

IV B.Tech I Semester Supplementary Examinations, November 2005
ARTIFICIAL INTELLIGENCE & EXPERT SYSTEMS
(Computer Science & Systems Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) If a problem-solving search program were to be written to solve language understanding problems, determine whether the search should proceed forward or backward. Justify your statement of answer?
(b) In what kind of a problem space would a depth-first search be better than a breadth first one? [8+8]
2. Describe A^* Algorithm? And explain its applications? [16]
3. What are basis of Resolution? And explain the unification algorithm? [16]
4. (a) Describe Nonmonotonic Reasoning?
(b) Describe statistical and Probabilistic Reasoning? [8+8]
5. Describe various schemas, scripts and goal structures of Languages understanding? [16]
6. Describe various methods involved in speech Recognition and understanding? [16]
7. (a) What are all the important characteristics of AI Languages?
(b) Describe computer architecture for AI applications? [8+8]
8. Write short notes on the following:
(a) AI problems
(b) AI in Robotics
(c) Structure of an expert system. [5+5+6]
