GITAM (Deemed to be University)
[CSEN 2031]
B.Tech. Degree Examination

(Elective)
II Semester

ARTIFICIAL INTELLIGENCE
(Effective from the admitted batch 2021–22)

Time: 2 Hours   **Max.Marks: 30**

Instructions: All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

SECTION-A

1. **Answer All the Questions**:   (5×1=5)

   a) What are the types of Agents?
   b) Define the Heuristic function.
   c) Define Constraint Satisfaction Problem.
   d) What is Term?
   e) Define a Robot and mention some examples.

SECTION-B

Answer the following: (5×5=25)
UNIT-I

2. Discuss thinking and acting rationally.

OR

3. Give the PEAS description of the driverless car.

UNIT-II

4. List out the five components that involved for any problem with example.

OR

5. How does A* algorithm work?

UNIT-III

6. How does alpha-beta pruning reduce complexity?

OR

7. How backtracking efficiency can be improved in map colouring problem?

UNIT-IV

8. Explain about syntax and semantics of first order logic.

OR

9. Describe backward chaining algorithm.

UNIT-V

10. Explain in brief about the Natural Language Processing.

OR

11. Explain Bayes rule with applications.

[1,2,4,5,8,10/II S/122]