



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