

FIRST YEAR – SEMESTER – II
PAPER II: OBJECT ORIENTED PROGRAMMING USING C++

Credits: 4

Hours: 75

Objectives: To acquire the knowledge in object oriented programming C++.

UNIT – I

Procedure Oriented Programming (POP) – Examples - Object Oriented Programming (OOP) – Examples –Comparison of POP and OOP - Principles of Object Oriented Programming (OOP) – Software Evaluation – OOP Paradigm – Basic Concepts of OOP – Benefits of OOP – Applications of OOP.

UNIT – II

Introduction to C++ - Tokens – Keywords – Identifiers – Variables – Operators – Manipulators – Expressions and Control Structures – Pointers – Function Prototyping, Parameter Passing to Functions – Values return by Functions – Inline Functions – Friend and Virtual Functions.

UNIT – III

Classes and Objects – Constructors and Destructors – Types of Constructors – Operator Overloading – Type Conversions – Function Overloading.

UNIT – IV

Inheritance – Types of Inheritance – Virtual Functions and Polymorphism – Constructors in Inheritance – Mapping Console I/O Operations- Exception handling.

UNIT – V

Files – File Streams – File Operations – File Pointer – Error Handling during File Operations – Command Line Arguments.

TEXT BOOK

1. E.Balagurusamy – Object Oriented Programming with C++ - TMH.

REFERENCE BOOK

1. Robert Lafore – Object Oriented Programming in Microsoft C++ - Galgotia.

WEBSITES

http :// www.cprogramming.com/tutorial/lesson1.html

http :// www.cplusplus.com/doc/tutorial