

M.C.A. Sem.2 Examination
Artifici Intelligence
June-2025

Date : 24/6/2025, Tuesday
Time : 3-00 Hours]

[Max. Marks : 50

Instructions:

- Write both the Sections in the separate answer book.
- Both Sections having equal weightage.
- Draw Diagrams wherever necessary.
- Make Assumptions wherever necessary.

Section - I

- Q.1 Describe following: (Any – 5) [10]
- 1.What is AI?
 - 2.Goals of AI.
 - 3.Contributions of AI.
 - 4.Difference between with and without AI.
 - 5.AI technique.
 - 6.Task domains of AI.
- Q.2 Explain following algorithms with appropriate examples: (Any – 3) [15]
- 1.Best First Search.
 - 2.A* Algorithm.
 - 3.Depth First Search.
 - 4.Steepest Descent Hill Climbing.

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Section - II

- Q.3 Define the following: (Any – 5) [10]
1. AND-OR graph
 2. Plateau
 3. State
 4. Heuristic function
 5. Recoverable problem
 6. Local and global maxima
- Q.4 Explain steps of NLP, its application, importance and limitations. [5]
- OR**
- Q.4 Explain semantic net framework with suitable example. [5]
- Q.5 Exhibit the following conceptual dependencies: (Any – 5) [10]
1. Ram ate apple.
 2. Merry went to college yesterday.
 3. Susan went to a restaurant for dinner.
 4. School decided to take students to picnic.
 5. Students listened to the speaker.
 6. Om pushed Rohan with his hand.
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