Roll No.						

Total No. of Pages : 02

Total No. of Questions : 09

## MCA (Sem.-3) OPTIMIZATION TECHNIQUES Subject Code : PGCA1971 M.Code : 90802 Date of Examination : 06-01-23

Time: 3 Hrs.

Max. Marks : 70

## INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION B & C have FOUR questions each.
- 3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
- 4. Select atleast TWO questions from SECTION B & C.

## **SECTION-A**

### l. Write short notes on :

- a) Normal Distribution
- b) Artificial Variable
- c) Transportation Table
- d) Linear Programming
- e) Branch and Bound method
- f) Probability
- g) LPP
- h) Decision theory
- i) Slack variables
- j) Sample space.

### **SECTION-B**

- 2. Differentiate between linear and non-linear programming with help of example.
- 3. Describe exceptional cases in LP.
- 4. Write a note on duality theory.
- 5. Discuss brief branch and bound technique.

# **SECTION-C**

- 6. Discuss optimal solutions for transportation /assignment problems.
- 7. Write a note on network computations.
- 8. Differentiate between Free Floats and Total floats.
- 9. Explain the concept of game with mixed strategies.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.