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Name :....

Reg. No :....

#### SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2025

#### (CBCSS-PG)

(Regular/Supplementary/Improvement)

#### **CC19P CSS2 C09 - COMPUTATIONAL INTELLIGENCE**

(Computer Science)

(2019 Admission onwards)

Time: 3 Hours

Maximum: 30 Weightage

# Part-A

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

- 1. Expalin DFS.
- 2. Examine in brief constraint satisfaction problem.
- 3. Explain in brief instances and ISA relationships.
- 4. Explain in brief forward versus backward reasoning.
- 5. Discuss components of planning system.
- 6. Explain expert system shells.
- 7. Describe in brief genetic algorithm.

### $(4 \times 2 = 8 \text{ Weightage})$

# Part-B

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

- 8. Discuss strategies of state space search.
- 9. Inspect Steepest Ascent Hill Climbing.
- 10. Analyze AO\* algorithm.
- 11. Explain Knowledge representation issues.
- 12. Explain Resolution in predicate logic.
- 13. Demonstrate conceptual dependency.
- 14. Describe hopfield networks.

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

# Part-C

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

15. Interpret the state space search with example.

- 16. Inspect Best First Search with A\* algorithm.
- 17. Illustrate alpha beta pruning.
- 18. Interpret various types of machine learning.

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

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