

Reg. No. :

D 199 **Q.P. Code : [07 DMB 06]**

(For the candidates admitted from 2007 onwards)

M.B.A. DEGREE EXAMINATION, DECEMBER 2008.

First Year

QUANTITATIVE TECHNIQUES FOR MANAGEMENT

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. What are the measures of central tendency? Explain their properties.
2. (a) Discuss the procedure for constructing a network.
(b) What is crashing? Explain with an example.
3. Discuss the properties of binomial distribution.

4. With reference to game theory, explain

- (a) Saddle point
- (b) Rule of dominance
- (c) Pure strategy
- (d) Mixed strategy.

5. What is Monte Carlo simulation? What are its applications?

6. Compare deterministic inventory model with probabilistic inventory model. Which model would you prefer? Why?

7. Solve the following linear programming using simplex method

$$\text{Maximize } z = 3X_1 + 2X_2 + 5X_3$$

Subject to

$$X_1 + 2X_2 + X_3 \leq 430$$

$$3X_1 + 2X_3 \leq 460$$

$$X_1 + 4X_3 \leq 420$$

$$\text{and } X_1, X_2, X_3 \geq 0.$$

8. Solve the following transportation problem and check its optimality

	Destination			Supply
	D ₁	D ₂	D ₃	
S ₁	2	7	4	5
S ₂	3	3	7	8
S ₃	5	4	1	7
S ₄	1	6	2	14
Demand	7	9	18	34