

Reg. No.:

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TERM END EXAMINATIONS (TEE) – December 2021- January 2022

Programme	: B.Tech.	Semester	: Fall 2021-22
Course Name	: FUNDAMENTALS IN AI and ML	Course Code	: CSA2001
Faculty Name	: Dr. RAKHI	Slot / Class No	: A11+A12+A13 /0039
Time	: 1½ hours	Max. Marks	: 50

Answer ALL the Questions

Q. No.	Question Description	Marks
PART - A (30 Marks)		
1	(a) i) Explain the Turing Test approach with an example.	5
	ii) How a Simple reflex agent is different from a Model-based Reflex agent. Show diagrammatically.	5
OR		
(b)	What are Constraint satisfaction Problems? Solve the following CSP problem using step by step procedure: $\text{USA} + \text{USSR} = \text{PEACE}$	10
2	(a) How to represent knowledge with the help of semantic network Explain with the help of a suitable example.	10
OR		
(b)	What is the basic typology of Interaction? How the communication process is important for intelligent agents? Explain in the context of Agent communication languages.	10
3	(a) i) Why argumentation is important for Agent communication? Explain the process of Argumentation with an example.	6
	ii) Write Prolog code for recursion using a suitable example.	4
OR		
(b)	Explain the Concept Learning task with all possible sets of concepts and examples in predicting the value of target variable.	10

PART - B (20 Marks)

- 4 i) Justify the importance of Best First Search in the context of the greedy approach. 6
- ii) How Game theory is important and how this is different from search problems?
- iii) What is the Description Logic and Truth Maintenance System? How these are important for reasoning? 4
- 5 What are the possible Machine Learning Problems? What are the Perspectives and issues in Machine Learning problems? How to solve these issues? 10

