



QP CODE: 25047412



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Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc COMPUTER SCIENCE

ELECTIVE - CA820301 - SOFT COMPUTING

2019 ADMISSION ONWARDS

79091997

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is fuzzy logic?
2. What do you mean by bias?
3. What is Perceptron networks?
4. What is generalization in a back propagation network?
5. What are the limitations of associative memory networks?
6. What is the activation function used in continuous BAM?
7. Write any four operations of classical set.
8. What is weighted average defuzzification method?
9. Define Sugeno λ -measure.
10. What are the different operators of Genetic Algorithm?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. What is Neural networks and what are the advantages of neural networks?
12. Explain the evolution of neural networks.
13. What is Adaline and write the training algorithm for Adaline Network.
14. What are associative memories? What are the different types of associative memories?
15. With a flowchart, explain the working of Mexican hat net.





16. Differentiate crisp tolerance and fuzzy tolerance relation.
17. What are the different forms of membership functions? Explain any two.
18. Compare Genetic algorithms and Traditional algorithms

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Write note on artificial neural networks and biological neural networks and differentiate them.
20. Distinguish tree neural networks and wavelet neural networks.
21. What are radial basis function? Explain the architecture and training of rbf.
22. Explain the applications of genetic algorithm.

(2×5=10 weightage)

