M.SC. DEGREE EXAMINATION,APRIL 2018
I YEAR - II SEMESTER
CORE Elective Paper II-SOFT COMPUTING

Time : 3 Hours   Max.marks :75

Section A $(10 \times 2 = 20 marks)$

Answer any **TEN** questions

1. Define Artificial neural network.
2. What is a Hybrid system?
3. What is an associative memory?
4. What is meant by adaline?
5. Define Hopfield network.
6. What do you understand about membership function?
7. What is the purpose of defuzzyfication?
8. Define a simple fuzzy arithmetic.
9. Define the Cartesian product of fuzzy relation.
10. What is decomposition and aggregation rule.
11. Define Genetic algorithm.
12. List the classifications of Genetic algorithm

Section B $(5 \times 5 = 25 marks)$

Answer any **FIVE** questions

13. Describe the biological neuron with diagram.
14. Discuss supervised learning.
15. Explain McCulloch-Pitts Neuron in brief.
16. Explain the methods of membership value assignments.
17. What is a fuzzy set? Explain the set in the form of a table.
18. Define fuzzy relation. Explain the composition of fuzzy relation.
19. Explain cross over and mutation in Genetic algorithm.

Section C $(3 \times 10 = 30 marks)$

Answer any **THREE** questions

20. Explain the various models of neural network with diagram.
21. Discuss the perceptron networks.
22. Explain the classical relation and fuzzy relation with example.
23. Describe fuzzy inference system.
24. Distinguish Traditional algorithm with genetic algorithm.