

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, EAST DELHI CAMPUS, SURAJMAL VIHAR-110092

Semester: 3 rd			
Paper code: AIDS257/AIML257/IOT257	L	T/P	Credits
Subject: Principles of Artificial Intelligence Lab	0	2	1
Marking Scheme			

- 1. Teachers Continuous Evaluation: As per university examination norms from time to time
- 2. End term Examination: As per university examination norms from time to time

INSTRUCTIONS TO EVALUATORS: Maximum Marks: As per university norms

- 1. This is the practical component of the corresponding theory paper.
- 2. The practical list shall be notified by the teacher in the first week of the class commencement under the intimation to the office of the HOD/ Institution in which the appear is being offered from the list of practicals below.
- 3. Instructors can add any other additional experiments over and above the mentioned in the experiment list which they think is important.
- 4. At least 8 experiments must be performed by the students.

Course Objectives:

- **1.** To understand the basics of Prolog Programming.
- 2. To solve different mathematical problems using Prolog Programming.
- 3. To apply Prolog Programming for solving different real time problems.
- 4. To determine the rules for creating Expert Systems.

Course Outcomes:

CO1 Students will be able to understand and apply Prolog Programming for solving different real-life problems.

CO2 Students will be able to create different expert systems using Prolog Programming

CO/PO	PO01	PO02	PO03	PO04	PO05	PO06	PO07	PO08	PO09	PO10	PO11	PO12
CO1	2	1	2	1	1	2	2	-	1	1	1	1
CO2	2	1	2	2	1	1	1	1	-	1	1	2

List of Experiments

- 1. Write a program to implement syntax, basic list manipulation functions and numeric functions in Prolog.
- 2. Write a program to implement input, output and predicates in Prolog.
- 3. Write a program to implement local variables and conditional statements using Prolog.
- 4. Write a program to calculate factorial of a given number using Prolog.
- 5. Write a program to solve 4-Queen problem using Prolog.
- 6. Write a program to solve any real-life problem using depth first search.
- 7. Write a program to solve TIC-TAC-TOE Problem using Prolog.

8. Write a program to solve Monkey Banana Problem using Prolog.Approved by BoS of USAR: 15/06/23,Approved by AC sub-committee : 04/07/23Applicable from Batch Admitted in Academic Session 2022-23 OnwardsPage | 26



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- 9. Write a program to solve Water Jug Problem using Prolog.
- 10. Write a program to solve 8 Puzzle Problem using Prolog
- 11. Write a program to solve Tower of Hanoi Problem using Prolog.
- 12. Write a program for medical diagnosis using Prolog.