

A-847

Total Pages : 3

Roll No.

MCS-E6

Master of Computer Application (MCA)

(Artificial Intelligence)

4th Semester Examination, 2024 (June)

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

(Long Answer Type Questions) 2×19=38

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. How an algorithm's performance is evaluated ? Compare different uninformed search strategies.
2. Discuss about the forward and backward chaining algorithm with example.
3. Discuss in detail about the architecture of intelligent agent.
4. What do you mean by an expert system ? What are the main advantages in keeping the knowledge base separate from control module in knowledge-based system ? Discuss about the components of expert system.
5. Describe in detail about the steps involved in knowledge engineering process.

Section–B

(Short Answer Type Questions) 4×8=32

Note :- Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Write short notes on :
 - (i) Genetic Algorithm
 - (ii) A* searching technique
2. How artificial intelligence handles reasoning under uncertainty ? Discuss in detail.

3. What is reinforcement learning ? How does it work ?
4. What do you mean by artificial intelligence ? What are the different types of AI ?
5. Explain Bayes Theorem in detail.
6. What do you mean by first order predicate logic ? Explain it through example.
7. How an AI can be used in E-Commerce business model ?
8. Discuss and differentiate between supervised and unsupervised learning with suitable example.
