B.E./B.Tech. Examination Nov-Dec. 2022

Artificial Intelligence 150515

Time: 2 Hours

Maximum marks: 50

Minimum Passing marks:

Note:		 Answer all five questions. All questions carry equal marks. In each question part a, b are compulsory c and part d has internal choice. Out of which part a and b carry 2 marks, part c and d carry 5 marks. All parts of each question are to be attempted at one place. 			
)ues	stion	4. Assume suitable value for missing data, if any	Mar ks	Level	Course Outcome Mapped
10.		Unit-1			
			2	L1	CO1
ī.	(a)	Describe need of Artificial Intelligence?	2	L1	CO1
_	(b)	Write the requirements of Good control strategy.	ļ. —	L2	CO2
	(c)	Describe the water jug problem with their production rule.	6	122	CO2
	1 (-)	OR'	6	L1	CO1,5
	(d)	Explain the following Artificial Intelligence Techniques: 1. Machine Learning 2. Computer Vision & Robotic			001,0
		2. Computer Vision & Robotic Unit-2		<u> </u>	
	1 (-)	Explain the concept of Agent in AI	2	Ll	CO1,3
2	(a) (b)	Differentiate Breadth First Search and Depth First Search	2	L1	CO1,3
	(c)	Describe the Plateau, Ridge, and Local minima with respect to the hill climbing problems.	6	L2	CO3
		OR		 	CO3
	(d)	Write an algorithm for A* search?	6	L2	- 103
	<u> (u)</u>	Unit-3	1.	L1	CO1,4
3	(a)	Discuss the concept of Procedural knowledge.	2	L1	CO4
	(b)	Describe the knowledge representation techniques in AI (only two).	2		
	(c)	Construct the predicate logic for the following:	6	L2	CO4
		a. All Pompeian's were Roman.b. Everyone is loyal to someone.			
		b. Everyone is loyal to someone. c. Caesar was a ruler			
-		OR			
-	(d)	Define Semantic network. Write the important components of scripts.		L1	CO4,1
-	L	Unit-4			
+	1 (0)	Differentiate the various types of learning.		2 L1	CO1,5
4	(a)	CEnery logic With evample		2 L1	CO1,5