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Sl.No.   Total No. of Pages : 2

IV Semester M.Com. Degree Examination, June/July - 2017
(Scheme: Choice Based Credit System)
COMMERCE
HC: Operations Research

Time : 3 Hours]   [Max.Marks: 70

PART -A

Answer any five questions. Each question carries five marks   [5 × 5 = 25]

1   Define Operation Research.

2   Introduce the different types of models in Operation Research Based on the time reference.

3   Explain the applications of Linear Programming.

4   Explain the essence of Simplex method to solve LPP.

5   Explain the Importance of Integer programming.

6   What do you mean by Cutting plane methods.

7   Write a short note on least cost method.

8   Elucidate Vogel's Approximation Method.

PART -B

Answer any three questions. Each question carries ten marks. [3 × 10 = 30]

9   Explain the different types of models in Operation Research.

10 Give the applications of integer programming.

11 Explain various models of Operation Research with suitable examples.

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12   A firm manufactures two Tablets CIPLOX (X) and DENOX (Y). Profit per unit of X is Rs 2 and Y is Rs 3. Total machine hours available per day are 10. 1 unit of X requires 1 machine hour and 1 unit of Y requires 2 machine hours. Total Labour hours available per day are 14. X and Y requires 2 and 1 labour hours respectively. How much units of each product must be manufactured to maximize the profit?

13   Explain the similarities and differences between canonical forms and standard forms of LPP?

PART -C

14.   Case Study (Compulsory)   [1 × 15 = 15]

A Hotel contains four persons available for four works on the four jobs. Only one person can work on any one job. The following table shows the cost of assigning each person to each job. The objectives are to assign person to jobs such that the total assignment cost is a minimum. How should be jobs be assigned to minimize the cost.

		Jobs			
		1	2	3	4
	A	20	25	22	28
	B	15	18	23	17
Persons	C	19	17	21	24
	D	25	23	24	24

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