

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.(AI) END SEMESTER EXAMINATIONS NOVEMBER -2023

SEMESTER - I

22UAICT1001 - Introduction to Artificial Intelligence

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Describe the History of AI and its importance.
2. Illustrate the risks and the benefits of AI.
3. Ascertain the importance of the Tree data structure and its use in Prolog.
4. Illustrate Knowledge based systems and agents with example.
5. Explain the syntax and the semantics of the basics of Propositional Logic.
6. Relate the Modus Ponens and Modus Tollens with respect to the First order predicate inference rules.
7. Justify the use of Prolog in AI and also explain how it helps in satisfying goals?
8. Distinguish Joining Structures and Difference Structures in Prolog.

Section C

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

9. Explain about AI and
 - a) Turing Test Approach
 - b) Learning Agents
10. Relate
 - a) Tautology
 - b) Contradiction
 - c) Conjunctive normal form
 - d) equivalence of propositions in Propositional logic.
11. Distinguish Forward and Backward chaining, unification algorithm in First Order Predicate Logic.
12. Apply the use of Cut in Prolog for generating multiple solutions with examples. Also discuss the uses and Problems of Cut.
13. Evaluate the Recursive Search, Mapping and Recursive comparison with appropriate examples.
