

Subject Code: MB916

MBA I Semester [R09] Regular Examinations, February 2011

Quantitative Analysis for Business Decisions

Time: 3 Hours

Max Marks: 60

Answer any FIVE questions All questions carry EQUAL marks

1. ABC metal design division has 5 jobs to be done on five machines .Any job can be done on Any machine .The costs of doing the jobs in different machines are given below .Assign the jobs for different machines so as to minimize the total cost .

jobs	Machines				
	A	B	C	D	E
1	13	8	16	18	19
2	9	15	24	9	12
3	12	9	4	4	4
4	6	12	10	8	13
5	15	17	18	12	20

2. a) Write a short note on application of game theory ?
b) Find the Saddle point and hence solve the following game?

		Player B		
		B1	B2	B3
Player A	A1	15	2	3
	A2	6	5	7
	A3	-7	4	0

3. Outline the procedure for large sample tests and discuss their theoretical basis .Comment on The assumptions mode?
- 4.a) Define the term correlation .Explain the concept of positive and negative correlation with Examples?
b) What is a Scatter Diagram?

Subject Code: MB916

5. a) what is a control chart ? Describe how a control chart is constructed and interpreted.

b) What might cause a process to be out of control?

6. A project is composed of Seven activities, where time estimates are listed in the following

Table activities are identified by their beginning (i) and ending (j) node number .

Activity	Optimistic	Pessimistic	Most likely
i- j	time	time	time
1- 2	0.7	1.3	1.0
2- 3	3.8	9.8	5.6
2- 4	5.2	12.4	7.6
3- 4	2.1	6.1	2.7
4- 5	0.7	3.7	3.4
5- 6	0.7	1.3	1.0

i) Find the expected duration and Standard deviation for activity.

ii) What is the probability that the project will be completed two weeks ahead of the expected time

7. Discuss and describe the role of linear programming in managerial decision-making

bring out limitations, if any.

8. What techniques are used to solve decision-making problems under uncertainty?

Which technique results in an optimistic decision?
