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**Total No. of Pages : 02**

**Total No. of Questions : 09**

**PIT B.Tech. (CSE/ECE/IT/ME/EE) (Sem-7)**

**ARTIFICIAL INTELLIGENCE**

**Subject Code : BTEC-908A-18**

**M.Code : 90678**

**Date of Examination : 27-05-2023**

**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. Write Briefly :**

- a. What do you mean by intelligent control?
- b. What is declarative knowledge?
- c. Explain ANN.
- d. Explain Fuzzy Logic.
- e. What do you mean by open list?
- f. Define probability.
- g. Define temporal difference learning.
- h. What is state space?
- i. Role of AI in today's era.
- j. What do you mean by policy iteration?

## **SECTION-B**

2. Explain Architecture of Intelligent control system?
3. Explain Self Organizing Networks in detail.
4. Explain Fuzzy set operations with suitable example.
5. What do you mean Mutation and Crossover probabilities? Explain.
6. Explain GA in route planning for travelling sales person.

## **SECTION-C**

7. What are the characteristics of AI problem, explain with the help of example.
8. Explain Crisp Vs Fuzzy set theory in detail with appropriate example.
9. Explain Single and multi-point crossover operation in detail with suitable examples.

**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.**