Seat No.:	Enrolment No
-----------	--------------

GUJARAT TECHNOLOGICAL UNIVERSITY MCA - SEMESTER- IV EXAMINATION - SUMMER 2016

Subject	Code: 2640009 Date:04-06-20	16
•	Name: Soft Computing 0.30a.m. To 01.00p.m. Total Marks:	70
1.	Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1 [A]	Define the Following question: (1) Fuzzy Set (2) Crisp Relations (3) Linear Separability (4) Weights (5) Bias (6) Learning Rate (7) Competitive Learning	07
Q. 1 [B]	Explain Perception Networks for Artificial Neural Networks.	07
Q. 2 [A]	Explain Radial Basic Function Network.	07
Q. 2 [B]	What is Soft Computing? Discuss different techniques used in Soft Computing and its applications. OR	07
Q. 2 [B]	Explain Architecture & Operation of Fuzzy Logic Control System.	07
Q. 3 [A] Q. 3 [B]	Explain Kohonen Self-Organizing Feature Maps. Explain Bidirectional Associative Memory. OR	07 07
Q. 3 [A] Q. 3 [B]	Write short notes on Hopfield Networks. Difference between fuzzification and defuzzification methods.	07 07
Q. 4 [A]	What are Back-Propagation Networks? Explain its architecture and Characteristics.	07
Q. 4 [B]	Explain applications of genetic algorithm. OR	07
Q. 4 [A] Q. 4 [B]	Explain Time Delay Neural Networks. Explain Adaptive Resonance Theory Network.	07 07
Q. 5 [A] Q. 5 [B]	Explain Fixed Weight Competitive Network. Explain McCulloch-Pitts Neuron model and write disadvantage of it. OR	07 07
Q. 5 [A]	Explain Various types of crossover and mutation techniques. Explain Simulated Annealing Network	07 07
