Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA Integrated - VII— EXAMINATION – SUMMER - 2017

Subject Code: 4470601 Subject Name: Machine Learning Time: 02.30 PM TO 05.00 PM Instructions:		Date:29/04/2017		
		02.30 PM TO 05.00 PM	Total Marks: 70	
	1. 2. 3.	ı v		
Q.1	(a)	What is Machine Learning? List advantages and limitation Learning.	s of the Machine	07
	(b)	Explain step by step general processes one has to follow supervised machine learning project.	for completing a	07
Q.2	(a)	Explain working of Candidate- Elimination algorithm. Compa algorithm.	re it with FIND-S	07
	(b)	What is Information Gain (IG)? Explain with example address Information Gain and its usage for selection of attributes. OR	sing calculation of	07
	(b)	What is perceptron? What is Back Propagation Neural Networks is the differences between both of them?	rk (BPNN)? What	07
Q.3	(a) (b)	Derive the weight update rule for BPNN. What is BAYESIAN belief network? Explain with example. OR		07 07
Q.3	(a) (b)	Draw the perceptron network with three inputs & three output formulas for calculating errors at each output unit and updating What is Probably Approximately Correct framework(PAG)	g the weights.	07 07
	()	details.	, 1	
Q.4	(a) (b)	Explain K- Nearest Neighbor Learning algorithm. What is Case –Based Reasoning (CBR)? How it helps in learn suitable example.	ing? Explain with	07 07
		OR		
Q.4	(a) (b)	What is Eager Learning method? Explain any one Eager Learn What is sequential learning algorithm? Explain with help o paradigm.		07 07
Q.5	(a)	What is First-Order Horn Clauses? How it helps in learning example.	ng? Explain with	07
	(b)	Explain Explanation based learning with help of PROLOG-EF OR	3G algorithm.	07
Q.5	(a) (b)	Explain First Order Combined Learner (FOCL) algorithm with What is reinforcement learning? What is the purpose of rewalearning? List 3 situations where this kind of learning is required.	ard in this kind of	07 07
