

P.CODE:37336

R05

SET- 2

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
IV.B.TECH - I SEMESTER REGULAR EXAMINATIONS NOV/DEC, 2009
ARTIFICIAL INTELLIGENCE
(Common to CSE, ECC)**

Time: 3hours

Max.Marks:80

**Answer any FIVE questions
All questions carry equal marks**

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1. a) Draw a state space representation of Towers of Hanoi problem
b) Explain the state space representation of Water – Jug problem [8+8]
2. Discuss in detail about the A* algorithm, using a suitable example [16]
3. a) Different between proposition logic& predicate logic.
b) Describe how the search control knowledge proves the efficiency or search in a Knowledge based systems [8+8]
4. Write short notes on:-
 - a. Semantic net
 - b. Frames
 - c. Scripts
 - d. Conceptual dependency [16]
5. a) What are the problems in implementing non – monotonic reasoning in problem solving process?
b) Compare chronological back tracking and dependency directed back tracking [8+8]
6. a) Describe how Alpha-Beta search works with relevant examples
b) What is Alpha-Beta Pruning [10+6]
7. a) Draw the case structure for “the train passes through the tunnel”
b) Explain what knowledge is necessary to produce a connect parse for
“Rama killed Ravana with the help of monkeys” [8+8]
8. Explain the importance of repeated problem solving for an effective improvement in the process of “Learning”. Distinguish it from Learning by taking advice. [16]
