C++ syllabus

Chapter	Topics
Object Oriented Programming Principles	• What are objects, features • OOPs Features • Classes & objects • Encapsulation • Inheritance • Polymorphism • Data Abstraction
Introduction C++	• Rules of C++ programming • Structure of C++ program • C++ Tokens • (Identifiers, Keywords, Constants, Operators, Special character) • C++ Data types
Basic programming	• Console I/O Statements(cin, cout) • Programs to perform various calculations • Operators • Programs to implement various operators
Control statements	• Conditional Control Statements If-else , switch-case • Loops While, do while, forloop • Implementing programs on conditional & loops
Arrays	• Definition, advantages • Array types • Single dimension • Double dimension
Functions	• Inline functions

Object Oriented Programming	• Defining a Class ,creating Objects • Accessing Data Members using objects • Calling Member Functions using objects • Implementing Array of Objects, objects as parameters & return type, new , this operators • Scope resolution operator • access specifiers(private, public, protected) • Implementing Static Data Members • Implementing Static Member Functions
Function Overloading	• What is function over loading • Implementing overloading on various functions
Operator Overloading	• Definition • About operator keyword, rules of operator overloading • Overloading various operator
Constructors & Destructors	• Types (Default Constructor, Parameter Constructor, Copy Constructor) • Destructors
Friend Function & Friend classes	• Friend Function definition, usage of friend keyword • Implementing of friend functions i • Friend Class definition
Inheritance	• Definition, Advantages • Types of Inheritances (Single, Hirerchial, Multilevel, Multiple Hybrid)
Virtual Functions	• Pure virtual function definition
Templates	• Template Definition • Generic Function