



B.Tech V Semester Regular/Supplementary Examinations, February 2024
ARTIFICIAL INTELLIGENCE
(COMPUTER SCIENCE & ENGINEERING)

Maximum Marks: 70

Date: 24.02.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A		CO	Bloom Tx
All the following questions carry equal marks (10x2M=20 Marks)			
1	What is heuristic function?	CO1	L1
2	Define depth first search.	CO1	L1
3	Differentiate between forward and backward reasoning.	CO2	L2
4	Name the issues involved in knowledge representation.	CO2	L2
5	What is Dempster-Shafer theory?	CO3	L1
6	Differentiate between statistical reasoning and fuzzy reasoning.	CO3	L2
7	What is meant CYC in AI?	CO4	L1
8	What is Conceptual Dependency?	CO4	L2
9	Name some alternative planning technique to goal stack planning.	CO5	L1
10	What is the advantage of using iterative deepening?	CO5	L2
Part-B		CO	Bloom Tx level
Answer All the following questions. (5X10M=50Marks)			
11	What are uninformed search strategies? Explain. [10m]	CO1	L3
OR			
12	Discuss Hill Climbing Heuristic Search techniques with numerical illustration. [10m]	CO1	L3
13	Discuss in detail about approaches to knowledge representation. [10m]	CO2	L3
OR			
14	Summarize the various issues faced while representing Knowledge in Artificial Intelligence. [10m]	CO2	L3
15	Discuss about probability and Bayesian theorem. [10m]	CO3	L2
OR			
16	Summarize in detail about reasoning with Fuzzy sets with some examples. [10m]	CO3	L4
17	Describe the types of Semantic Network. [10m]	CO4	L3
OR			
18	Define the Scripts and explain the components of scripts with a real-time	CO4	L3

	example. [10m]		
19	Explain the Minimax search procedure and discuss the time and space complexity of the Minimax search. [10m]	CO5	L4
	OR		
20	Discuss the concept of goal stack planning in AI. Provide a detailed example to illustrate how goal stack planning works in solving a planning problem. [10m]	CO5	L4