

ELECTIVE COURSE IV – PROGRAMMING IN C++

Unit I

Object Oriented Programming: Software Evolution – OOP paradigm – concepts, benefits, object oriented languages and Applications

Unit II

Introduction to the Basic concepts of C++ language – Tokens, Keywords, Identifiers, Data types, variables, Manipulators – Expression and control structures – Functions: main functions photo typing - call by reference – Function overloading – Friend and inline functions

Unit III

Classes and object – constructors and Destructors – operation over loading – Type conversions.

Unit IV

Inheritance – Single Inheritance – Multiple Inheritance – Hierarchical Hybrid Inheritance – Polymorphism pointers – virtual functions – console I/O operations

Unit V

Files – classes for file stream operations – opening, closing and processing files, End of file detection – File pointers – updating a file – Error handling during file operations – command line Arguments – Templates – Exception Handling

Text Book:

1. Object oriented programming with C++ - E. alagurusamy, Tata Mc. Graw Hill Publishers Ltd. New Delhi 1995

Reference Book:

1. Object oriented programming in C++, Robert Leforse, Gelgotia 1994
2. C++ The complete reference – Herbert Schildt, 3rd Edition, Tata Mc Graw Hill Publishers Ltd. 1999
3. 'Let us C++' Yeswans Kanetkar – BPB publications 1999
4. "Programing with C++" – John R. Hubbard – Schman's online series , 1996.