

TIME : 3 Hours

Max. Marks : 100

PART - A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. Draw a simple model of Artificial Neural Network.
2. What is activation function? Give an example.
3. What is feedforward Neural Network?
4. What are the characteristics of Neural Network?
5. What are the different types of encoding methods used in Genetic Algorithm?
6. What is fitness function in GA?
7. What are the different selection methods used in Genetic Algorithm?
8. What is Elitism?
9. What is fuzzy set and crisp set.
10. Write down any two properties of Fuzzy set.
11. State the basic feature involved in characterising membership function.
12. What are the two modes of Fuzzy reasoning?
13. What are the issues in structure identification?
14. What are regression trees?
15. What are the assumptions followed in clustering technique?
16. What are the complications in channel equalization?
17. Write down the three operators of Genetic Algorithm.
18. Write down the properties of crisp set.

19. What is the general form of static evolution function?

20. What are the three chromosome coding Schemes?

PART - B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. (a) Explain about the Back propagation learning in Neural Network.
(b) Explain about Supervised and Unsupervised learning.
22. Explain any four paradigms available for Fuzzy decision making.
23. (a) What are the different Fuzzy set operations? (4)
(b) Explain about the reproduction in Genetic Algorithm. (8)
24. Explain Travelling Salesman Problem and optimize the problem using Genetic algorithm approach.
25. (a) Explain K-means clustering algorithm. (8)
(b) Explain about focus set based rule combination. (4)
26. (a) Explain about ANFIS architecture. (8)
(b) Write short notes on Neuro Fuzzy control. (4)
27. Explain in detail about the adaptive noise cancellation using ANFIS.
28. With neat diagrams explain about Printed Character Recognition using ANFIS.

*****THE END*****