[M19 IT 1103]

I M. Tech I Semester (R19) Regular Examinations
ARTIFICIAL INTELLIGENCE
Information Technology
MODEL QUESTION PAPER

TIME: 3 Hrs. **Max. Marks: 75 M**

Answer **ONE Question** from **EACH UNIT**
All questions carry equal marks
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			CO	KL	M
		UNIT - I			
1.	a).	Construct the state space graph model for vehicle not starting problem	1	4	7
	b).	Apply heuristic search algorithm to find the water jug problem	1	3	8
		OR			
2.	a).	Apply problem reduction strategy for problem solving	1	3	8
	b).	Explain the varis problem characteristics of AI	1	2	7
		UNIT - II			
3.	a).	Solve the given propositional calculus expressions are equivalent or not (P->Q->R) AND (P->Q ^ Q->R)	2	3	9
	b).	Analyze the given expression is tautology (P^Q^R)V ~P	2	4	6
		OR			
4.	a).	Illustrate the unification algorithm with example	2	2	6
	b).	Apply resolution refutation in proportional logic for checking the equivalence of expressions	2	3	9
		UNIT - III			
5.	a).	Construct semantic network for the mobile device	3	4	7
	b).	Construct the script for patient visiting the hospital	3	4	8
		OR			
6.	a).	Draw & explain the components of Expert system architecture	3	2	7
	b).	Build a rule based expert system for criminal identification.	3	3	8
		UNIT - IV			
7.	a).	Design Bayesian belief network for classification using rain prediction data set	4	4	6
	b).	How can we use the dampster Shafer theory for prediction?	4	3	9
		OR			
8.	a).	Identify the operations performed on fuzzy set	4	3	7
	b).	Write abt different types of membership functions	4	2	8
		UNIT - V			
9.	a).	How the support vector machines can be used in machine learning?	5	3	9
	b).	Differentiate the supervised & unsupervised learning	5	3	6
		OR			
10.	a).	Design a Perceptron for EX-OR gate logic	5	4	8
	b).	Draw the structure of multi layered forward networks	5	2	7