K16P 0723

Reg. No. : .....

Name : .....

IV Semester M.C.A. Degree (Reg./Supple./Improve.) Examination, July 2016
(2014 Admn.)
Elective – II : MCA 4E05 : ARTIFICIAL INTELLIGENCE

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **any ten** questions. **Each** question carries **three** marks.

1. What are the significant features of AI ?
2. Mention various issues of the AI.
3. List out the rules of predicate calculus.
4. What are the strategies for state space search ?
5. Mention the properties of heuristic search.
6. Define resolution.
7. Compare and contrast knowledge representation and knowledge acquisition.
8. What are the significant features of conceptual graphs ?
9. How expert system technology is very essential in AI ?
10. What are the properties of production system ?
11. Mention the merits of symbol based machine learning.
12. What are the uses of models of machine learning ? **(10×3=30)**

P.T.O.

SECTION – B

Answer **all** questions. **Each** question carries **ten** marks.

13. a) How is AI problem is characterised, explain how AI problem is transformed into state space search with suitable examples ? **10**

OR

b) What are the goals, applications and design issues of AI ? **10**

14. a) Discuss the concept of conceptual graphs for associative networks, explain with suitable diagram. **10**

OR

b) What is heuristic information, explain how heuristics are used in solving 8 puzzle problem ? **10**

15. a) Discuss the history of AI representational schemes briefly. **10**

OR

b) Briefly describe the functional operations of knowledge representation and knowledge acquisition with suitable examples. **10**

16. a) Write a PROLOG program that answers questions about family members and relationships. **10**

OR

b) List out the various data structure specifications of prolog programming, explain the importance of each one of them briefly. **10**

17. a) How to distinguish knowledge and learning, explain the properties, usage of each one w.r.t. machine learning ? **10**

OR

b) Discuss the various social and emergent models for providing knowledge based machine learning strategies briefly with suitable examples. **10**