



**PREDICTIVE ANALYTICS**  
(CSE)

**Maximum Marks: 70**

**Date:02.01.2025 Duration: 3 hours**

- Note:**
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

**Part-A**

All the following questions carry equal marks (10X2M=20 Marks)

1	List the Data Modeling Techniques.
2	Define Supervised Learning
3	Discuss about Model Theory.
4	What is meant by Pruning?
5	Briefly discuss about Learning & Development
6	Define Arima Model.
7	Give the Measures of Forecast Accuracy.
8	What is meant by Prediction?
9	Define purpose of documents.
10	Explain scope of documents.

**Part-B**

Answer All the following questions. (5X10M=50Marks)

11	Explain in detail about Blue property-assumptions-Least Square Estimation. [10M]
	OR
12	Explain in detail about different Regression Concepts and Least Square Estimation method. [10M]
13	A. Write in detail about Regression vs Segmentation. [5M] B. Discuss about Analytics applications to various Business Domains. [5M]
	OR
14	Explain the concept of tree pruning. When and why is pruning necessary, and what techniques can be employed to simplify complex decision trees? [10M]
15	A. Compare and contrast regression and classification, considering their output types, applications, and evaluation metrics? [6M] B. Explain the concept of pruning in decision trees? [4M]
	OR
16	A. Explain the importance of record-keeping in HR management. [5M] B. How can NOS 905 benefit both employers and employees in terms of career development, skill recognition, and industry standards? [5M]

17	A. Write various Time Series Methods with examples. [5M] B. Discuss STL Approach with an example. [5M]
	OR
18	A. Discuss about various Measures of Forecast Accuracies. [5M] B. Explain about prediction in detail. [5M]
19	Discuss briefly any one Case Study related to Understanding structure of Documents. [10M]
	OR
20	Discuss about the importance of respecting intellectual property and copyright laws in document creation and knowledge sharing. How can organizations navigate these legal considerations effectively? [10M]