# **C++ Programming Syllabus**

* Procedure v/s Object Oriented Programming
* Benefits of OOP's
* Different OOP's Features
* Data types, Variables
* Constants, Expressions
* Operators (Arithmetic, Logical, Relational)
* Operators (Conditional, Assignments)
* Type Conversion & Casting
* Control Structure (If, If-Else, Nested If-Else)
* Control Structure (Switch, While loop)
* Control Structure (For loop)
* Control Structure (Do While loop)
* Control Structure (Break, Continue)
* Control Structure (Nested Loops)
* Functions (Pass by value, Pass by reference)
* Functions Overloading
* Functions (Inline Functions, Friend Function)
* Classes & Objects (Class Definition, Public)
* Classes & Objects (Private)
* Classes & Objects (Protected Members)
* Constructor & Destructor (Characteristics)
* Default Constructor
* Constructor Overloading
* Parameterized Constructor, Destructor
* Copy Constructor, Operator Overloading
* Inheritance (Base & Derived Class)
* Single & Multilevel Inheritance
* Multiple, Hierarchical
* Hybrid, Multiple Inheritance
* Abstract Class, Virtual Base Class
* Virtual Function
* Pointer, Polymorphism, Pointer to Array
* Run Time & Compile Time Polymorphism
* Files and Console I/O
* Template (Function Templates
* Template (Template Class)