B.Sc. (Information Technology) 2nd Semester
INTRODUCTION TO PROGRAMMING - C++
Paper-II

Time Allowed—2 Hours]   [Maximum Marks—75

Note :— There are **eight** questions of equal marks. Candidates are required to attempt any **four** questions.

1. Define and distinguish between functional and object oriented programming.

2. (a) How the data members and member functions designated as private, public and protected are accessed?

    (b) What is a class? How does it accomplish data hiding? Explain with example.

    (c) Write short note on abstract class.

3. What is a copy constructor? Explain its significance. In what way a copy constructor is automatically invoked ? How a copy constructor is related to an object returned by a function ?

4. What is a default constructor? What is its significance? In what way it is equivalent to a constructor having default arguments? What are various types of default constructors? Explain with examples.

5. Define functions overloading. What are the complicacies involved in use of default parameters in overloaded functions ? Explain.

6. What do you mean by operator overloading? Which operators cannot be overloaded? How can we overload unary and binary operators? Explain giving suitable examples.

7. Define inheritance. What are the various types of inheritance? Explain giving examples.

8. Define polymorphism and explain the various methods of implementing this concept in C++.