PVP 20

Code: 20CS4501D

III B.Tech - I Semester – Regular Examinations - DECEMBER 2022

ARTIFICIAL INTELLIGENCE
(COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.
2. All parts of Question must be answered in one place.

BL – Blooms Level CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	Explain about the categorization of AI definitions.	L2	CO1	7 M
	b)	Discuss any four successful applications of AI.	L2	CO1	7 M
OR					
2	a)	What is intelligent agent? Explain in detail with an example.	L2	CO1	7 M
	b)	Illustrate a Medical Diagnosis system by using PEAS Factors.	L3	CO2	7 M
UNIT-II					
3	a)	What is Problem solving? Demonstrate the solution for searching with suitable example.	L3	CO4	7 M
	b)	Illustrate any one informed search strategy with suitable example.	L3	CO4	7 M

		OR			
4	a)	Demonstrate any one uninformed search strategy with suitable example.	L3	CO4	7 M
	b)	Illustrate A* algorithm with suitable example.	L3	CO4	7 M
		UNIT-III			
5	a)	Illustrate the use of First Order Logic to represent the knowledge.	L3	CO2	7 M
	b)	Explain in detail about Unification algorithm with suitable example.	L2	CO3	7 M
		OR			
6	a)	Translate the following sentences into formulas of predicate logic. i) A John likes all kinds of food. ii)Apples are food iii)Chicken is food iv)Anything anyone eats and isn't killed by is food	L2	CO2	7 M
	b)	Discover the differences between forward chaining and backward chaining.	L3	CO3	7 M
		UNIT-IV			
7	a)	List and explain the Components of a Planning System.	L2	CO3	7 M
	b)	Explain about Heuristics for planning.	L2	CO3	7 M
		OR			
8	a)	Discuss about continuous and Multi-agent Planning.	L2	CO3	7 M

	b)	Demonstrate planning with propositional logic with suitable examples.	L3	CO3	7 M
UNIT-V					
9	a)	Explain about various probabilistic models for learning.	L2	CO3	7 M
	b)	Illustrate various forms of learning with suitable examples.	L3	CO3	7 M
OR					
10	a)	Discuss various issues in learning a probabilistic model.	L2	CO3	7 M
	b)	Demonstrate Reinforcement learning and its applications.	L2	CO3	7 M