

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT)/MCA (Sem.-4)

ARTIFICIAL INTELLIGENCE AND SOFT COMPUTING

Subject Code : PGCA-1926

M.Code : 79691

Date of Examination : 07-07-22

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.

SECTION-A

1. Write short notes on :

- a) What is Intelligence?
- b) Write the use of Forward chaining.
- c) What is definite clause in AI?
- d) Discuss memory bounded heuristic search.
- e) Write the use of Semantic Analysis.
- f) Write a short note on Supervised Learning.
- g) Differentiate between hard and soft computing.
- h) What is self-organizing map in Neural Networks?
- i) Discuss defuzzification method.
- j) What are hybrid systems?

SECTION-B

2. Discuss the concept of 8-Queens problem.
3. What is importance and use of propositional logic in AI?
4. How does hill climbing algorithm work? Where it is used?
5. Write the concept of parsing in Natural language processing.

SECTION-C

6. Explain some of the important applications of Soft Computing.
7. Discuss the use of Associative memory in Soft computing.
8. By taking suitable examples, 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.