

NOVEMBER 2023

50438/SE45A

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define General Problem Solver.
2. What is meant Physical Symbol System Hypothesis?
3. List out the various Properties of Knowledge.
4. Denote Backtracking.
5. What is meant Hill Climbing?
6. What is Ridge State?
7. Define Mutilated Checkerboard Problem.
8. What is meant Representation Adequacy?
9. What is meant Proportional Logic?
10. Decide Predicate Logic.
11. What is Procedural Knowledge?
12. Define Declarative Knowledge.

IN Bsc computer Science → Artificial Intelligence and Expert

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Explain in detail about Breadth First Search with its Example and Algorithm.
14. Infer in brief about Depth First Search with its Example and Algorithm.
15. Extend in detail about Steepest-Ascent Hill Climbing method with its Algorithm.
16. Paraphrase in brief about Best First Search The A* Algorithm with example.
17. Outline in detail about Inheritable Knowledge diagram with algorithm.
18. Rephrase in brief about Representing Instance and Isa Relationship with example.
19. Describe in detail about Forward versus Backward Reasoning with example.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Elucidate in brief about a Water Jug Problem with its Example and Algorithm.
21. Enumerate in detail about Agenda-Driven Search Algorithm using Best-First Search.

22. Illustrate in brief about Issues in Knowledge Representation with example.
23. Summarize in detail about various example of Predicate Logic as a Representing Knowledge.
24. Differentiate Forward-Chaining Rule System and Backward-Chaining Rule System with example.