SET 2

SR 22

St. Peter's Engineering College (Autonomous) Dullapally (P), Medchal, Hyderabad – 500100. II - Mid Term Examination – November 2024						Dept.	:	CSM
						Academic Year 2024-25		
Subject Code	:	AS22-66PC01	Subject	:	INTRODUCTION TO ARTIFICIAL INTELLIGENCE			
Class/Section	:	B. Tech.	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

BLOOMS LEVEL					
Remember	L1	Understand	L2	Apply	L3
Analyze	L4	Evaluate	L5	Create	L6

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PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT - I			
1	**a.** What are the types of Agents?	1M	L1	C221.1
	b. Write down the properties name of Search Algorithm.	1M	L1	C221.1
	c. What is the time complexity of DFS algorithm?	1M	L1	C221.1
	d. Define problem solving agent.	1M	L1	C221.1
	UNIT – II			
	e. What is Alpha and Beta.	1M	L1	C221.1
	f. Define Minimax Algorithm.	1M	L1	C221.1
	g. What are types of Constraint Satisfaction Problems?	1M	L1	C221.1
	h. State De Morgan's Laws.	1M	L2	C221.2
	UNIT – III			
	i. Define wumpus world?	1M	L1	C221.1
	j. Evaluate the given sentence "**All Pompians were Romans**" write a well-formed formula in predicate logic.	1M	L5	C221.5

PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT - I			
2	**a.** Explain about different Environment Types in AI.	4M	L1	C221.1
	b. Explain Problem Solving Agents in brief.	4M	L1	C221.1
	OR			
3	**a.** Explain about A* search algorithm.	4M	L2	C221.2

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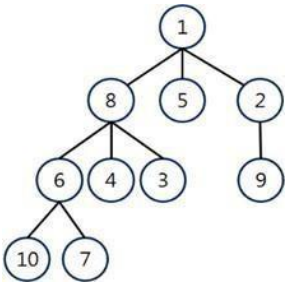
	b. Discuss Depth First Search Technique with the help of a given tree.  	**4M**	L5	C221.5
	UNIT – II			
4	**a.** Write a short note on Minimax algorithm with example.	**4M**	L1	C221.1
	b. Write short note on the following Algorithm: a. Backtracking Algorithm b. Forward-Checking Algorithm	**4M**	L2	C221.2
	OR			
5	**a.** Explain constraint satisfaction problem with graph coloring as example.  	**4M**	L5	C221.5
	b. With a neat diagram explain about the architecture of knowledge-based agent.	**4M**	L1	C221.1
	UNIT – III			
6	Explain inference rules for quantifiers?	**4M**	L1	C221.1
	OR			
7	Explain backward chaining process?	**4M**	L1	C221.1

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