

Roll No. : ...350583...

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# BCA-206

B.C.A. (Second Year) Examination, 2023

OBJECT ORIENTED PROGRAMMING USING C++

Paper- VI

*Time Allowed : Three Hours*

*Maximum Marks : 100*

**Part-A**

**[Marks : 20]**

**Note:** Answer all questions (50 words each). All questions carry equal marks.

**Part-B**

**[Marks : 50]**

**Note:** Answer any five questions (250 words each). Selecting one from each Unit. All questions carry equal marks.

**Part-C**

**[Marks : 30]**

**Note:** Answer any two questions (300 words each). All questions carry equal marks.

**Part-A**

1. Answer the following questions :

- (i) What is the use of recursive function?
- (ii) What is the use of inline function?

- (iii) Differentiate between unary and binary operators.
- (iv) Differentiate between constructor and destructor.
- (v) What is a virtual class?
- (vi) Define Data Abstraction.
- (vii) What is the need of overloading operators and functions?
- (viii) What is static data member?
- (ix) List the exception objects available in C++?
- (x) What do you understand by formatted output in C++?

### Part-B

2. Discuss the significance of default arguments using suitable example.
3. Discuss any 3 flow control statements available in C++?

### Unit-II

4. Write C++ code to overload operators +, -, \* with suitable example.

5. Write a C++ program to Display Student Details (rollno, name, class, email) using constructor and destructor.

### Unit-III

6. What are the various C++ access specifiers? Discuss any one with the help of example.
7. Differentiate between multilevel inheritances and multiple inheritance with an example.

### Unit-IV

8. Explain the use of function template.
9. How exceptions are handled in C++?

### Unit-V

10. How do you read and write data in file handling in C++?
11. Discuss in brief about three components of STL.

### Part-C

12. Explain in detail the different data types present in C++?
13. Discuss the concept of class and object. Also write a C++ Program to find Sum of odd numbers between 1 and 100 using class.
14. Write a C++ program demonstrating the use of the pure virtual function with the use of base and derived classes.

15. How Exception handling is implemented in the C++ program, explain with the suitable example.
16. Write a user-defined function in C++ to read the content from a text file OUT.TXT, count and display the number of alphabets present in it.

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