

Roll No.

Total No. of Pages : 02

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B.Tech. (Computer Science & Engineering) (Sem-7)

ARTIFICIAL INTELLIGENCE

Subject Code : BTCS/701

M.Code : 71893

Date of Examination : 24-4-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer the following questions:

- a) What do you mean by utility theory?
- b) What do you mean by conditional planning?
- c) Define event.
- d) Define built-in predicates.
- e) What do you mean by LISP?
- f) What do you mean by Agent?
- g) What is knowledge representation?
- h) Explain predicate logic.
- i) What is Heuristic search?
- j) What is the need of AI?

SECTION-B

2. What do you mean by AI? Explain contribution of AI in various fields with examples.
3. Explain the best first search in detail with an example.
4. Explain PROLOG in detail with suitable examples.
5. Explain hierarchical and conditional planning in detail.
6. Explain genetic algorithms with examples.

SECTION-C

7. Explain A* algorithm in detail with examples.
8. What are the characteristics of AI problem, explain with the help of examples.
9. Explain natural language processing and formal grammar in detail.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.