Unit V

9. Define Queuing Theory. Explain its characteristics, assumptions, and applications in business organizations. **16**

10. "Queuing Theory helps in balancing service cost and waiting cost." Explain in detail. **16**

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M.B.A. EXAMINATION, 2026

(Second Semester)

(2016-17 Only)

(Re-appear Only)

MANAGEMENT SCIENCE

Time : 3 *Hours*] [*Maximum Marks :* 80

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

Unit I

1. Define Management Science. Explain its basic concepts, characteristics, scope, and role in managerial decision-making. **16**

2. Explain the Simplex Method of solving Linear Programming Problems with detailed procedure. **16**

Unit II

3. Define Game Theory. Explain its assumptions, characteristics, and importance in business decision-making. **16**

4. Explain mixed strategy games with suitable numerical illustrations. **16**

Unit III

5. Define Transportation Problem. Explain its formulation and objectives in Operations Research. **16**

6. Differentiate between Transportation Problem and Assignment Problem. **16**

Unit IV

7. Define PERT and CPM. Explain their objectives, features, and significance in project management. **16**

8. What is Critical Path ? Explain the determination of Critical Path in network analysis. **16**