PRN:		Course Code :	PCA204

First Year **MCA** End Semester Examination Summer 2024

Introduction to AI 000393

Day and Date: Sat 23 NOV 2024 Max Marks: **100**

Time : 02:00PM To 05:00PM Duration: **03** hrs

Instructions: 1) **Each question is compulsory.**
2)**Right figure indicates full marks.**

		Marks	Bloom's Level	CO
Q.1	**Attempt the following**			
a)	Define Agent and explain types of agent in AI.	08	L2	CO2
b)	Describe applications of AI with an examples.	08	L2	CO2
	OR			
b)	State Production system and characteristics of production system.	08	L2	CO1
Q.2	**Attempt the following**			
a)	Define search algorithm, terminology and properties of search algorithm.	08	L2	CO3
b)	Explain Hill climbing algorithm and its problem with an example.	08	L2	CO2
	OR			
b)	Explain Mean-End Analysis with an example.	08	L3	CO3
Q.3	**Attempt any two from the following**			
a)	Define knowledge representation and types of knowledge.	08	L2	CO3
b)	Illustrate level of knowledge base agent and its approaches.	08	L2	CO2
c)	Compare forward and backward chaining.	08	L2	CO3
Q.4	**Attempt any two from the following**			
a)	Describe unification with its conditions and algorithm	08	L4	CO3
b)	Define inference .its rules and types in AI.	08	L3	CO1
c)	Illustrate Resolution in FOL with an example.	08	L3	CO2
Q.5	**Attempt any Two of the following**			
a)	Compare Deductive and Inductive reasoning.	09	L2	CO3
b)	Describe Monotonic and Non-monotonic reasoning with its advantages and disadvantages.	09	L3	CO3
c)	State truth maintenance system and its working principles.	09	L2	CO3
Q.6	**Attempt any Two of the following**			
a)	Define Expert system and its characteristics with an examples.	09	L2	CO3
b)	Discus the capabilities of expert system with its advantages an disadvantages.	09	L2	CO4
c)	Discus the importance of Expert system in AI.	09	L3	CO4

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