SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai — 600 044. B.Sc. END SEMESTER EXAMINATIONS NOVEMBER-2022 SEMESTER - I 21UCSCT1001 - Problem Solving Through Programming in C

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. Define top down design approach.
- 2. Write a C program to find the largest number in an array?
- 3. Explain the Structure of C language.
- 4. What are the differences between break and continue?
- 5. What is recursion? Write a C program to display a Fibonacci series using recursion?
- 6. Define command line arguments with example.
- 7. How to perform passing arrays to function?
- 8. What is the Difference between Structure and Union? Give an example.

Section B

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Discuss the difference between algorithm and pseudo code.
- 10. Write a detailed program to find the addition of two matrix.
- 11. Explain the different types of control statements.
- 12. Explain arrays with examples.
- 13. Write a program to create a student mark list using structure.
