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Total No. of Questions: 09

Total No. of Pages: 02

MCA(Sem.5)
ARTIFICIAL INTELLIGENCE
Subject Code: MCA-501
Paper ID: 74381

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. Attempt any ONE question (carrying TEN marks) each from Section A, B, C and D.
2. Section-E is compulsory carrying TWENTY marks.

SECTION A

1. How are problems defined in AI? Give an example with your answer.
2. What do you mean by the term 'Artificial Intelligence'? What are the different aspects of this field?

SECTION B

3. How is Informed Search technique implemented in AI? Explain in detail with an example.
4. Describe the role of Heuristic information in searching problems in AI.

SECTION C

5. (a) Represent the following information in FOPL:
 - i. Sue owns a dog.
 - ii. All cats are mammals.(b)What is Clausal form? Why are sentences converted into clausal form?
6. Explain in detail the Resolution principle with the help of an example.

SECTION D

7. What are the different ways in which uncertainty is dealt with in AI?

8. Describe the role of Parsing in Natural Language Processing.

SECTION E

9. Write short notes on:

- a. Difference between Frames and Scripts
- b. Turing Test in AI
- c. Uses of Alpha-Beta Pruning
- d. Shortcomings of Propositional Logic
- e. Breadth First Search with an example
- f. Fuzzy Logic
- g. Disadvantages of Uninformed Search
- h. Syntax of FOPL
- i. Belief Networks
- j. Difference between Depth-first and A* algorithm