



ADITYA DEGREE COLLEGES: AU REGION

IV SEMESTER - MID - I - EXAMINATIONS

Date:07-02-2025

Course: II BSc

Max. Marks: 60 M

Time: 3 hrs

Subject: Introduction to AI (AIR Major)

SECTION - A

I. Answer the any five from following questions.

5 x 4=20M

- 1) Explain the concept of rationality in AI.
- 2) Discuss the nature of environments in AI and provide examples.
- 3) Describe uninformed search strategies with examples.
- 4) Explain the process of problem formulation in AI.
- 5) What is Alpha-Beta pruning? Explain its use in game-playing agents.
- 6) Explain the working of the Mini-Max algorithm with a game-tree example.
- 7) Explain about optimal decisions in multiplayer games.
- 8) Explain about structure of agents in AI.

SECTION - B

II. Answer all the following questions.

4 x10=40M

- 9.a) Define Artificial Intelligence (AI) and explain AI problems with examples.

OR

- b) Explain the foundation and history of AI in detail.

- 10.a) Describe agents and environments in AI with relevant examples.

OR

- b) Explain problem-solving agents and their role in AI systems.

- 11.a) Explain Breadth-First Search (BFS) with an example.

OR

- b) Discuss the A* algorithm and illustrate its working with an example.

- 12.a) Explain about depth first search with example.

OR

- b) Explain the working of the Mini-Max algorithm with a game-tree example.