

Reg. No. : .....

**D 1168**

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

(For the candidates admitted from 2007 onwards)

**M.B.A. DEGREE EXAMINATION, DECEMBER 2010.**

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. Explain deterministic and probabilistic model with examples.
2. What is a trans-ship model? Explain how is it different from transportation model. Illustrate it with examples.
3. What is a waiting line model? Discuss the structure of model M/M/1 for infinite population.
4. Illustrate with an example, how will you compute EOQ with price breaks.

5. Discuss the various probability distributions with their characteristics.

6. For the following table find the optimal assignment schedule.

	Cities					
	I	II	III	IV	V	
A	160	130	120	160	190	
Banks	B	135	120	130	160	175
C	140	110	155	170	185	
D	50	40	30	80	100	
E	50	35	70	80	100	

7. Solve the following game graphically and find the value of the game

	Players B		
	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>
Player A	A <sub>1</sub>	$\begin{bmatrix} 8 & 4 & -2 \\ -2 & -1 & 3 \end{bmatrix}$	A <sub>2</sub>

8. Solve the following L.P.P. using simplex method  
 Maximum  $z = 10x + 20y$

Subject to  $3x + 5y \leq 90$

$6x + 3y \leq 72$

$x, y \geq 0.$