

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.C.A - END SEMESTER EXAMINATIONS - NOV'2024

SEMESTER - I

22UCACT1001 - Programming in C and C++

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Show the basic structure of a C program.
2. Explain how C++ implements access control using access specifiers.
3. Demonstrate the concept of friend functions in C++. How do they differ from member functions?
4. Describe the basic file operations in C++. What are the common modes used to open a file?
5. Describe the different types of arrays in C.
6. Write a C++ program that demonstrates the use of classes, objects, and member functions.
7. Write a program for students marksheet preparation with necessary oops concepts.
8. Create a C++ program to demonstrate exception handling with user-defined exceptions.

Section C

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

9. Illustrate various control statements in C with examples.
10. Explain the importance of string handling functions in C with examples of their usage.
11. Examine the major principles of Object-Oriented Programming (OOP) and illustrate each with an example.
12. Compute the difference between a default constructor and a parameterized constructor with suitable example.
13. Evaluate the various types of inheritance in C++ with suitable examples for each type.
