SRN – 23

M.Com. (Semester – III) Examination, April 2018
COO3A2 : COST MANAGEMENT AND CONTROL (OA – 18)

Duration : 3 Hours

Max. Marks : 60

Instructions : *i) This paper consists **Nine** question carrying **equal** marks.*
*ii) Question No. **1** consists of **5 compulsory** questions of **2** marks **each**.*
*iii) Answer **any 5** questions from question **2, 3, 4, 5, 6, 7, 8** and **9**.*
*iv) **Each** question carries **10** marks. Figures to the **right** indicate marks.*

1. Answer the following : **(2×5=10)**

   a) Explain the term Cost Drivers.

   b) Define any two performance measurement techniques.

   c) State the application of learning curve theory in business.

   d) What is slack in Network analysis ?

   e) What is unbalanced assignment problem ?

2. a) A company has just completed the manufacturing of 40 units of a new product. The manufacturing costs are : **6**

	Rs.
Direct Materials	2,00,000
Direct Labour : 8000 hours at Rs. 20 per hour	1,60,000
Variable Overhead	80,000
Special tool (re-usable)	10,000
Fixed Overhead apportioned	1,00,000

The company's policy is to add a profit of 12% on selling price.

The company received another order for 120 units of this product for which the company quoted, based on its policy on absorption cost basis, a price of Rs. 15,625 per unit. The customer struck the order to Rs. 11,000 per unit. The company is short of work and is keen to take up more orders

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but it is reluctant accept this order price because it is against the policy to accept any price before its cost. The company experiences a learning curve of 90%.

Compute the gain or loss arising from acceptance of the order of Rs. 11,000 per unit and advise the company suitably.

b) Explain in detail the process of Target Costing. 4

3. A project consists of seven activities and the time estimates are furnished as under : 10

Activity i	1	1	1	2	3	4	5
Activity j	2	3	4	5	5	6	6
Optimistic days	4	3	4	5	8	4	2
Most likely days	10	6	7	5	11	10	5
Pessimistic days	16	9	16	5	32	16	8

1) Darw the project network.
2) Identify the Critical path and duration.
3) Find the Variance of each activity.
4) What is the probability that the project will be completed in 5 days earlier than the critical path duration ?
5) What project due will provide 95% confidence level of completion ?

4. A company producing 4 different products viz. A, B, C and D having 4 operators viz. Ajay, Vijay, Mohan and Sohan, who are capable of producing any of the four products, works effectively for 7 hours a day. The time (in minutes) required for each operator for producing one unit of each product is given in cells of the following matrix along with profit (Rs. per unit) 10

Operator/Product	A	B	C	D
Ajay	6	10	14	12
Vijay	7	5	3	4
Mohan	6	7	10	10
Sohan	20	10	15	15
Profit (Rs./unit)	3	2	4	1

Find out the assignment of operators to products that will maximize the profit.

5 A company has four factories F1, F2, F3 and F4 manufacturing the same product. Production and raw material costs differ from factory to factory and given in the following table. Transportation costs from the factories to sales depots S1, S2 and S3 are also given. The sales price and total requirement at each depot as also the product capacity at each factory is also state. Determine the most profitable production and distribution schedule and the corresponding profit. The surplus production should be taken to yield zero profit. **10**

Particular	F1	F2	F3	F4	Sales price/ unit	Requirement
Production Cost per unit	15	18	14	13		
Raw material Cost per unit	10	9	12	9		
Transportation cost per unit to S1	3	9	5	4	34	80
S2	1	7	4	5	32	120
S3	5	8	3	6	31	150
Production capacity (units)	10	150	50	100		

Provide the initial basic feasible solution by Vogel's Approximation Method.

6. The budgeted data relating to two products manufactured by a company for a month are **10**

Particular	Product A	Product B
Selling Price	300	200
Variable Cost	160	60
Sales Commission	60	40

Each unit of the product incurs cost in the company's two Department P and Q. The total capacity available for the month under review is budgeted to be 1400 hours in department P and 2000 hours in department Q. The capacity costs amount to Rs. 14,000 and Rs. 20,000 respectively per month for P and Q irrespective of the level of usage made it. The number of hours required in each of these departments to complete one unit of output is –

Particular	Product A	Product B
Department P	2 hours	4 hours
Department Q	5 hours	4 hours

The maximum output which company can sell in the month is restricted to 400 units of either of these products. You are required to formulate LP model and solve it graphically to determine the optimal product mix and profit.

7. "Planning fails on certain areas". Explain the balance scorecard technique of cost management which overcomes the pitfalls of those planning areas and what are the characteristics of good balanced scorecard. **10**

8. a) What is transfer pricing ? Explain in detail the various methods of transfer pricing ? **7**

   b) What are the benefits of Responsibility accounting in the organization ? **3**

9. a) Explain the various techniques which are used by the cost manager in order to cope with changes in Business Environment. **6**

   b) Define TQM. What are the core concepts of TQM ? **4**