

**VI Semester B.C.A. Degree Examination, May/June - 2025****(NEP Scheme Freshers+Repeaters)****COMPUTER APPLICATION****Artificial Intelligence and Applications****Time : 2½ Hours****Maximum Marks : 60****Instructions :***Answer all the sections.***SECTION - A****I. Answer any Six questions. Each question carries 2 marks. (6×2=12)**

1. Define weak AI and Strong AI.
2. What is Environment in AI.
3. Define actuators in problem solving agent.
4. What is bidirectional searching?
5. What is First Order Logic?
6. Define Unification in propositional logic.
7. What is supervised learning?
8. Define artificial neural network.
9. Define classification and regression?

SECTION - B**II. Answer any Four questions. Each question carries 6 marks. (4×6=24)**

10. Explain PEAS.
11. Explain A* search algorithm.
12. Explain Wumpus world in detail.
13. What are the attributes of Decision Tree?
14. Explain support vector machines.
15. List any five advantages of Robotics.

[P.T.O.]

**SECTION - C**

III. Answer any Three questions. Each question carries 8 marks. (3×8=24)

16. Explain various properties of task environment.
17. Differentiate between DFS and BFS search algorithm.
18. Explain backward chaining algorithm for propositional logic.
19. Differentiate between supervised and unsupervised learning.
20. What are the key components of a speech recognition system?