TB252555N

o/c

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2025

2023 ADMISSIONS SUPPLEMENTARY

B.C.A SEMESTER II - CORE COURSE

BC2C03B23 - OOPS with C++

Time : 3 Hours **Maximum Marks : 80**

Part A

I. Answer any Ten questions. Each question carries 2 marks **(10x2=20)**

1. Write the syntax for switch statement.
2. Discuss on enumerated types.
3. Define the term Class.
4. Discuss the purpose of a destructor.
5. List down the characteristics of constructors.
6. Distinguish between base class and derived class.
7. List down the operators that cannot be overloaded using friend function.
8. Describe inheritance.
9. Define run time polymorphism.
10. Define virtual function.
11. Define generic programming.
12. Differentiate the use of seekg() and tellg() functions.

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. Explain with examples : i) break ii) continue iii) goto statement
14. Explain how private data members are accessed and manipulated.
15. Illustrate dynamic initialization of objects using constructors.
16. Differentiate between different levels of inheritance.
17. Write a C++ program example to demonstrate unary operator overloading.
18. Describe pure virtual functions.
19. Explain dynamic binding with a sample program.
20. Explain the various file opening modes available.
21. Describe the try-throw-catch mechanism in C++.

Part C

III. Answer any Two questions. Each question carries 15 marks **(2x15=30)**

22. Explain the use of constructors. Describe the different types of constructors with examples.
23. Describe the concept of operator overloading. Explain how they differ in case of operator function as a member function or friend function.
24. Explain how virtual member functions are defined and used. Discuss how pointers are used in virtual function implementation.
25. Explain the exception handling techniques in C++.