24P362 (Pages: 2) Name: .....

Reg.No: .....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19PCSS3E01B - INTRODUCTION TO SOFT COMPUTING

(Computer Science)

(2019 Admission onwards)

Time : 3 Hours Maximum : 30 Weightage

Part-A

Answer any ***four*** questions. Each question carries 2 weightage.

1. Illustrate Bayes Decision theory.
2. Explain minimum error rate classification.
3. Describe decision surfaces.
4. Explain normal density.
5. Describe back-propagation.
6. Illustrate fuzzy relations.
7. Explain the fundamental concept of Evolutionary Computation.

(4 × 2 = 8 Weightage)

Part-B

Answer any ***four*** questions. Each question carries 3 weightage.

8. Explain statistical approaches.
9. Illustrate continuous case.
10. Describe Genetic algorithm.
11. Illustrate perceptron learning.
12. Illustrate competitive networks.
13. Illustrate applications of fuzzy set.
14. Explain swarm intelligence.

(4 × 3 = 12 Weightage)

Part-C

Answer any ***two*** questions. Each question carries 5 weightage.

15. Explain theoretical foundations of genetic algorithms.

16. Illustrate applications of neural network.

17. Explain fuzzy sets and its Operations.

18. Explain how Support Vector Machines (SVM) works?

(2 × 5 = 10 Weightage)

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