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Shree Damodar College of Commerce & Economics, Margao  
M.Com, Semester III, Semester End Examination, January 2022  
COO336: Cost Management and Control (OA-18A)

Duration: 3 hours

Max. Marks 60

Instructions:

1. This paper consists of **Nine** Questions carrying **Equal** marks.
2. Question No.1 consists of **5 Compulsory** Questions of **2 Marks Each**.
3. Answer any **5** questions from Question **2,3,4,5,6,7,8 and 9**.
4. **Each** question carries **10** marks. Figures to the **right** indicate marks.

Q.1) Answer the following:

(5x2=10)

- a) Explain any two types of competitive strategy giving relevant examples
- b) 'Lifecycle costing is especially important in industries that face rapid technological advancement'. Explain
- c) Explain Cost Pools, Cost Drivers and Cost objects
- d) Factors affecting learning curve
- e) Applications of transportation problem in cost control

Q.2)(A) "Cost Management is a broad concept than cost accounting, cost control and cost reduction". Explain.

(5)

(B) Explain the importance of the following in strategic cost management.

- (i) Manufacturing technologies    (ii) Customer orientation    (iii) Growth of service industry    (5)

Q.3) Memory Media is considering a change to activity-based product costing. The company produces two products, CDs and DVDs in a single production department. The production department is estimated to require 4,000 direct labour hours. The total indirect labour is budgeted to be Rs.4,20,000.

Time records from indirect labour employees revealed that they spent 40% of their time setting up production runs and 60% of their time supporting actual production.

The following information about CDs and DVDs was determined from the corporate records:

|              | <i>Number of setups</i> | <i>Direct labour hours</i> | <i>Units produced</i> |
|--------------|-------------------------|----------------------------|-----------------------|
| <b>CDs</b>   | 500                     | 2,000                      | 75,000                |
| <b>DVDs</b>  | 1,100                   | 2,000                      | 75,000                |
| <b>Total</b> | 1,600                   | 4,000                      | 1,50,000              |

**Required:**

- (a) Determine the indirect labour cost per unit allocated to CDs and DVDs under a single plant wide factory overhead rate system using the direct labour hours as the allocation base. (3)
- (b) Determine the activity pools and activity rates for the indirect labour under activity-based costing. Assume two activity pools-one for setup and the other for production support. (2)

- (c) Determine the activity cost per unit for indirect labour allocated to each product under activity-based costing. (3)
- (d) Why are the per-unit allocated costs in (a) different from the per-unit activity cost assigned to the products in (c)? (2)

Q.4) 'The creation of foreign subsidiaries and bases of operation for cross-border flow of products, services, trademarks, funding and technology is having a significant impact on the issue of transfer pricing in today's international business scenario'. With relevance to this statement explain the concept of transfer pricing and highlight the basic issues relating to transfer pricing in case of MNC's. (10)

Q.5) "Target Costing is a systematic approach to establishing product cost goals based on market driven standards". How can target costing improve performance? Discuss the various cost reduction methods available in Target costing. (10)

Q.6) You are required to prepare a network diagram for constructing a five-floor apartment. The major activities of the project and the three-time estimates of the project completion is given below:

| Activity | Description                 | Duration (Weeks) |    |    |
|----------|-----------------------------|------------------|----|----|
|          |                             | Tp               | To | Tm |
| 1-2      | Selection of site           | 15               | 3  | 6  |
| 2-3      | Preparation of drawings     | 30               | 6  | 12 |
| 3-5      | Arranging for finance       | 17               | 5  | 11 |
| 7-8      | Receiving quotations        | 28               | 4  | 19 |
| 5-8      | Selection of contractor     | 7                | 1  | 4  |
| 6-7      | Getting approval from govt  | 27               | 3  | 9  |
| 4-5      | Laying the foundation stone | 15               | 3  | 6  |
| 1-6      | Start construction          | 14               | 2  | 5  |
| 2-4      | Advertise in the newspaper  | 8                | 2  | 5  |

- Draw a network diagram.
- Find the critical path after estimating the earliest and latest event times for all nodes.
- Find the probability of completing the project within 31 weeks?
- What is the chance of project duration exceeding 46 weeks?
- What will be the effect on the current critical path if the most likely time of activity 3-5 gets revised to 14 instead of 11 weeks given above?

Given that:

|             |        |        |        |        |        |
|-------------|--------|--------|--------|--------|--------|
| Z value     | -1     | 1.33   | 2      | 1.94   | 0.50   |
| Probability | 0.3419 | 0.4082 | 0.4772 | 0.4738 | 0.1915 |

(10)



Q.7) A company produces 2 types of pens. Pen A is superior one and Pen B is of a lower quality. profits from pen A and pen B are Rs. 5 and Rs.3 respectively per pen. Raw material requirements for each Pen A is twice as that of pen B. The supply of raw materials is sufficient only for 1,000 pens. Pen A requires a special clip and 400 such clips are available per day. Whereas for Pen B 700 clips are available per day. Using the liner programming technique, find graphically the product mix for the company so that they can maximize their profits. (10)

Q.8) A company has three warehouses W1, W2 and W3. It is required to deliver a product from these warehouses to three customers A, B and C. The warehouses have the following units in stock:

| Warehouse    | W1 | W2 | W3 |
|--------------|----|----|----|
| No. of units | 65 | 42 | 43 |

And customer requirements are:

| Customer     | A  | B  | C  |
|--------------|----|----|----|
| No. of units | 70 | 30 | 50 |

The table below shows the costs of transporting one unit from warehouse to the customer.

| Customer | Warehouse |    |    |
|----------|-----------|----|----|
|          | W1        | W2 | W3 |
| A        | 5         | 7  | 8  |
| B        | 4         | 4  | 6  |
| C        | 6         | 7  | 7  |

Find the optimal transportation route using all the three methods.

(10)

Q.9) Rajni corporation having its head office at Bangalore wants to assign 3 recently hired software engineers. Mr. John, Mr. Suresh and Mr. Vishwanath at 3 regional offices located at Ahmedabad, Chennai and New Delhi. The cost involved in locating these engineers at various offices are indicated in the table below:

| Regional office    |            | Ahmedabad | Chennai | New Delhi |
|--------------------|------------|-----------|---------|-----------|
| Software engineers | John       | 8         | 11      | 12        |
|                    | Suresh     | 5         | 16      | 13        |
|                    | Vishwanath | 5         | 10      | 23        |

However, the firm also has an option of sending any of the three to fill up the vacancy in its head office located at Bangalore, if it is more economical than to move to the regional offices. Taken cost of Rs. 10 to reallocate Mr. John to Bangalore, Rs. 8 to reallocate Mr. Suresh and Rs. 15 to reallocate Mr. Vishwanath to Bangalore. What is the optimal assignment to allocate these software engineers to the office? (10)

\*\*\*\*\* All the Best\*\*\*\*\*