Exam. Code : 105703
Subject Code : 1553

B.Sc. (IT) Semester—III

OBJECT ORIENTED PROGRAMMING USING C++

Paper—I

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt any **FIVE** questions. All questions carry equal marks. The students can use only non-programmable and non-storage type calculator.

1. Explain the various characteristics of object oriented programming languages. Discuss in detail various advantages and disadvantages of object oriented programming languages. 15

2. What are the various types of operators in C++ ? What do you mean by operator precedence and associativity ? Explain giving examples. 15

3. What are the various conditional control structures available in C++ ? Explain giving suitable examples. 15

4. Discuss the following in detail :

   (a) Do----loop vs while loop 5

   (b) Type casting 5

   (c) Call by value vs call by reference. 5

5. What is a static class member ? Explain how a static member is defined and declared in C++. What are the merits and demerits of static data member over global variables ? 15

6. What do you mean by operator overloading ? Which operators can not be overloaded ? How can we overload unary and binary operators ? Explain giving suitable examples. 15

7. Define a structure. What are the advantages of structures ? What are the major components of a structure declaration ? Distinguish between declaration of a structure type and structure variable. 15

8. Define inheritance. What are various types of inheritance ? How ambiguity is resolved in multiple inheritances ? Explain giving suitable examples. 15