19EAI232: Introduction to Artificial Intelligence and its Applications

Question Bank

UNIT 02 and 03

SECTION-I

Answer ALL Questions (5*2=10 Marks)

1. Define Local Search Algorithm.
2. Explain in brief three types of Local searches.
3. Explain in brief types of Hills Climbing search algorithm.
4. What is Adversarial Search.
5. AI is Applied in games, explain its types.
6. What are the limitations of MIN MAX algorithm?
7. Explain the term pruning in algorithm.
8. Explain the term Constraint satisfaction problems (CSPs)
9. Write and describe Real Life Problems which can be solved using CSP.
10. Explain Local Search for CSP
11. Explain the term Knowledge Based Agents.

SECTION-II
Answer any TWO Questions (2*10=20 Marks)

1. Design a State Space landscape which explain Local search Algorithm. Define Global Minimum and Define Global Maxima

2. Design a state space landscape for the Hill Climbing algorithm.

3. Create a Game using MIN and MAX two players. Use a Tre structure to explain working.

4. Explain the term MIN and MAX, create and tree structure to explain working of MINMAX algorithm.

5. Create a tree structure to explain the working of Alpha – Beta – Pruning, Explain with example and tree structure.

6. Create a MAP for the solution of the Constraint satisfaction problems (CSPs). Explain the term Domain, Variables, Constraints.

7. What is Backtracking Search for CSP, Explain with suitable examples.

8. Create a knowledge-based agents' architecture and explain various levels of knowledge-based agents.

9. Create and Knowledge based agents with WUMPUS, design and explain with an example.