PRN:		Course Code:	PCA302R

Second Year **M.C.A.** End Semester Examination Winter 2024

Artificial Intelligence 000401

Day and Date: Mon 25 Nov 2024 Max Marks: **100**

Time: 10:30AM To 01:30PM Duration: **03** hrs.

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Define Artificial Intelligence. List any four applications of AI.	08	L1	CO1
	b)	Demonstrate Problem Reduction Approach.	08	L2	CO2
		OR			
	b)	List types of Production system.	08	L1	CO1
Q.2		**Attempt the following**			
	a)	Explain in detail Brute First search.	08	L2	CO1
	b)	Demonstrate Depth first search with example.	08	L2	CO2
		OR			
	b)	Summarize Hill Climbing.	08	L2	CO4
Q.3		**Attempt any two from the following**			
	a)	List and explain types of Learning.	08	L1	CO1
	b)	Illustrate Knowledge Representation issues.	08	L2	CO2
	c)	How to represent Knowledge using rules?	08	L1	CO3
Q.4		**Attempt any two from the following**			
	a)	Extend Propositional and Predicate logic.	08	L2	CO3
	b)	Define First Order Logic, explain Syntax and Semantics.	08	L1	CO1
	c)	Design Conversion to Clausal form.	08	L6	CO3
Q.5		**Attempt any Two of the following**			
	a)	List and explain types of Reasoning.	09	L1	CO1
	b)	Compare in between DFS and BFS.	09	L4	CO4
	c)	Build truth maintenance system.	09	L6	CO4
Q.6		**Attempt any Two of the following**			
	a)	Illustrate Building blocks of expert system.	09	L2	CO2
	b)	Demonstrate phases of expert system.	09	L2	CO2
	c)	What are the characteristics of expert system?	09	L1	CO1

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