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. Devise an AO* algorithm and explain how it is not suitable for searching in And-OR graphs   [16]

2. a) Differentiate between forward and backward reasoning
   b) Explain about A* algorithm in detail   [8+8]

3. a) Justify the need for computable functions and predicates in logic.
   b) What is the significance of knowledge representation? Give differences between database and knowledge base   [8+8]

4. Transform the following to conceptual dependencies:
   I gave pen to my friend
   Rama eat ice cream
   I borrowed book from your friend
   While going home, I saw a frog   [16]

5. Write a short notes on the following
       a) Minimalist reasoning
       b) Non – dependency directed back tracking
       c) Abduction
       d) Non – Monotonic reasoning   [16]

6. a) Explain hierarchial planning with relevant examples.
   b) Explain Alpha – Beta Pruning   [8+8]

7. What are the prominent features of an expert system and describe their features in detail.
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8. Write short notes on the following:-

       a) Route learning
       b) Induction
       c) Epistemology
       d) Decision Trees.   [16]

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