MBA–043 **MSP–18**

M.B.A. DEGREE EXAMINATION – JANUARY, 2015.

First Year

OPERATIONS RESEARCH

Time : 3 hours Maximum marks : 75

PART A — (3 × 5 = 15 marks)

Answer any THREE questions.

All questions carry equal marks.

1. What is operations research?
2. What is transportation problem?
3. What is queuing theory?
4. What is network analysis?
5. What is a game?

PART B — (4 × 15 = 60 marks)

Answer any FOUR questions.

All questions carry equal marks.

6. Discuss the concept of duality with examples.
7. Explain the algorithm of assignment problem with an example.

8. Outline the elements of queueing system.

9. Discuss the merits of CPM and PERT.

10. Explain the special cases in linear programming.

11. Discuss the applications of game theory.

12. Solve the L.P.P. by graphical method.

Maximize $z = x + y$

Subject to

$$2x + 3y \geq 6$$
$$x + 2y \geq 12$$
$$x, y \geq 0$$