

BCA (Hons) SEM – III Examination 2020
Subject : Object Oriented Programming Through C++
Paper – B.C.A. 303

F.M. 80

Time 3Hrs

A. Answer any five questions.

5x10= 50

1. Describe different features of OOP.
2. Explain function overloading with suitable example.
3. Describe various visibility modes available in C++.
4. Describe various types of inheritance in C++ with suitable diagrams.
5. Write a programme in C++ to create a stack and demonstrate its usage.
6. Create a class for complex numbers in C++ and overload the + and – operators for that class. Now create objects of that class to add and subtract two complex numbers.
7. What is friend function? How friend function violates the philosophy of OOP?

B. Answer *any Six* questions.

6x5= 30

1. Write a suitable programme in C++ to describe the use of constructor to dynamically initialize object.
2. How does virtual base class solve problem in multiple inheritance. Explain it with a suitable example.
3. What is runtime polymorphism? How runtime polymorphism is achieved in C++?
4. Describe forward declaration in C++ with a suitable example.
5. Write a function using template to sort a set of numbers.
6. Describe I/O stream class in C++.
7. Define exception. Write steps to handle exception in c++.
8. In which situation operator overloading using friend function is compulsory. Explain.