

2023

M.Sc.

4th Semester Examination

COMPUTER SCIENCE

PAPER : COS-491

( Practical )

( AI Lab )

Full Marks : 25

Time : 2 hours

*The figures in the right-hand margin indicate marks.*

Answer *any one* question from the following :

20×1=20

1. Write a program to calculate factorial of a given number.
2. Write a program to find  $n^{\text{th}}$  Fibonacci number.

( 2 )

3. Write a program to check whether a given number is prime.
4. Write a program to implement the Tower of Hanoi problem using prolog.
5. Write a program to find the GCD of two given numbers.
6. Write a program to solve 8 queens problem.
7. Write a program to solve a problem using depth first search.
8. Solve Travelling Salesman Problem using prolog programming.

**[PNB + Viva = 5]**

\* \* \*