25803056

25803056

Reg. No.....

Name.....

# INTEGRATED M. C. A. (I. M. C. A.) DEGREE EXAMINATION, MAY 2025

**Fourth Semester**

IMCA 401—ARTIFICIAL INTELLIGENCE

(2019 and 2018 Admissions—Supplementary/2017 Admissions—Mercy Chance)

Time : Three Hours Maximum Marks : 75

## Part A

*Answer any* **ten** *questions.*

*Each question carries* 3 *marks.*

1. Recall the assumptions of artificial intelligence.
2. Define the term "LISP".
3. What are the salient features of PROLOG ?
4. State the properties of WFFS.
5. Explain the need of Non-Deductive inference method.
6. How will you create a class and objects in Object Oriented Systems ? Give example.
7. Give the benefits of Fuzzy matching algorithm.
8. Describe the integrating knowledge in memory.
9. Memorize the general concepts in knowledge acquisition.
10. What are the advantages of genetic algorithms ?
11. Write a note on patterns recognition.
12. Point out the knowledge system building tools.

(10 × 3 = 30)

**Turn over**

## Part B

*Answer* **all** *questions.*

*Each question carries* 9 *marks.*

13. (a) Inspect the level of model and criteria for success.

*Or*

(b) Dissect the characteristics of production system.

14. (a) Measure the syntax and semantics of propositional and predicate logic.

*Or*

(b) Influence the general architecture of associative networks with diagram.

15. (a) Compare and construct the blind search and informed search with example.

*Or*

(b) Discuss the implementation procedures for RETE algorithm.

16. (a) Assume the steps to difficulty in knowledge acquisition.

*Or*

(b) Interpret the importance of analogical reasoning and learning.

17. (a) Conclude the purpose of semantic analysis and representation structures.

*Or*

(b) Elucidate the system architecture and functions of experts system.

(5 × 9 = 45)