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MBA-5
1st Year Examination, Calendar Batch 2017
Operation Research
&
Research Methodology

Time : 3 Hours]

[Max. Marks : 100

Note. (A) Attempt any **five** questions.

(B) Each question carries equal marks. (20*5)

- Q.1** Four product are produced in four machines and their profit margins are given by the tabl^r as following:

	P ₁	P ₂	P ₃	P ₄	Capacity
M ₁	10	7	8	6	40
M ₂	5	9	6	4	55
M ₃	7	4	11	5	60
M ₄	4	10	7	8	45
Requirement	35	42	68	55	

Find a suitable production plan of product in machine so that the profit is maximized while the capacities and requirement are met.

- Q.2** Discuss the method of tabulation and data presentation. How is data graphically represented?
- Q.3** What are the relevance of primary and secondary data in research? How is primary data collected for research?
- Q.4** One unite of product A requires 3 unit of row material and 2 hours of labour and contributes the profile of Rs 7 .One unit of product Requires One unit of row material and one hour of labour and cons tributes the profit of Rs 5 .there are 48 units of row material and 40 hours of labour available .The objective is to maximize the profit. Calculate the shadow prices of the row material and labour.
- Q.5** Discuss the method of observation in research methodology.
- Q.6** Discuss the sample distribution methods.
- Q.7** What is the significance of linear programming in research methodology?
- Q.8** What is the meaning and significance of report in research?

