

**TB222460W**

**Reg. No : .....**

**Name : .....**

**BCA DEGREE (C.B.C.S.) EXAMINATION, MARCH 2023**

**2022 Admissions Regular & 2021 Admissions Supplementary / Improvement And 2020, 2019 And 2018 Admissions  
Supplementary**

**SEMESTER II - CORE COURSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY MANAGEMENT)**

**BCA2B05B18 - OOPS WITH C++**

**Time : 3 Hours**

**Maximum Marks : 80**

**Part A**

**I. Answer any Ten questions. Each question carries 2 marks**

**(10x2=20)**

1. Describe the scope resolution operator.
2. Differentiate between cin and cout.
3. Give the syntax for class specification in C++.
4. Identify the purpose of scope resolution operator.
5. Give the syntax for object creation in C++.
6. Describe type conversion.
7. Give the syntax for defining a derived class.
8. Describe inheritance.
9. Explain the situation in which pointer to a function is used.
10. Define pointer.
11. Recognize the role of 'io manip' file.
12. Give the syntax for class template.

**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. Explain with syntax and example how an array is declared and used.
14. Distinguish between built-in and user defined functions.
15. Explain how private data members are accessed and manipulated.
16. Explain how a class type is converted to a basic type.
17. Explain private inheritance.
18. Write a C++ program to demonstrate use of virtual function.
19. Illustrate the use of an abstract base class.
20. Distinguish between the terms class template and template class.
21. Describe the different stream classes for I/O console operations.

**Part C**

**III. Answer any Two questions. Each question carries 15 marks**

**(2x15=30)**

22. Illustrate how classes and objects are defined and used in C++.
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 the concept and implementation of run time polymorphism.
25. Describe the different file input output functions in C++.