Seat No.:	Enrolment No.

Subject code: 730802

GUJARAT TECHNOLOGICAL UNIVERSITY M. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Date: 26/12/2012

-		Name: Artificial Intelligence 0.30 am – 01.00 pm Total Marks: 70	
Inst	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Write advantages and limitations of Artificial Intelligence over Natural intelligence.	07
	(b)	What is Crypt Arithmetic? Explain the applications of Crypt Arithmetic in Artificial Intelligence.	07
Q.2	(a)	Explain Case Based Reasoning in Artificial Intelligence.	07
	(b)	Write the applications of AI in Manufacturing Engineering. OR	07
	(b)	Explain Artificial Neural Network in detail.	07
Q.3	(a) (b)	Write the applications of Rule based and Case based Expert System. What is Constraint Satisfaction Problem? Explain Consistency Driven Techniques for solving CSP.	07 07
		OR	
Q.3	(a)	What is Heuristic Search? Explain Best First Search Algorithm.	07
	(b)	Write the production rules for Water jug problem.	07
Q.4	(a)	Show the step to solve the puzzle using Crypt Arithmetic. ROADS + CROSS = DANGER	07
	(b)	Explain importance of Predicate Logic and predicate Calculus in AI.	07
		OR	
Q.4	(a)	What is Search? Explain A* Algorithm.	07
	(b)	What is Machine Learning? Explain the Applications of machine Learning in Automated Industry.	07
Q.5	(a)	Explain Turing and Pruning in details.	07
	(b)	Explain Connectionist Speech and Connection Vision in Machine Learning.	07
Q.5	(a)	OR Explain the steps of Natural Language Understanding Process in Detail.	07
.	(b)	What is Expert System? Explain Application of Expert System in AI.	07
