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SEAT No. :
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BE/Insem./Oct.-584

B.E. (Computer Engineering)

ARTIFICIAL INTELLIGENCE AND ROBOTICS

(2015 Pattern) (Semester - I)

1 Hour]

Instructions to the candidates :

Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.

Neat diagrams must be drawn wherever necessary.

Figures to the right side indicate full marks.

Assume Suitable data if necessary.

Justify your answer with an example wherever necessary.

[Max. Marks : 30

OR

- 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]

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

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

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

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

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

Explain problem decomposition with an example. [4]

OR

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

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

P.T.O.

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