

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA- SEMESTER -V EXAMINATION -SUMMER-2019

Subject Code:3650014

Date: 10-05-2019

Subject Name: Machine Learning

Time:10.30 am to 1.00 pm

Total Marks: 70

Instructions:

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

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|------------|---|-----------|
| Q.1 | (a) Discuss any one application area of Machine learning. | 07 |
| | (b) Answer the following | 07 |
| | i. Give utility of Find-S algorithm | |
| | ii. Discuss lazy and eager learning. | |
| Q.2 | (a) Differentiate between supervised and unsupervised learning with respect to machine learning. | 07 |
| | (b) Discuss candidate elimination algorithm giving example. | 07 |
| | OR | |
| | (b) Discuss steps in developing machine learning applications. | 07 |
| Q.3 | (a) Discuss concept of Decision tree giving example. | 07 |
| | (b) Discuss concept of Regression in machine learning. | 07 |
| | OR | |
| Q.3 | (a) Discuss K-NN algorithm giving example. | 07 |
| | (b) Discuss problems of Neural network representation. | 07 |
| Q.4 | (a) Discuss Back propagation algorithm. | 07 |
| | (b) Discuss hypothesis space search in decision making. | 07 |
| | OR | |
| Q.4 | (a) Why Bayesian learning method are relevant to study for machine learning concept? Discuss its features. | 07 |
| Q.4 | (b) Discuss the summary of checkers learning program. | 07 |
| Q.5 | (a) Discuss Gibbs algorithm with example. | 07 |
| | (b) Discuss concept learning with example. | 07 |
| | OR | |
| Q.5 | (a) Write formula for Bayes theorem. With help of example, discuss it. | 07 |
| | (b) Discuss Brute Force learning algorithm. | 07 |
