

APRIL 2023

50438/SE45A

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define an Artificial Intelligence.
2. What is Turing test?
3. Write a note on Heuristic function.
4. What is DENDRAL?
5. Define : Gradient search.
6. What is fact?
7. List the four properties used in relationships among attributes.
8. Name the standard symbols used in predicate logic.
9. Define Resolution.
10. What is goal-directed reasoning?
11. Write a note on Horn clause? Give an example.
12. What is an Expert system? Give an example.

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Explain Breath-First search algorithm with an example.
14. Write the Issues in the design of search programs.
15. Describe simple Hill Climbing Algorithm with an example.
16. Explain the working of Best-first search with an example.
17. Summarize on Frame Problem.
18. Discuss the Natural detection with an example.
19. Distinguish between procedural and declarative knowledge.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Describe any five Problem Characteristics of AI with example.
21. Explain the Means-ends analysis algorithm.

22. What are the approaches to Knowledge representation? Explain.
 23. Describe the conversion to clause form algorithm.
 24. Summarize the Expert System Life Cycle in detail.
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