

	<b>Reg. No.:</b>	
	<b>Name :</b>	



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**Mid-Term Examinations – October 2021**

Programme	: <b>B. Tech.</b>	Semester	: <b>Fall 2021-22</b>
Course	: <b>Fundamentals in AI &amp; ML</b>	Code	: <b>CSA2001</b>
Faculty	: <b>Dr. Mahendra Pratap Yadav</b>	Slot/ Class No.	: <b>C11+C12+C13/BL2021 221000042</b>
Time	: <b>1 ½ hours</b>	Max. Marks	: <b>50</b>

**Answer all the Questions**

Q. No.	Sub. Sec.	Question Description	Marks
1		Define the Artificial Intelligence. Explain the concept of Artificial Intelligence either based on their capabilities or based on their functionality in details.	<b>10</b>
2	(a)	Discuss the concept of Turing Test in AI. Write the essential features that are required to a machine to pass the Turing test.	<b>5</b>
	(b)	Compare uninformed search and informed search with respect to its operation.	<b>5</b>
3		<p>Explain A* algorithm with the following example.</p> <p>Find the most cost-effective path to reach from start state A to final state J using A* Algorithm.</p>	<b>10</b>
4		Discuss the concept of DFS algorithm along with their properties. Write the pseudo code for the DFS algorithm.	<b>10</b>
5		Explain the concept of alpha-beta pruning approach. Solve the following example with the help of alpha-beta pruning approach.	<b>10</b>

