

Code No: 12003

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA-II Semester Supplementary Examinations July 2010
QUANTITATIVE ANALYSIS FOR BUSINESS DECISIONS**

Time: 3hours

Max.Marks:60

**Answer any Five questions
All questions carry equal Marks**

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1. a) What is the function of models in decision making? Mention different types of models.
b) Explain advantages and disadvantages of models.
2. a) What is Expected Opportunity Loss? Describe in brief.
b) What do you mean by Minimax Regret?
3. Find the solution to the following LPP by solving its dual.
Maximize $Z = 30x_1 + 23x_2 + 29x_3$
Subject to: $6x_1 + 5x_2 + 3x_3 \leq 26$
 $4x_1 + 2x_2 + 5x_3 \leq 7$
and $x_1, x_2, x_3 \geq 0$
4. Discuss the similarity between transportation problem and assignment problem.
5. a) List the different strategies and explain them briefly.
b) Two players A and B match points. If the points match, then A wins one unit of value, if the points do not match, then B wins one unit value. Determine optimum strategies for the players and the value of the game.
6. a) Explain Kendall's notations for representing queuing models.
b) In Indian Coffee Caf centre, it was observed that there is only one bearer who takes exactly 4 minutes to serve a cup of coffee once the order has been placed with him. If the students arrive in the cafe centre at an average rate of 10 per hour, how much time one is expected to spend waiting for his turn to place the order.
7. a) Give some practical applications where simulation is used to make the situation more efficient.
b) Discuss the advantages and disadvantages of simulation technique.
8. What is critical path analysis? Describe with illustration its utility in project planning and control.
