

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER VII- EXAMINATION –WINTER-2022

Subject Code: 2678601**Date: 02/01/2023****Subject Name: Machine Learning****Time: 02:30 PM TO 05:00 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) Explain steps to train and evaluation matrices to check model performance. **07**
(b) List the tools for Machine Learning application development with detail. **07**
- Q.2** (a) Explain Different types of Machine learning. **07**
(b) Write short note on Data pre-processing. **07**
- OR**
- (b) How to find Nearest Neighbors in KNN algorithm. **07**
- Q.3** (a) Explain the difference between linear and logistics regression with example. **07**
(b) Explain features engineering. **07**
- OR**
- Q.3** (a) Explain various learning techniques involved in supervised learning? **07**
(b) What is support vector machine .Discuss in detail? **07**
- Q.4** (a) What is Random forest? Explain with example? **07**
(b) Compare biological neuron and artificial neuron. **07**
- OR**
- Q.4** (a) What is deep learning discuss its importance? **07**
(b) Explain the k-Means Algorithm with an example. **07**
- Q.5** (a) Explain Apriori algorithm for association rule learning. **07**
(b) What is Naïve Bayes classifier? Narrate Principle of Naive Bayes Classifier. **07**
- OR**
- Q.5** (a) Explain Artificial Neural Network with suitable example. **07**
(b) What is Regression? Explain its types in details. **07**
