

Roll.No.

25UAICT1002

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Sc.Cs with AI. - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - I

25UAICT1002- Principles of Artificial Intelligence

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Mention the main goals of Artificial Intelligence.
2. Explain the Physical Symbol System Hypothesis with an example.
3. Differentiate between Propositional Logic and Predicate Logic with examples.
4. Define Unification? Give an example of Most General Unifier (MGU).
5. What is Taxonomic Reasoning? Give an example.
6. Elucidate Ontological Engineering and its significance in AI.
7. Differentiate between Logic and Control in Logic Programming.
8. Compute two lists to determine if they are identical in prolog recursive comparison.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Discuss the different subfields of AI and explain how they relate to perception, understanding, and action.
10. Describe in detail the process of Substitution and Resolution in First-Order Predicate Logic with examples.
11. Illustrate Non-Monotonic Reasoning? Discuss its techniques and applications.
12. Sketch the interpretation of Horn Clauses in Rule Chaining with suitable examples.
13. Summarise the working of the 'Cut' operator in Prolog. Discuss its uses and potential problems with suitable examples.
