

Roll No

MCTA-201

M.E./M.Tech., II Semester

Examination, December 2016

Soft Computing

Time : Three Hours

Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal marks.

1. a) What is Heuristic Searching Techniques? Compare between A* and AO* Algorithms.
b) What is Learning? Differentiate between supervised and unsupervised learning.
2. a) What are the similarities and dissimilarities between fuzzy logic and Neural networks?
b) Explain Kohonen's self organizing Networks.
3. a) Define exemplar vector or code book vector. Discuss the features of Hop field Network.
b) What is Individual Decision Making? State the decision functions for a multiobjective decision making.
4. a) Describe how neural network is used to obtain fuzzy membership function.
b) Discuss fuzzy Bayesian decision making in detail.
5. a) What is FLC? What are the special forms of FLC system models?
b) Differentiate between simple Hill climbing and simulated annealing hill climbing.

6. a) What do you understand by Regression tree in Neuro-fuzzy Modeling? How does it differ from the classification tree?
b) Explain travelling salesman problem using simulated annealing.
7. a) Discuss about the various types of genetic algorithm in detail.
b) Explain the application of genetic algorithm.
8. Write short notes on any three :
 - a) Semantic Networks
 - b) Data clustering algorithm
 - c) Fuzzy automata
 - d) Fuzzy matrices
 - e) Cauchy machines
