Seat No.: Enrolment		Enrolment No.	t No	
	GUJARAT TECHNOLOGICAL UNIVERSITY M.E -II <sup>st</sup> SEMESTER-EXAMINATION – JULY- 2012			
Subject code: 1710410 Date: 14/0			2012	
Subj	ect N	lame: Introduction to Artificial Intelligence.		
Time: 10:30 am – 13:00 pm Total M		Marks: 70		
Instr	ucti	ons:		
		empt all questions.		
		ke suitable assumptions wherever necessary.		
3.	Figu	res to the right indicate full marks.		
Q.1	(a)	What is AI? What is intelligence? Discuss Practical Impact of AI in your	07	
_		field of engineering.		
	<b>(b)</b>	Explain in detail expert system architecture. Discuss characteristic	07	
		features of expert systems.		
Q.2	(a)	Give the problem space for the following.	07	
	()	(1) Chess. (2) Water Jug Problem.		
	<b>(L</b> )	Evaleia Maca End analysis algorithm	07	
	<b>(b)</b>	Explain Mean-End analysis algorithm.  OR	07	
	<b>(b)</b>	Explain hill climbing algorithm.	07	
Q.3	(a)	Explain cut predicate and its types.	07	
	<b>(b)</b>	Explain Graph theory.  OR	07	
Q.3	(a)	Explain fail predicate with example.	07	
<b>V.</b>	(b)	Discuss strategies for state space search.	07	
Q.4	(a)	Explain nearest neighbor algorithm with appropriate example.	07	
	<b>(b)</b>	Explain best first search algorithm with example.  OR	07	
Q.4	(a)		07	
	( )	acquisition? Discuss in detail with appropriate illustration.		
Q.4	<b>(b)</b>	Explain pattern directed search.	07	
Q.5	(a)	What is simulated annealing? Write an algorithm for simulated annealing.	07	
<b>~.</b>	(b)	Explain recursion based search.	07	
	\ · /	OR		
Q.5	(a)	Give five examples of facts that are difficult to represent and manipulate	07	

\*\*\*\*\*

in predicate logic

(b) Explain in brief appropriate case study of AI in manufacturing.

**07**