Programming in C++

UNIT - I

OOP concept, Procedural vs OOP Programming, OOP terminology and features (03). Tokens, Character set, Keywords, Data-types Declarations, Constants and variables, Expressions, Standard Library and header files (03). Operator and Expressions; Arithmetic Operator, Increment/Decrement Operator, Relational Operator, Logical Operator and Conditional Operators, Logical Expression, Flow of control statement; Selection statement, Iteration Statement, Jump statement, Construction of loops and implementation, while, Do-while, for statements nested loops (04).
Lectures: 10

UNIT - II

Arrays one dimensional and two arrays (01). Classes and Objects: Need for Classes, Encapsulation, Information Hiding (03). Declaration of Classes, iostream operators, referencing class Members (04). Scope of Class and Its members, Scope resolution operator and its uses, Nested Classes (04).
Lectures: 12

UNIT - III

Functions in class: function definition, Default arguments, Constants arguments, Call by value, Call by reference, Calling Functions with arrays, returning from a function (04). storage class specifies automatic, external and static variable (03). Function overriding, Function overloading, Operator Overloading. Functions: Friend, Inline, Abstract, Virtual, Pure Virtual (05).
Lectures: 12

UNIT - IV

Constructors and Destructor: Declaration, Definition and characteristics (03). Default Constructor, Copy constructor, Parameterized constructor, constructor overloading (04). Inheritance: Need, Different forms, single Inheritance, Multiple Inheritance (04).
Lectures: 11