

Total No. of Questions : 6]

SEAT No. :

P5794

[Total No. of Pages : 2

BE/Insem./Oct.-584
B.E. (Computer Engineering)
ARTIFICIAL INTELLIGENCE AND ROBOTICS
(2015 Pattern) (Semester - I)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume Suitable data if necessary.*
- 5) *Justify your answer with an example wherever necessary.*

Q1) a) Define artificial intelligence and elaborate the applications of artificial intelligence in the real world. [6]

b) Explain importance of pruning CLOSED and OPEN lists of A* algorithm. [4]

OR

Q2) a) Explain in detail A* algorithm with an example. [6]

b) Explain Depth Bounded DFS (Depth Limited DFS) algorithm with an example. [4]

Q3) a) Explain in detail Rule Based Expert System with a neatly labelled diagram. [6]

b) Explain problem decomposition with an example. [4]

OR

Q4) a) Explain with an example Goal Stack Planning (STRIPS algorithm). [6]

b) Give and explain examples of real time Constraint Satisfaction Problem. [4]

P.T.O.

Q5) a) Explain unification algorithm, clearly stating the various output of the algorithm. [6]

b) Explain in brief the building blocks of conceptual dependency (CDs) used to represent knowledge. [4]

OR

Q6) a) What is semantic network? How is it used to represent inheritance, explain with an example. [6]

b) Explain with an example Backward Chaining. [4]

