CS6456 OBJECT ORIENTED PROGRAMMING

DETAILED SYLLABUS

OBJECTIVES:

• To get a clear understanding of object-oriented concepts.

• To understand object-oriented programming through C++.

UNIT I OVERVIEW

Why Object-Oriented Programming in C++ - Native Types and Statements –Functions and Pointers Implementing ADTs in the Base Language.

UNIT II BASIC CHARACTERISTICS OF OOP

Data Hiding and Member Functions- Object Creation and Destruction- Polymorphism data abstraction: Iterators and Containers.

UNIT III ADVANCED PROGRAMMING

Templates, Generic Programming, and STL-Inheritance-Exceptions-OOP Using C++.

UNIT IV OVERVIEW OF JAVA

Data types, variables and arrays, operators, control statements, classes, objects, methods – Inheritance

UNIT V EXCEPTION HANDLING

Packages and Interfaces, Exception handling, Multithreaded programming, Strings, Input / Output

TEXT BOOKS:

1. Ira Pohl, "Object-Oriented Programming Using C++", Pearson Education Asia, 2003.

2. H.M. Deitel, P.J. Deitel, "Java: how to program", Fifth edition, Prentice Hall of India private limited, 2003.