

P.CODE:37336

R05

SET- 4

**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) Develop algorithms for Depth first and Breadth First search algorithms?
b) Describe the factors determining the choice of direction of a particular problem [8+8]
2. Describe the following in detail: -
 - a) Hill climbing
 - b) Best first search
 - c) Constraint satisfaction [16]
3. a) What is meant by Matching? Explain complex and approximate matching
b) What are the desirable properties of knowledge representation [8+8]
4. a) Explain the various features of Declarative and Procedural frames
b) Suggest a semantic network to describe the furniture in a house. [8+8]
5. a) List the key reasoning operations that are performed by JTMS.
b) Justify how ATMS could be used in medical diagnosis. [8+8]
6. a) What is Hierarchical planning. Explain with relevant examples
b) Illustrate the minimax search for the tic – tac – toe game. [10+6]
7. a) Describe various classes of grammars
b) Describe Backus – Naur Form(BNF) syntax used in programming languages [10+6]
8. a) What is unsupervised learning?
b) “Learning is the most important characteristic of Intelligence” Justify. [8+8]
