

P.CODE:37336

R05

SET- 3

**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**

- - -

1. a) Provide a state space for the game of chess.

b) Describe different control strategies used in problem solving [8+8]
2. State the traveling salesman problem and explain: Combinational explosion, Branch and bound technique and Nearest neighbour heuristic [16]
3. a) Compare contrast conventional programs and rule based systems
b) Elucidate various knowledge level representations involved in reasoning process. [8+8]
4. Provide relational structures for slot and filler structures. Compare their merits and demerits. [16]
5. a) What is non Monotic reasoning? How it is used in problem solving.
b) Compare and contrast chronological back tracking and dependency directed back tracking. [8+8]
6. a) Write Waltzs algorithm.
b) "The Minimax procedure is depth first and depth limited" Justify? [10+6]
7. a) Derive a possible bottom up parsing for the sentence "The sun rises in the East"
b) Define the role of ATN in semantic analysis. [8+8]
8. a) What is meant by "Learning"?
b) Describe the features of memorization and direct instruction? [8+8]
