**Bachelor of Commerce (Computer Application) (B.C.C.A.) Semester–II (C.B.C.S.) Examination**

**PROGRAMMING IN 'C++'**

**Compulsory Paper–3**

Time : Three Hours]                                                                                       [Maximum Marks : 80

**N.B. :—** (1)  Draw well labeled diagram wherever necessary.

(2)  **ALL** questions are compulsory.

### PART–A

**N.B. :—** (1)  Each question carries **2** marks.

(2)  Answers should not be in more than **5** lines.                                      8×2=16

1.  (a)  Define Class.

(b)  What is an Operator ?

(c)  What do you mean by Call by Value ?

(d)  Define Local Variable. Give an example.

(e)  What is Constructor ?

(f)  What is Static Data Member ?

(g)  What is Function Overloading ?

(h)  List the name of operators which we can overload in C++.

### PART–B

**N.B. :—** (1)  Each question carries **3** marks.

(2)  Answers should not be in more than **10** lines.                                    8×3=24

2.  (a)  What are the advantages of OOPS ?

(b)  List out the various types of operators in C++.

(c)  Differentiate local and global variable with suitable example.

(d)  What is the use of typedef ?

(e)  How is the member function of a class accessed in C++ ?

(f)  List the merits and demerits of copy constructor.

(g)  Write the syntax and example of Operator Overloading.

(h)  What is the use of get ( ) and put ( ) functions in C++ ?

**PART–C**

**N.B. :—** (1) Each question carries **5** or **10** marks.

(2) Answers should not be in more than **400** words for **5** marks questions and **600** words for **10** marks questions respectively.

**EITHER**

3.  (a)  Explain the basic structure of object oriented programming.                                    5

(b)  What is the use of assignment operator ? Write down various assignment operators with suitable example.                                                                                              5

**OR**

(c)  Explain various data types used in C++ with suitable example.                            10

**EITHER**

4.  (a)  What is Function ? Explain different types of function in C++.                             5

(b)  Explain call by value with suitable example.                                                          5

**OR**

(c)  Explain pointer and function in detail.                                                                    10

**EITHER**

5.  (a)  What is Constructor ? Write down its advantages and disadvantages.                 5

(b)  What is Destructor ? How it works ? Explain with example.                                  5

**OR**

(c)  What is Access Specifier ? Discuss various types of access specifier that are available in C++.
                                                                                                                                    10

**EITHER**

6.  (a)  Explain the operation of overloading of an assignment operator.                         5

(b)  Discuss the concept of pure virtual function with suitable example.                     5

**OR**

(c)  Explain the syntactic rules for the following functions :

(i)  Open ( )

(ii)  Close ( )

(iii)  Read ( )

(iv)  Write ( ).                                                                                                  10