

1058
B.E. (Computer Science and Engineering)
Sixth Semester
CSE-614: Artificial Intelligence (OLD)
(May – 2016)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) Is A* algorithm admissible?
- b) What is difference matrix in Means ends analysis?
- c) Why control strategy should be systemic and cause motion?
- d) List the different conflict resolution approaches.
- e) How problem of local minima can be solved for Hill climbing algorithm
- f) What is backward reasoning?
- g) What is relevance based learning?
- h) What is Non monotonicity of rules?
- i) What is different in ADL language
- j) List different planning approaches. (10x1)

UNIT – I

- II. a) What is Turing test? How would you determine the criteria of success of any technique?
- b) What is steepest ascent hill climbing algorithm? How it overcome the problem of simple hill climbing? (5,5)
- III. a) Explain the AO* algorithm in detail? Can the parent of node be changed in the algorithm?
- b) What is iterative deepening? What are the main advantages of using iterative deepening/ (5,5)
- IV. a) Explain the role of alpha and beta values in Min-Max algorithm.
- b) What are fuzzy sets? Explain different operations that can be performed on fuzzy sets.
- c) How slots in frames can be represented as full-fledged objects? (4,4,2)

P.T.O.

(2)

UNIT – II

- V. a) What is Graphplan algorithm? Explain its working on an example.
b) What is conditional planning? How it improves upon partial order planner?
- VI. a) Why decision tree approach is greedy approach? Explain the information gain algorithm to pick up the best attribute.
b) What do you mean by learning with hidden variables? Explain any approach based on this. (6,4)
- VII. a) Differentiate between semantic and syntactic analysis.
b) What are non-monotonic expert systems? Explain the Expert system architecture in detail. (3,7)

x-x-x