

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER - VII EXAMINATION –WINTER-2021

Subject Code: 2678601**Date: 29/11/2021****Subject Name: Machine Learning****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Write your thoughts on human learning vs. Machine learning. **07**
(b) Explain steps to train and evaluation matrices to check model performance. **07**
- Q.2** (a) Explain Information gain & Entropy. **07**
(b) How to find Nearest Neighbors in KNN algorithm. **07**
- OR**
- (b) Explain naive Bayes algorithm. **07**
- Q.3** (a) Explain Back propagation Neural network. **07**
(b) Discuss supervised and unsupervised machine learning algorithm. **07**
- OR**
- Q.3** (a) Explain Random forest algorithm. **07**
(b) Explain Data preprocessing in machine learning. **07**
- Q.4** (a) Write classification learning steps with appropriate example. **07**
(b) Explain features engineering. **07**
- OR**
- Q.4** (a) Explain Artificial Neural Network with suitable example. **07**
(b) Explain different types of Regression algorithm. **07**
- Q.5** (a) Explain k-means clustering algorithm. **07**
(b) Explain Apriori algorithm for association rule learning. **07**
- OR**
- Q.5** (a) What is Deep learning? Compare Deep Learning with machine learning. **07**
(b) What is Reinforcement Learning method? List its various algorithms. Explain any one of them. **07**
