

Roll.No.

21UCCCT3006

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.Com. CA - END SEMESTER EXAMINATIONS - NOVEMBER 2025

21UCCCT3006 - IV

21UCCCT3006 - Objected Oriented Programming using C++

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Describe the Object-Oriented Programming paradigm and list its key features.
2. Illustrate how encapsulation and abstraction are applied in a real-world application.
3. Write a program to calculate the sum and average of five numbers using appropriate variables and expressions.
4. Differentiate between keywords, identifiers, and variables in C++ with suitable examples.
5. Define a function prototype. Explain its purpose in C++.
6. Compare function overloading and virtual functions in achieving polymorphism.
7. Develop a program that demonstrates a default constructor and a parameterized constructor in a class.
8. Justify the use of multiple inheritance in program design.

Section C

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

9. Write a C++ program to create a Student Information System using classes and objects to read and display student details.
10. Compare and analyze the behavior of different control structures (if, if-else, switch) with example programs.
11. Design and implement Inline function with suitable example program.
12. Explain how operator overloading enhances the reusability and readability of object-oriented programs.
13. Evaluate the role of stream manipulators (like setw(), setprecision(), endl) in managing console I/O operations.
