



Code No: A0610

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech I Semester Examinations March/April 2011

ARTIFICIAL INTELLIGENCE

(DIGITAL SYSTEMS AND COMPUTER ELECTRONICS)

Time: 3hours

Max.Marks:60

Answer any five questions  
All questions carry equal marks

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1. a) Explain why problem formulation must follow goal formulation.  
b) Give a brief account on structure of agents. [12]
2. a) Define state – space.  
b) Clearly bring out the difference between iterative deepening depth first search and bi – director search.  
c) Write short notes on memory bounded heuristic function. [12]
3. a) Explain CSP with an example.  
b) Write short notes on Hill climbing. [12]
4. a) Define alpha – Beta pruning. Explain the same with an example.  
b) Write short notes on optimal decisions in multiplayer games. [12]
5. a) Briefly explain wumpus - world environment.  
b) Write short notes on resolution patterns in propositional logic. [12]
6. a) Write the partial planning algorithm.  
b) Write short notes on backward state space search. [12]
7. Explain learning decision trees with an example. [12]
8. Write short notes on:-  
i) Unification  
ii) EM algorithm [12]

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