Exam. Code : 206701
Subject Code : 4680

M.Sc. Computer Science 1ˢᵗ Semester

SOFT COMPUTING
Paper–MCS–105

Time Allowed—3 Hours]　　　[Maximum Marks—100

Note :— There are four sections, each have two questions. Attempt any **five** questions, selecting at least **one** question from each Section. All questions carry equal marks.

SECTION–A

1. Which are various applications of Neural Network ? Discuss in detail about the Perception Neural Network.

2. Explain the following :

   (a) Back-propagation neural network.

   (b) Adalines and madalines.

SECTION–B

3. Which are various differences between supervised and unsupervised learning ?

4. Explain in detail adaptive resonance theory. What is its operational principle ?

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SECTION–C

5. What are genetic algorithms ? Explain the major components of Genetic algorithm. Give an example of G.A. for maximization problem.

6. Explain various applications of fuzzy logic. What do you mean by neuro-fuzzy systems ?

SECTION–D

7. Explain the relation between conditional probability and Baye's theorem.

8. Explain the relationship between fuzzy logic and probability theory.