

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.(CS) - END SEMESTER EXAMINATIONS APRIL-2023

SEMESTER - I

21UCSCT1001 - Problem Solving through Programming in C

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Define Algorithm. Write an algorithm to find the area and perimeter of a circle.
2. Explain variable. List the restrictions on the variable names.
3. Prepare a C program to implement the concept of recursion.
4. Describe pointers with an example.
5. Sketch an algorithm and flowchart to generate Fibonacci series of numbers up to 'n'.
6. Classify the if-else statement and explain it.
7. Explain multidimensional array with an example.
8. Differentiate structure and union.

Section C

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

9. Explain software design techniques.
10. Compute a program to find the square root of a number.
11. Examine switch and break statement with an example.
12. Classify string library function with an example.
13. Examine array of pointers with an example.
