

05/Mar/2026

10 Marks

23A31401T (Machine Learning)

Important Questions

Unit-III

- What is Random Forests? Explain Random Forests for classification & Regression.
- Describe Bayes classifier and its optimality.
- Explain about class conditional independence and Naive Bayes classifier (NBC)
- Explain Bayesian Additive Regression Trees

Unit-IV

- Explain about Linear Discriminants for classification
- Describe about Back Propagation for Training an MLP
- Explain Biological neurons vs Artificial neurons
- Explain SVM & its kernel Tricks
- Explain Linear Regression
- Explain Logistic Regression

Unit-V

- Discuss about k-Means clustering
- Explain about Rough k-Means clustering Algorithm
- Explain the following
 - (i) fuzzy c-Means clustering
 - (ii) Rough clustering
- Describe k-Means clustering Algorithm and explain Hierarchical clustering Algorithm.

Combination Question,

- List out the names and formulas like

Random Forest
Bayes Classification,
Linear Regression,
Logistic Regression
SVM,
MLPs
Clustering

2 marks

Unit - III

- ~~Explain~~ what is Conditional Probability?

- What is Trees for classifications?

- Explain Bayes Rules and inference?

- Explain Bias-Variance Trade-off

- What is Random Forests

- Explain Perceptron Classifier

Unit - IV

- What is kernel Tricks?

- What is SVM

- Explain Back Propagation in MLP

- Explain Linear Regression

- Explain Sigmoid function Explain uses of Logistic Regression.

Unit - V

- What is Fuzzy C-Means (FCM) clustering or write its main limitations

- Explain about Model based clustering.

- Explain Agglomerative clustering

- What is spectral clustering

- Explain Partitional clustering.