**B. Tech. (CSE) 6th Semester (G Scheme)
Examination, July-2022**

ARTIFICIAL INTELLIGENCE

Paper-PCC-CSE-304-G

Time allowed : 3 hours]   *[Maximum marks : 75*

Note : Attempt five questions in all, selecting at least one question from each section. Question No. 1 is compulsory.

1. Explain the following questions :   6×2.5=15

    (a) History of AI

    (b) Ant Colony Optimization

    (c) Bayesian Reasoning

    (d) Transformational Analogy

    (e) Neural Networks

    (f) Informed Search

Section-A

2. What do you mean by Game Playing : Min.-Max. Algorithm and Alpha-Beta Pruning. Explain in detail.   15

3. (a) Explain A * algorithm.   8

(b) What is Hill Climbing ? Explain Simple Hill Climbing. 7

Section-B

4. Describe different Approaches to Knowledge Representation. 15

5. Explain Rule-Base-System with example. 15

Section-C

6. Explain in detail Dempster-Shafer Theory. 15

7. What is Probability Theory in terms of Reasoning under Uncertainty ? Elaborate. 15

Section-D

8. Demonstrate fundamental understanding of various application of AI techniques in Expert systems and Neural Networks. 15

9. Demonstrate a discussion of AI, its current trends, limitations and implications. 15