Charotar University of Science and Technology [CHARUSAT]

Chandubhai S. Patel Institute of Technology [CSPIT]

Department of Computer Science & Engineering

Question Bank

Subject code	:	CS341	Semester	:	5	Academic Year	:	2022-23
Subject name	:	Artificial Intelligence						

1.	What is state space of a problem?	3
2.	Explain Best First Search method with any example.	5
3.	Discuss with examples: AI Problem Characteristic.	5
4.	Consider the following sentences: 1) Raj likes all kinds of food. 2) Apples are food. 3) Anything anyone eats and isn't killed by is food. 4) Sachin eats peanuts and is still alive. 5) Vinod eats everything Sachin eats. Now, attempt following: i. Translate these sentences into formulas in predicate logic ii. Use resolution to answer the question, "What food does Vinod eat?"	5
5.	Discuss limitations of Hill climbing search method.	3
6.	Explain Monotonic & Non monotonic reasoning.	5
7.	Discuss steepest ascent hill climbing.	3
8.	Explain alpha-beta cut off search with an example. State a case when to do alpha pruning.	5
9.	Discuss Min-Max search method.	3
10.	Explain steps of Natural Language Processing	3
11.	What is state space representation of a problem? Show the state space of the 8 puzzle problem.	5
12.	Explain difference between forwards reasoning and backward reasoning.	5
13.	Explain Semantic net, Frames, & Ontology	3
14.	Explain probability & Bay's theorem	3
15.	Explain AO* algorithm with any example.	3
16.	Explain Genetic Algorithm & Ant colony optimization.	2
17.	Explain Neural Network.	3
18.	Explain Blind Search techniques with any example.	5
19.	Explain expert system development system.	3
20.	Explain any state-of-the-Art Game program.	3

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