



SNS COLLEGE OF TECHNOLOGY

COIMBATORE-35

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Part-A – Short type Questions

(2 marks)

1.	What is artificial intelligence?
2.	Define structure of an agent
3.	Explain in detail about AI problems with real time example.
4.	Define problem solving agent
5.	List the Characteristics of Agent.
6.	What are the four components of a problem?
7.	Define Constraints satisfaction problem
8.	Compare human intelligence with artificial intelligence.
9.	What are the different types of problem and problem solving techniques in AI?
10.	Define Inference
11.	Define Heuristic search
12.	Define BFS
13.	What is memory bounded search ?
14.	List the some uninformed search strategy.
15.	List the real time applications of AI.

Part-B – Essay type Questions

(16 Marks)

1.	Describe an environment of Wumpus world in which knowledge based agents can show their worth.
2.	How many solution are there for the map coloring problem and how many solutions if four colors are allotted? Two colors?
3.	Explain A* algorithm with an example
4.	Explain in detail about the agents based on propositional logic.
5.	What do you mean by state space search? Describe about the construction of state space?
6.	Explain in detail about first order logic with preposition logic
7.	“Peter can play cricket. Peter cannot play tennis. He can play tennis and cricket. He can play tennis or badminton. If peter can play tennis then he can play badminton. He can play tennis if and only if he play badminton “. Derive implication statements in terms of propositional logic with truth table.
8.	Apply the steps involved in search through problem space for 8 queens and explain in detail.
9.	Analyze how breadth first and depth first search algorithm to minimize the total estimated cost.
10.	Explain in detail Informed and Uninformed strategies.

