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PG (CBCS) M.SC. Semester- IV Examination, 2022 COMPUTER SCIENCE PAPER: COS 491

PAPER: COS 491 (PRACTICAL: ARTIFICIAL INTELLIGENCE: LAB)

ESTD 2017 OF COLLEGE O

Full Marks: 20

Time: 3 Hours

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

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **ONE** of the following questions:

 $1 \times 20 = 20$

- a) Write a program to solve 8-queens problem using PROLOG.
- b) Write a program in PROLOG to implement factorial (A, F) where F represents the factorial of a number A.
- c) Write a Prolog program to implement max (A, B, M) so that M is the maximum of two numbers A and B.
- d) Write a Prolog program to implement BFS.
- e) Write a Prolog program to implement 8- puzzle problem using best first search.
- f) Write a Prolog program to calculate GCD of two numbers.
- g) Write a Prolog program to implement DFS.
- h) Write a Prolog program to implement Traveling Salesman problem.
