

# Value Added Courses

## Programming Fundamentals (Using “C”)

### UNIT-I

**Fundamentals of C:** Programming Concepts, Pseudocode, Algorithm, Flowchart, Basic Structure and Execution of C Program, Constants, Variables, and Data Types, Operators and Expressions, Managing Input and Output Operations

**Decision making and Branching:** if statement, if...else statement, nesting of if else statement, else if ladder, switch statement, Goto statement.

**Iteration:** while, do...while, for loop, Nested loops, break & continue.

### UNIT-II

**Arrays** One-dimensional arrays, Declaration and Initialization, Two-dimensional arrays, Declaration and Initialization, Character arrays.

**String:** Reading and Writing strings, String-handling functions – strlen, strcpy, strcat, strcmp.

**Functions:** Need and Elements of user-defined functions, Definition of Functions, Function call and declaration, Parameter Passing, Recursion

**Understanding Pointers:** Accessing the address of a variable, declaration and initialization of pointer variables, accessing a variable through its pointer, Array through pointers.

**Structures and Unions:** Defining structure, Declaring structure variables, Accessing structure members, Structure initialization, Operation on individual members, Array of structures, Union.

### Reference Books:

1. E. Balagurusamy – Programming in ANSI C, 3rd Edn., TMH, New Delhi ; 2004.
2. Programming with C, B.S.Gottfried (TMH).
3. Y. Kanetkar – Let us C, 4th Edition, BPB Publication , New Delhi; 2002.
4. Kerighan& Richie The C programming language (PHI Publication).

# Web Designing and Development

## UNIT-I

**HTML:** Introduction to HTML, HTML tags, text formatting, text style, lists, adding graphics to HTML documents, tables, linking documents, frames, Forms, Image Maps.

**CSS:** Types of Style sheets, Different elements of Style sheets.

## UNIT- II

**Java Script:** Java script in web pages, advantages of java script, data types and literals, Javascript Array, Operators and expression, conditional checking, function, user defined function.

**DOM:** Hierarchy, Different objects of DOM (window, navigator, history, form, frames etc.), Form validation, Event handling in JavaScript

## Reference Books:

1. M.L. Young: Complete Reference b: Internet; 2nd Edition; Tata Mc Graw Hill,2006.
2. Thomas A. Powel ; Web Design : C.R.; Second Edition; TMH, 2009.
3. Thomas A. Powel ; HTML & XHTML : C.R.; Fourth Edition; TMH, 2008.
4. Harely Hahn: The Internet, Tata Mc Graw Hill.
5. G. Robertson: Hands on HTML, BPB Publications.
6. Joel Sklar: Principles of Web Design, BPB Publications.