APRIL 2023 **57703/CS21C**

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer any TEN questions.

1. Define the term – Artificial Intelligence.

2. What is Turing test?

3. Define the term – Intelligent agents.

4. What is Hill Climbing?

5. Mention the problem in Game playing.

6. Specify the approaches to Knowledge representation.

7. What is Non-monotonic reasoning?

8. Distinguish between Forward and Backward reasoning.

9. What is meant by Statistical learning?

10. What is meant by Resolution in first-order logic?

11. Mention the types of Expert systems.

12. What is Knowledge engineering?

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Describe briefly the foundations of Artificial Intelligence.

14. Explain the concept of Agents, Environments and the concept of Rationality.

15. Discuss on the method of Searching for Solutions.

16. Describe about Alpha-Beta Pruning.

17. Explain the way of representing simple facts in Logic and Logic programming.

18. Discuss briefly on Reinforcement Learning.

19. Describe about the Expert systems success factors and problems addressed by expert systems.

PART C — (4 × 10 = 40 marks)

Answer any FOUR questions.

20. Discuss on the Structure of Agents.

21. Describe the basics of Game playing, Mini-max algorithm and optimal decisions in multiplayer games.

22. Explain about Semantic nets and Frames.

23. Discuss on the method of representing Knowledge using Rules.

24. Describe about the Forward and Backward Chaining in First-order logic.

25. Explain the basic concepts, structure and human element in Expert systems.

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