

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (Sem.-3)

ARTIFICIAL INTELLIGENCE & SOFT COMPUTING

Subject Code : PGCA1926

M.Code : 90799

Date of Examination : 14-06-2024

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C. have FOUR questions each.
3. Attempt any FIVE questions from SECTION-B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION-B & C and FIFTH from any section.

SECTION-A

1. Write short notes on :

- a. Define AI.
- b. What is Tic-Tac-Toe problem?
- c. What is clause in AI?
- d. Discuss Greedy Search.
- e. Write the use of Semantic Analysis.
- f. Write a short note on Supervised Learning.
- g. Define Fuzzy Logic.
- h. What are Back propagation networks?
- i. Discuss concept of optimization.
- j. What are hybrid systems?

SECTION-B

2. Discuss the concept and solution of 8-Queens problem.
3. Explain Knowledge representation. What is importance and use of propositional Logic in AI?
4. How does Hill climbing algorithm work? Write its applications.
5. Write the concept of grammars and parsing in Natural language processing.

SECTION-C

6. Explain some of the important applications of Soft Computing.
7. Discuss the use of Neural Networks. Discuss its learning rules.
8. By taking an suitable example show the Fuzzy Arithmetic and structure of Fuzzy rule based system.
9. Explain in detail about Genetic algorithms operators, methods of selection and crossover.

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