(Pages: 2)

Name:

Reg.No:

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P CSS3 E01B - INTRODUTION 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 syntactic and descriptive approaches.
- 2. Explain Bayes Decision theory.
- 3. Explain minimum error rate classification.
- 4. Explain normal density.
- 5. Illustrate Neural model and network architectures.
- 6. Explain Operations on fuzzy sets.
- 7. Summarize various concepts in SVM.

 $(4 \times 2 = 8$ Weightage)

Part-B

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

- 8. Explain 2-category classification.
- 9. Describe decision surfaces.
- 10. Illustrate theoretical foundations of genetic algorithms.
- 11. Explain supervised Hebbian learning.
- 12. Explain hopfield network.
- 13. Describe fuzzy relations.
- 14. Explain the Fundamental concept of Evolutionary Computation.

 $(4 \times 3 = 12 \text{ Weightage})$

Part-C

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

- 15. Describe Genetic algorithm, genetic operators and parameters.
- 16. Explain associative learning.

- 17. Illustrate applications of fuzzy set.
- 18. Describe swarm intelligence.

$(2 \times 5 = 10 \text{ Weightage})$
