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Printed Pages: 2

BCA/M-15

C++ WITH INTRODUCTION TO OBJECT

ORIENTED PROGRAMMING

Paper-BCA-303

Time allowed: 3 hours]   **[Maximum marks: 80**

Note: Attempt **five** questions in all, selecting at least **one** question from each unit. All questions carry equal marks.

UNIT-I

1. (a) Discuss the data types used in C++.

   (b) Explain the usage of Increment and Decrement operator with suitable examples.

2. (a) Differentiate the following:
   - (i)   While and Do-while Loop
   - (ii) Break and Continue statement
   - (iii) Structure and Union

   (b) What are the variables and constants? Discuss the rules for declaring variables.

3. (a) Discuss the concept of type conversion.

   (b) Write a Program of largest of three numbers using switch Statements.

UNIT-II

4. (a) Discuss the different string functions with example.

   (b) What are the different Manipulators used in C++?

5. Define array. Discuss array initialization and declaration of arrays. Write a program to multiply two matrixes in C++.

UNIT-III

6. (a) Explain the copy constructer with suitable C++ coding.

   (b) List out the rules for overloading operator.

7. (a) Define Polymorphism. Explain the different types of polymorphism.

   (b) Explain the working of Friend function.

8. (a) Write a program to Overload unary operator in C++.

   (b) Discuss the concept of Static data member and static member function with suitable example.

UNIT-IV

9. Write short notes on the following concepts:

   (a) Virtual base class

   (b) This pointer

   (c) Object model

   (d) Nested classes.

10. (a) What is inheritance? Write a program to illustrate the concept of Multiple Inheritances.

    (b) Discuss the concept of Pointer to objects.