

IV B.Tech II Semester Supplementary Examinations, April/May 2005
ARTIFICIAL INTELLIGENCE
(Electronics & Communication Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What is meant by artificial Intelligence.
(b) Discuss the branches and area of applications of A.I.
(c) Discuss the state space search representation problems with examples.
2. (a) Explain the cants of control strategies.
(b) Discuss a boot the four categories of production systems.
3. (a) What are semantic networks? Explain its features with sample semantic net.
(b) Explain the classifications of nodes in semantic net.
4. (a) Differentiate between procedural knowledge and declarative knowledge.
(b) Describe the frame problem in knowledge representation.
(c) Briefly discuss winstons learning program.
5. (a) Differentiate between Data-driven search and goal-driven search.
(b) What is machine learning?
(c) Explain the perceptron learning with example.
6. (a) Differentiate between connectionist A.I. and symbolic A.I.
(b) Discuss the parallism in Reasoning system and Distributed Reasoning systems.
(c) What is syntactic processing and semantic Analysis.
7. (a) What do you understand by Natural Language processing (NLP)? Explain.
What is pragmatic analysis.
(b) Write down the algorithm for Steepest-Ascent-Hill climbing and Simple-Hill-Climbing with example.
8. Write short notes on the following:
 - (a) A* search technique.
 - (b) Constraint satisfaction
 - (c) Forword and Backword Reasoning
 - (d) Expert system shells and knowledge Acquisition.
