Seat	No.: _	Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY M. E SEMESTER – II • EXAMINATION – SUMMER • 2013	
Subject Name: Artificial Intelligence		Name: Artificial Intelligence	
		0.30 am – 01.00 pm Total Marks: 70 tions:	
11150	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)		7
	(b)	Technique can be represented, list out some of the task domain of AI. Analyze Tower of Hanoi problem with respect to seven problem characteristics.	7
Q.2	(a)	Write a note on Expert system and explain its characteristics	7
	(b)	Explain A* algorithm with example. OR	7
	(b)	Explain AO* algorithm with example.	7
Q.3	(a)	Consider the following sentences: 1. John likes all kinds of food. 2. Apples are food. 3. Chicken is food. 4. Anything anyone eats and isnøt killed by is food. 5. Bill eats peanuts and is still alive 6. Sue eats everything Bill eats.	7
	(b)	Translate these sentences into formulas in predicate logic. Explain and write algorithm for Minimax.	7
Q.3	(a) (b)	OR Explain and write algorithm for Minimax search with alpha-beta pruning. Write steps to convert wff into clause form.	7 7
Q.4	(a) (b)	Explain Learning in Problem solving. Explain forward versus backward reasoning OR	7 7
Q.4	(a) (b)	Explain Rote Learning. Explain fuzzy sets and differentiate between fuzzy sets and crisp sets with example.	7 7

Q.5 (a) Explain Unification Algorithm.(b) Explain architecture of neural networks and application areas of neural networks.

(b) Explain how Expert system is built using example of knowledge acquisition 7

OR

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7 7

Q.5 (a) Write a note on Bayesian networks.

system MOLE.