# i-Nate Education

105 -106 Ranawat Trade Center Bhawarkuan ,Indore Email:-inateeducation@gmail.com ,0731-2362212,9229440120

Course Duration: 30 hrs

**Introduction, Importance of C:-** Importance of C, introduction to c compiler, Sample C programs, Basic structure of C programs, Programming style, Executing a C program. C input output funcation printf(), scanf(), clrscr(), getch()

**Constants, Variables and data Types:** Introduction, Character Set, C tokens, Keywords and Identifiers, Constants, Variables, Data types, Declaration of Variables, Defining symbolic constants.

**Operators and Expression:-** Introduction, Arithmetic Operators, Relational Operators, Logical Operators, Assignment Operators, Increment and Decrement Operators, Conditional Operators, Bitwise Operators, Special Operators, Arithmetic Expressions, Evaluation of expressions, Precedence of arithmetic operators, Type conversions in expressions, Mathematical function

**Control statement :-**Decision making with IF statement, the IF ELSE statement, Nesting of IF ... ELSE statements, the turnery (? :) Operator ,The switch statement and Break , Loops statement For, while and do-while , Jumps in loops Break and continue.GOTO statement

## **Introduction User-Defined Functions and pointer:**

Need for user-defined functions, The form of C function, Return values and their types, Calling a function, category of functions, Arguments with return values, Arguments with no return values, No Arguments with return values, No arguments and no return values, call by value and call by address, Indtroducation to pointer Nesting of functions, Recursion Functions

## Introduction to Array pointer and functions

Initialization One-dimensional arrays, Two-dimensional arrays, Concept of Multimensional arrays. Pointer to arrays passing array to functions array of pointer

## Introduction to strings:pointer and functions

Declaring and initializing string variables, Reading and Writing string on screen ,String Operations: String Copy, String Compare, String Concatenation And String Length, String Handling pre define functions, and use define functions. Pointer to string ,passing String to functions, Initialization of two-dimensional String, pointer to 2d string ,passing 2d string to functions

## Data types revisited, and preprocessor

more on data types ,storage classes ,macro Expansion(#define) and macros with arguments , macros versus functions , file inclusion(# include) , conditional compilation(# ifdef ,# endif), #if and #elif , #undef ,#pragma

## Structures and Unions and Enumerations pointer and functions

Defining a structure, Processing a structure, User-defined data type (typedef), Array of Structures, Structures and Pointers, Passing structure to a function, Self referential structure, Unions, Enumerations.

#### **Input and output**

Types of I/O, console formatted and unformatted I/O, sprintf() and sscanf()

#### File input output Management

Introduction to text and binary files , Defining files and its Operations, Error handling during I/O operations, Random access files, Command line arguments