

ADMISSION NUMBER											

School of Business
Bachelor of Business Administration in Business Analytics
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem V - D1UF504T - Machine Learning

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

- 1) Unsupervised classification can be termed as _____. Choose the correct one K1 (2)
- 2) Define different types of learning. Targetted marketing, Recommended Systems, and Customer Segmentation are applications of which types of learning. K2 (4)
- 3) Explain Random forest. K2 (6)
- 4) Differentiate between Gradient Descent and Stochastic Gradient Descent K3 (9)
- 5) Discuss the Perceptron training rule. K3 (9)
- 6) Explain Gradient descent and what is use in ANN. K5 (10)
- 7) Draw the architecture of the Back Propagation Network (BPN) and explain in detail. K4 (12)
- 8) Explain FP, TP, FN, and TN pertaining to the Confusion Matrix. K5 (15)
- 9) What K denotes in K Means Clustering. What is Euclidean distance? Why it is used. K5 (15)
- 10) Explain the naïve Bayes algorithm in detail. Using the same naïve Bayes algorithm to solve the below-given problem. K6 ,K6 (18)

1. If the weather is overcast, the player should play cricket or not?

Weather	Play cricket
Rainy	Yes
Sunny	Yes
Overcast	Yes
Overcast	Yes
Sunny	No
Rainy	Yes
Sunny	Yes
Overcast	Yes
Rainy	No
Sunny	No
Sunny	Yes
Rainy	No
Overcast	Yes