Certificate Course in Programming Foundation (C & C++)

CCE offers many job oriented computer courses."Certificate Course in Programming Foundation (C & C++)" is one of the CCE approved course.The detailed contents of this course is in the attachment.

COURSE CODE : CCE-CC6

ELIGIBILITY : 10th

DURATION : 3 Months

SYLLABUS

Introduction to programming concept

- Types of programming language , Low level language , High level language , Types of language processor , Header file

Structure of programming language

- Program structure :-Comment , Define columns &Rows

Data type in C

- Introduction to data type , Variables , Input statement

Operators and expression

- Arithmetic operators , Increment and Decrement operator , Relational operator , Logical operator , And operator , Or operator , Not operator , Conditional operator

Decision control structure

- Introduction to Decision Making statement , The switch statement

loop control structure

- Introduction , For loop , While loop , Do while loop , Loop termination

Arrays

- Introduction to arrays

Function

- Introduction to function , Types of function

Structure

- What is Structures , Structure in c , The dot operator , Arrays of Structure

Introduction to C++

Overviews of C++

- Object oriented Programming, concept , Advantage & ,usage of C++ . Classes and objects :classes structure and classes, union and classes, Friend function ,Friend classes, Inline function ,Scope resolution operator, Static class members, Static data members function, passing object to function, Returning objects , Object assignment.

Constructor & Destructor

- Constructor and destructor: Introduction constructor , parameterized constructor , multiple constructor in a class , constructor with default argument , copy constructor , copy constructor , Default argument ,destructor.

Operator overloading

- function & operator overloading: function overloading , overloading constructor function finding the address of an overloading function , operator overloading: creating a member operator function , Creating prefix and postfix form of the increment & decrement operator , overloading the shorthand operation (i .e. +=,-=etc) , operator overloading restrictions , operator overloading using friend function , overloading loading Some special operators , overloading [ ],(),-,comma operator , overloading <<.

Inheritance

- Base class access control , protected member , Protected base class Inheritance , Inheritance multiple base class , constructors , destructors & Inheritance , when constructor & destructor function are expected , Passing parameter to base class constructors , grating access , Virtual functions & Polymorphism: virtual function , pure virtual function , early Vs , late binding.

The C++ input /output system basic

- C++ stream , the basic stream classes: C++ Predefined stream , formatted I/o: formatting using the ios member , setting the format flags , clearing format flags , an overloaded form of self