302- Decision Science

1. What is the significance of Decision Sciences in business management?

- A. A discipline focused on random decision-making
- B. A framework for making informed decisions
- C. A tool for subjective decision analysis
- D. A method for creative decision-making

Answer: B. A framework for making informed decisions

- 2. What role do quantitative techniques play in decision-making?
- A. Enhancing intuition
- B. Minimizing subjectivity
- C. Ignoring data analysis
- D. Relying solely on intuition

Answer: B. Minimizing subjectivity

- 3. What is Flood's Technique used for in assignment models?
- A. Maximizing profit
- B. Assigning tasks based on preferences
- C. Minimizing costs
- D. Maximizing resource utilization

Answer: B. Assigning tasks based on preferences

- 4. What is the North West Corner method primarily used for in transportation models?
- A. Finding the optimal solution

- B. Calculating initial basic feasible solution
- C. Identifying critical paths
- D. Estimating slack in a network

Answer: B. Calculating initial basic feasible solution

- 5. How is linear programming used in decision-making?
- A. Minimizing uncertainty
- B. Maximizing probability
- C. Optimizing resources subject to constraints
- D. Randomly selecting variables

Answer: C. Optimizing resources subject to constraints

- 6. What is the scope of Monte Carlo Simulation?
- A. Limited to deterministic processes
- B. Only applicable in manufacturing
- C. Broad applicability in modeling uncertainties
- D. Suitable only for single-variable analysis

Answer: C. Broad applicability in modeling uncertainties

- 7. What does the Critical Path in CPM represent?
- A. The longest path in the network
- B. The shortest path in the network
- C. The most uncertain path in the network
- D. The path with maximum slack

Answer: A. The longest path in the network

8. What is the primary focus of Queuing Theory?

- A. Maximizing server utilization
- B. Minimizing customer waiting time
- C. Ignoring service rate variations
- D. Focusing on single-server models only

Answer: B. Minimizing customer waiting time

9. What is the Maximin criterion in Decision Theory?

- A. Maximizing the best possible outcome
- B. Minimizing the worst possible outcome
- C. Maximizing the average outcome
- D. Minimizing the average outcome

Answer: B. Minimizing the worst possible outcome

10. In Game Theory, what does a 2×2 zero-sum game involves?

- A. Two players with two strategies each
- B. Two players with one strategy each
- C. Four players with two strategies each
- D. Two players with zero-sum outcomes

Answer: A. Two players with two strategies each