Seat No.: _____ Enrolment No._____

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.**

Q.1	**(a)**	Discuss any one application area of Machine learning.	**07**
	(b)	Answer the following i. Give utility of Find-S algorithm ii. Discuss lazy and eager learning.	**07**
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**

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