

**DECEMBER 2021**

**P/ID 17633/PCATF**

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Time : Three hours

Maximum : 80 marks

PART A — ( $10 \times 2 = 20$  marks)

Answer any TEN questions.

1. Write down the benefits of AI.
2. What do you mean by Intelligent agent?
3. Name the uninformed search strategies.
4. What is meant by Iterative deepening?
5. Write the concept behind simulated Annealing.
6. What are called stochastic games?
7. What is meant by Alpha-Beta pruning?
8. What is called constraint propagation?
9. Write down the syntax and semantics of First order logic.
10. What do you mean by ontological Engineering?
11. How to do reasoning with default information?
12. Write down the Bayes model.

PART B — ( $5 \times 6 = 30$  marks)

Answer any FIVE questions.

13. Briefly discuss the history of AI.
14. Explain the concept of Rationality.
15. Briefly describe Depth first search algorithm.
16. Describe Heuristic search strategies.
17. Explain steepest ascent Hill climbing algorithm.
18. Write short notes on predicate logic.
19. Explain Baye's theorem.

PART C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

20. Explain TIC TAC TOE problem.
21. Describe Greedy Best first search algorithm.
22. Explain Alpha-Beta pruning algorithm.
23. Describe the backtracking search for CSPs.
24. Explain the various methods of Knowledge representation.