

S-784

Total Pages : 4

Roll No. -----

MCS-E6

Artificial Intelligence

Master of Computer Application (MCA)

4th Semester, Examination 2022(Dec.)

Time: 2 Hours

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.

Section – A

(Long Answer – type questions)

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.

[2 x 19 = 38]

P.T.O.

- Q.1. What is Artificial Intelligence? Discuss the need of Artificial Intelligence? Mention some real world applications of AI.
- Q.2. Discuss Constraint Satisfaction problem with an algorithm for solving a problem.
- Q.3. What is search algorithms? With suitable example how AO* algorithm is used for problem reduction.
- Q.4. What is reinforcement learning? What type of problems can be solved by reinforcement learning? What is the most effective use of reinforcement learnings?
- Q.5. How can you development an Expert System in Artificial Intelligence? Also explain the Philosophy of AI.

Section – B

(Short-answer-type questions)

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.

[4 x 8 = 32]

- Q.1. What are the different types of AI? Discuss in brief each.
- Q.2. Discuss in brief the Bayesian networks and Bayesian theory.
- Q.3. What do you understand by Genetic algorithm? Where is genetic algorithm used in real life?
- Q.4. What is Markov's Decision process? Give example.
- Q.5. What is Deep Reinforcement Learning? Mention some important algorithm of reinforcement learning.

P.T.O.

Q.6. What is a Heuristic search? Give example.

Q.7. What is Decision Theory?

Q.8. What is Adversarial Search? How Adversarial Search for the minimax procedure works?
