

Reg. No.:

Name :



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

<b>Programme</b>	<b>: B Tech</b>	<b>Semester</b>	<b>: Fall 2021-22</b>
<b>Course Name</b>	<b>: Fundamentals in AI and ML</b>	<b>Course Code</b>	<b>: CSA2001</b>
<b>Faculty Name</b>	<b>: Dr. M. Maragatharajan</b>	<b>Slot / Class No</b>	<b>: C21+C22+C23/ 0062</b>
<b>Time</b>	<b>: 1 ½ hours</b>	<b>Max. Marks</b>	<b>: 50</b>

**Answer ALL the Questions**

<b>Q. No.</b>	<b>Question Description</b>	<b>Marks</b>
<b>PART - A ( 30 Marks)</b>		
1	(a) For the designing of automated taxi driver, analyse the PEAS components. Also explain it with relevant diagrams.  OR (b) For the 8 Queens problem, given solution using Hill climbing search and Genetic algorithms. Compare the performance of both.	10
2	(a) For the scenario, prediction of share market status as an effect of changes in interest rates, what type of chaining will be useful here for inferencing the rules and other data's. Brief it.  OR (b) For the sensor based vacuum tubes, which type of software agent will be used? Explain your answer with relevant diagrams.	10
3	(a) Among KQML and ACL, which one will be preferable for web-based communications? Explain it.  OR (b) Define Concept and Concept Learning. With example explain how the Concept Learning task determines the Hypothesis for given target concept.	10
<b>PART - B (20 Marks)</b>		
4	For the online chess playing game while the second player is the computer, then explain the following. i. Evaluation function ii. Minimax principle iii. Alpha beta pruning iv. Heuristic functions	10
5	Discuss the perspective and issues in machine learning.	10

