2012

Course : B.C.A. (3RD YEAR)

Paper : 6

Time : 3 hours

Full Marks : 100

Candidates are required to give their answers in their

own words as far as practicable.

The questions are of equal value.

Answer any Five questions, in which

question no. 1 is compulsory.

2.   Choose the correct answer of the following :

(k)   Which statement can only work for equality comparisons :

(i)   if

(ii)   switch

(iii)   for

(iv)   while

(l)   A sequence of characters enclosed by double quotes are known as :

     (i)   Character literals

     (ii)   String constants

     (iii)   Character constants

     (iv)   String literals

(m)   Identity the operator that cannot be overloaded in C++ :

     (i)   ? :

     (ii)   +

     (iii)   New

     (iv)   None of these

(n)   Which of the following represent correct from the function

Prototype ?

     (i)   float volume (int x, int y)

     (ii)   float volume (int x, y)

     (iii)   Volume (int x, int y)

     (iv)   float volume (int, float)

(o)   The friend functions are used in situation where,

    (i)   We want to exchange data between classes

    (ii)   We want to have access to unrelated classes

    (iii)   Dynamic binding is required

    (iv)   We want to created versatile overloaded.

(p)   An exception is caused by :

    (i)   A hardware problem

    (ii)   A problem in the operating system

    (iii)   A syntax error

    (iv)   A run time error

(q)   Which of the following cannot be passed to a function In C++ ?

    (i)   Reference variable

    (ii)   Arrays

    (iii)   Class objects

    (iv)   Header files

(r)   Which of the following are the wrapper classes ?

    (i)   Random

    (ii)   Byte

(iii)   Integer

(iv)   Short

(s)   **Which of the following methods belong to the string class ?**

(v)   Length ( )

(vi)   Compare to ( )

(vii)   Equals

(viii)   None of them

(t)   **Data input is :**

(i)   An abstract class defined in Java

(ii)   A class we can use to read primitive data type

(iii)   An interface that defines methods to open files

(iv)   An interface that defines methods to read

Primitive data types

2.   **Give an overview of the object oriented programming paradigm. Specify those features of OOP that makes this approach useful in software development.**

3. What do you mean by function overloading ? point out the difference between overloading and over riding. Explain with examples.

4. Explain with example static data member and static member function in C++.

5. Explain the term inheritance and its types. Also explain with example why we use virtual class.

6. What do you mean by "streams" in C++ environment? How are they used ?

7. What is an exception ? How exception handling mechanism can be used for debugging a program.

8. What is an applet ? How do applets differ from application programs. Why do applet classes need to be declared as public?

9. How can we handle string in java ? Write an application program in Java to check whether the two input strings are equal.

10. Write notes on the following :

   (a) Virtual function
   (b) final ( )
   (c) friend function