C++   **BCA(III)-301**

2013

Time: 3 hours
Full Marks: 80
Candidates are required to give their answers in
their own words as far as practicable

The questions are equal value.
*Answer any **five** questions in which*
Q.No. 1 is compulsory.

1. Indicate the correct answer of the following:
    (a) The keyword 'operator' is used to overload an
        (i) Operator
        (ii) Function
        (iii) Class
        (iv) None of the above
    (b) The relationship exists between a base class and a derived class is known as:
        (i) Kind of relationship
        (ii) has a relationship
        (iii) is a relationship
        (iv) None of the above
    (c) The ambiguity of members normally occurs in
        (i) Single inheritance
        (ii) Multilevel inheritance
        (iii) Multiple inheritance
        (iv) None of the above
    (d) Dynamic binding is done using the keyword
        (i) Virtual
        (ii) Inline
        (iii) Static
        (iv) Void
    (e) When a base class is not used for obejct declaration it is classes as:
        (i) Abstract class

(ii) Container class

(iii) Concrete class

(iv) None of above

(f) The write ( ) function writes-

(i) Single character

(ii) Object

(iii) String

(iv) None of the above

(g) Function template can accept-

(i) only one parameter

(ii) only two parameter

(iii) any number of parameter

(iv) None of the above

(h) Exception is generated in .... block

(i) try

(ii) catch

(iii) throw

(iv) none of the above

2. Explain the structure of a C++ program with suitable example.

3. What is function overloading? What are the rules for defining overloaded functions? Write a program to calculate area of a circle & rectangle using overloaded functions.

4. What are constructors and destructors? Explain the characteristics of constructor and destructors.

5. What do you mean by memory management in C++? Discuss the use of 'new' and 'delete' operators with suitable example.

6. How are friend functions used to carry out overloading of operators? In which situations are they helpful?

7. What do you mean by inheritance? Describe the various types of inheritance with examples.

8. What do you mean by virtual function and virtual classes? Where do you use virtual function? Where do you use virtual functions? Explain with example.

9. Write a program to explain, the concept of multiple catch statements.

10. Write a program to create a template to find the maximum value stored in an array.