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MCA DEGREE THIRD SEMESTER EXAMINATION, JANUARY 2022
20-382-0314 APPLIED ARTIFICIAL INTELLIGENCE
(Regular)

Time : 3 Hours

Maximum Marks:50

(Answer ANY FIVE questions)
 Each question carries EQUAL Marks.

NOS	QUESTIONS	Marks	CO	BL	PI
1.	(a) What is the advantage of using Predicate logic over propositional logic?	3	CO2	L2	2.6.3
	(b) Show that $\neg(p \vee (\neg p \wedge q))$ and $\neg p \wedge \neg q$ is logically equivalent by developing a series of logical equivalences.	7	CO2	L3	1.2.1
2.	(a) Explain the types of agents with appropriate diagram.	7	CO5	L2	1.2.1
	(b) Summarize the concept of unification with an example.	3	CO1	L3	1.6.1
3.	What is Minimax algorithm? Explain a method for improving the efficiency of Minimax strategy.	10	CO4	L2	2.6.4
4.	(a) Illustrate the steps for digital image processing.	8	CO6	L2	2.6.1
	(b) Explain the concept of perception .	2	CO1	L2	1.6.1
5.	Elucidate the steps for Preprocessing in Natural Language Processing.	10	CO7	L2	2.6.1
6.	What is the advantage of using Heuristic function while searching? Find a cost-effective path to reach J from A in the following graph using A* algorithm.	10	CO3	L3	1.7.1
7.	Convert the following sentence in propositional logic to its equivalent CNF format. $B_{1,1} \Leftrightarrow (P_{1,2} \vee P_{2,1})$	10	CO2	L3	1.7.1
