

**BACHELOR OF TECHNOLOGY (CBCS) (2020 COURSE)**  
**B.Tech.Sem - VII Computer Science & Engineering : WINTER : 2023**  
**SUBJECT : MACHINE LEARNING**

Day : Friday  
Date : 1/12/2023

**W-24341-2023**

Time : 02:30 PM-05:30 PM  
Max. Marks : 60

**N.B.:**

- 1) All questions are **Compulsory**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.

- Q. 1** a) Define outliers and How the outliers are determined in datasets. Explain with help of example. (10)
- OR**
- b) Define Data formats in Machine Learning. Explain all data formats available in brief. (10)
- Q. 2** a) Explain different types of Machine Learning techniques in brief. (10)
- OR**
- b) What are the criteria or parameters for choosing Machine Learning Techniques? Explain it with help of examples. (10)
- Q. 3** a) Write tabular difference between Classification and Regression. (10)
- OR**
- b) Explain following : (10)
- i) linear Regression
  - ii) Logistic Regression
- Q. 4** a) Explain Naïve Bayes Classifier in detail with help of example. (10)
- OR**
- b) Explain Decision Tree Classifier in detail with help of example. (10)
- Q. 5** a) What is Clustering? Explain different types of clustering techniques in detail. (10)
- OR**
- b) Explain the following : (10)
- i) Self Organizing Map (SOM)
  - ii) Anomaly Detection
- Q. 6** a) Explain Bagging and Boosting in detail. (10)
- OR**
- b) Write about the latest machine learning tools. (10)

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