# STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2019 – 2020 and thereafter)

# M.Sc. DEGREE EXAMINATION, NOVEMBER 2023 INFORMATION TECHNOLOGY THIRD SEMESTER

COURSE : CORE

PAPER : ARTIFICIAL INTELLIGENCE

SUBJECT CODE: 19CS/PC/AI35

TIME : 1 1/2 HOURS MAX. MARKS: 50

#### SECTION - A

# ANSWER ALL THE QUESTIONS:

(5x2=10)

- 1. What is an AI Technique?
- 2. Enumerate the differences between Procedural and Declarative Knowledge.
- 3. Why do we use Iterative Deepening?
- 4. Define: Rote learning.
- 5. List any two examples of expert systems.

#### SECTION - B

### **ANSWER ANY FOUR QUESTIONS:**

(4x5=20)

- 6. Enumerate the types of heuristic search techniques and explain any one in detail.
- 7. Discuss about fuzzy logic.
- 8. Compare and Contrast forward versus backward reasoning.
- 9. Explain Characteristics of semantic analysis in natural language processing.
- 10. Describe Hopfield neural networks.
- 11. Illustrate the significance of Knowledge Acquisition in AI.

## **SECTION - C**

#### **ANSWER ANY TWO QUESTIONS:**

(2x10=20)

- 12. Write short notes on Predicate Logic.
- 13. Describe the features of neural net learning and Genetic learning.
- 14. Explain the Architecture of expert systems with neat diagram.

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