

2025

MCA 3rd Semester Examination

MCA

Paper : MCA - 307

(AI Lab)

(Practical)

Full Marks : 50

Time : Two Hours

Answer any *one* question on lottery basis :

35×1=35

1. Write a PROLOG program to find the last element of a list.

2. Write a PROLOG program to find the K'th element of a list.

3. Write a PROLOG program to split a list into two parts; the length of the first part is given.

4. Write a PROLOG program to determine whether a given integer number is prime or not.

5. Write a PROLOG program to determine the greatest common divisor of two positive integer numbers.

6. Write a PROLOG program to determine the prime factors of a given positive integer.

7. Write a PROLOG program to solve 8-queens problem.

8. Write a PROLOG program to solve any problem using depth first search.

9. Write a PROLOG program to solve any problem using best first search.

10. Write a PROLOG program to solve 8- puzzle problem using best first search.

11. Write a PROLOG program to solve Robot (traversal) problem using means End Analysis.

12. Write a PROLOG program to solve Traveling Salesman problem with N cities.

13. Write a PROLOG program to construct truth tables for a logical expression.

[Viva-voce - 10]

[Practical Notebook - 5]
