

**MCA 3rd Semester Examination, 2022**

**MCA**

**PAPER – MCA-397**

*Full Marks : 50*

*Time : 2 hours*

*The figures in the right hand margin indicate marks*

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

**Answer any one question on lottery basis : 40 × 1**

- 1. Draw your own family tree up to three generation. Prepare the knowledge base using parent, male and female relations. Then frame the relation grand father, brother, sister, nephew and cousins using PROLOG.**
- 2. (i) Write a PROLOG program to calculate the sum of N natural numbers.**

- (ii) Write a PROLOG program to check a given string is palindrome or not.
3. (i) Write a PROLOG program to find the Fibonacci series up to N.
- (ii) Write a PROLOG program to delete a particular element from a given list.
4. (i) Write a PROLOG program to find the minimum element from a list.
- (ii) Write a PROLOG program to sort a list in ascending order.
5. (i) Write a PROLOG program to find the number of elements in a list.
- (ii) Write a PROLOG program to find the reverse of a list.

VIVA – 10

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