Paper Code : BCA220201

BCA (Year-I) (Semester-II) Examination, 2022

COMPUTER APPLICATION

[Paper : First]

(Object Modeling & C++ Programming)

[Maximum Marks : 100

Time : 3 Hours]

Section-A

(Very Short Answer Type Questions)

Note : Attempt all questions. Give answer of each question in about **50** words.   [2×10=20]

(i) Why an inline function is used?

(ii) Draw the form of Hybrid inheritance.

(iii) Name the stream classes for console operation.

(iv) Write the syntax of switch () statement.

(v) What are the float expression.

(vi) Expression x<<4 will shift how many bits position and in which direction?

(vii) What is pointer?

(viii) Write the format of accessing the class members.

(ix) Write the syntax catch () handler

(x) What is destructor?

Section-B

(Short Answer Type Questions)

Note : Attempt all questions of this section. Give answer of each question in about **200** words.   [10×5=50]

2. Write a program to illustrate the concept of virtual base class.

OR

Describe the structure of C++ program using OOPs concept.

Write down the rules for operator overloading. Also write which operator cannot be overloaded and where a friend function can not be used.

OR

Write a C++ program to convert the representation of a given number in to hexadecimal, octal and decimal form using self().

4. Explain scope resolution operator with syntax and example.

OR

What do you understand by "Abstract class". Write its syntax with suitable example.

5. How does an object oriented approach differ from object based approach? Explain.

OR

What do you understand by objects as Arguments, Illustrate with a suitable program code and show output.

6. What is multiple inheritance? When do we use such an inheritance. Describe with syntax.

OR

Write down the classification of data type in C++ with the help of a diagram.

Section-C

(Long Answer Type Questions)

Note : Answer **any two** questions of this Section. Give answer of each question in about **500** words.   [15×2=30]

7. How a member function can be defined inside the class definition and out side the class definition. Write with syntax.

8. What do you understand by control structures in C++. Explain in detail conditional structure if and else with a suitable program example.

9. Write a program to check a prime number by creating a function check-prime ().

10. Explain the following :

(a)   Type conversion