

BCA/D-16
OBJECT ORIENTED PROGRAMMING USING C++
PAPER-BBA-231

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) Explain the concept of data hiding and encapsulation in C++.
(b) Discuss the concept of copy constructor in C++ with suitable example.
(c) Write short note on friend function in. Give suitable example.
(d) Define operator. Explain various types of operators along with their hierarchy.

Unit-I

2. (a) Explain various features of object oriented programming.
(b) What is the significance of scope resolution operator in C++ ? Give suitable examples.
3. (a) Explain the concept of structure and class in C++ along with suitable example. How do they differ from each other?
(b) Write short note on static Data Members and Static Member Function.

Unit-II

4. (a) What is the significance of constructor and destructor in C++ ? How do we declare them? Write a program to compute area of various geometrical figures using constructor and destructor.
5. Explain the following in C++ with suitable examples :
 - * Unformatted and Formatted Input/Output Operations
 - * Constructor Overloading.

Unit-III

6. Explain the concept of string handling and dynamic memory management in C++ with suitable examples.
7. Explain the following along with their significance and suitable examples :
 - Manipulators
 - This pointer
 - Array of objects

Unit-IV

8. (a) Explain the concept of function overloading in C++. Write a program in C++ to compute area of various geometrical figures using function overloading.

- (b) Explain the concept of operator overloading in C++. Write a program to overload prefix increment operator using operator overloading in C++.
9. Explain the following concepts and give their significance with examples:
- * Binary operator overloading
 - * Inline functions.