectives.
17. The product of a company passes through 3 distinct processes. The following information is obtained from the accounts for the month ending January 31, 2020 :

| Particulars | Process -A | Process-B | Process-C |
| :--- | :---: | :---: | :---: |
| Direct material | 7,800 | 5,940 | 8,886 |
| Direct wages | 6,000 | 9,000 | 12,000 |
| Production O H | 6,000 | 9,000 | 12,000 |

3000 units @ Rs. 3 each were introduced to process - A. There was no stock of materials or work in progress. The output of each process passes directly to the next process and finally to finished stock A/c.

The following additional data is obtained :

| Process | Output | Percentage of Normal <br> loss to Input | Value of scrap /Unit |
| :---: | :---: | :---: | :---: |
| A | 2,850 | $5 \%$ |  |
| B | 2,520 | $10 \%$ | 2 |
| C | 2,250 | $15 \%$ | 4 |

Prepare Process Cost Account, Normal Loss Account and Abnormal Gain or Loss Account.
18. The Gadget Co produces three products A, B and C, all made from the same material. Until now, it has used traditional absorption costing to allocate overheads to its products. The company is now considering Activity Based Costing system in the hope that it will improve profitability. Information for the three products for the last year is as follows.

| Particulars | A | B | C |
| :--- | :---: | :---: | :---: |
| Production and sales volume (units) | 15,000 | 12,000 | 18,000 |
| Selling price per unit | 7.50 | 12 | 13 |
| Raw material usage (kg) per unit | 2 | 3 | 4 |
| Direct labour hours per unit | 0.1 | 0.15 | 0.2 |
| Machine hours per unit | 0.5 | 0.7 | 0.9 |
| Number of productions runs per annum | 16 | 12 | 8 |
| Number of purchase orders per annum | 24 | 28 | 42 |
| Number of deliveries to retailers per annum | 48 | 30 | 62 |

The price for raw materials remained constant throughout the year @ 1.20 per kg . similarly, the direct labour cost for the whole workforce was Rs. 14.80 per hour. The annual overhead costs were as follows:

| Machine set up costs | - | 26,500 |
| :--- | :--- | :--- |
| Machine running costs | - | 66,400 |
| Procurement costs | - | 48,000 |
| Delivery costs | - | 54,320 |

Calculate full cost per unit of each product using Activity Based Costing.

