

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT) (Sem.-4)  
**MACHINE LEARNING**  
Subject Code : PGCA-1945  
Paper ID : 79568  
Date of Examination : 15-07-22

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**

**1. Write short notes on :**

- a) What is machine learning?
- b) What is difference between "raw data" and "managed data"?
- c) Write about data visualization.
- d) Explain decision boundary.
- e) What is a mathematical model?
- f) Explain bagging.
- g) What are different types of boosting methods?
- h) Explain a regressive model.
- i) Write use of Markov model.
- j) What is PCA?

### SECTION-B

2. How do we calculate accuracy, precision and recall?
3. Write the algorithm of linear regression.
4. Explain Naive Bayes and its use.
5. What is overfitting?

### SECTION-C

6. Explain the random forest algorithm.
7. Diagrammatically explain the support vector machine.
8. Explain the time series analysis.
9. What do you mean by Neural nets?

**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.**