

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA - SEMESTER- V • EXAMINATION – WINTER 2020****Subject Code:4659302****Date:02/01/2020****Subject Name:Machine Learning****Time:10:30 AM to 12:30 PM****Total Marks: 56**

Instructions:

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss the human learning vs machine learning. **07**
(b) State importance of data preprocessing in machine learning **07**
- Q.2** (a) Evaluating performance of a model explain with example **07**
(b) Steps to improve performance of a model. **07**
- Q.3** (a) Explain in detail feature transformation and feature subset selection process. **07**
(b) Illustrate classification learning steps. **07**
- Q.4** (a) Differentiate between supervised machine learning and unsupervised machine learning. **07**
(b) What is clustering? Explain different types of cluster algorithm. **07**
- Q.5** (a) Explain Apriori algorithm with appropriate example. **07**
(b) Explain Bayes theorem and discuss the use of Bayesian method. **07**
- Q.6** (a) Explain libraries for text analytics using python with appropriate example. **07**
(b) Explain activation function and its types. **07**
- Q.7** (a) Draw and explain biological neuron and artificial neuron. **07**
(b) Discuss the need of deep learning over the machine learning. **07**
- Q.8** (a) Write pros and cons of backpropagation with proper example. **07**
(b) How to measure Regression and classification model accuracy? Give appropriate example. **07**
