

## CAP774:STYLING AND SCRIPTING FOR WEB DEVELOPMENT

L:3 T:0 P:2 Credits:4

**Course Outcomes:** Through this course students should be able to

CO1 :: classify the principles of creating effective and engaging web pages

CO2 :: apply CSS box model and advance CSS to enhance webpage aesthetics

CO3 :: examine the role of JavaScript and its data types, variables, operators and functions for interactive web design

CO4 :: determine the acceptability of data inputted through various website components using JavaScript validations

CO5 :: construct a well styled interactive website using CSS and JavaScript

### Unit I

**HTML:Introduction** : HTML introduction, HTML editors, HTML basics, elements, attributes, headings, paragraphs, formatting, links, head, images, tables, lists, blocks, layouts, forms, Iframes, color, colornames, colorvalues, entities, URL encode, quick list, XHTML

### Unit II

**HTML5: Introduction** : new elements in HTML5, canvas, SVG, drag/drop, geolocation, video, audio, input types, form elements, form attributes, semantic, webstorage, app cache, web workers, SSE

### Unit III

**CSS:Introduction** : basic, home, introduction, syntax id & class, backgrounds, text fonts, links, lists, tables

**CSS:CSS Box Model** : box model, border, outline, margin, padding

### Unit IV

**CSS: Advanced CSS** : grouping/nesting, dimension, display, positioning, floating, align, pseudo-class, pseudo-element, navigation bar, image gallery, image opacity, image sprites, media types

### Unit V

**JavaScript: Introduction** : what is javascript, understanding events, external javascript

**JavaScript:Basic Elements** : comment, variable, global variable, data types, operators, if statement, switch, loop, for and while, function

**JavaScript:Objects** : javascript objects, javascript array

### Unit VI

**JavaScript:Browser Object Model** : browser objects, window object, documentobject, getElementById, getElementsByName, getElementsByTagName, innerHTMLproperty, innerText property

**JavaScript:Validation** : form validation, email validation

**JavaScript: MenuBuilder** : menubuilder, bootstrap

### List of Practicals / Experiments:

#### List of Practicals

- Developing webpages using HTML5 elements
- Controlling the website element positioning using CSS Box Model
- Developing aesthetically appealing website using advance CSS
- Adding images sprites on web page to improve website performance
- JavaScript program to generate a random number
- JavaScript program to print all prime numbers in an interval
- JavaScript program to make a simple calculator
- JavaScript program to convert decimal to binary

- JavaScript program to sort words in alphabetical order
- JavaScript program to count the number of vowels in a string
- JavaScript program to compare elements of two arrays
- JavaScript program to perform Intersection between two arrays
- JavaScript program to implement a stack
- JavaScript program to remove all whitespaces from a text
- JavaScript program to check the number of occurrences of a character in the string

**Text Books:** 1. HTML & CSS: THE COMPLETE REFERENCE by THOMAS A. POWELL, Tata McGraw Hill, India

**References:** 1. WEB ENABLED COMMERCIAL APPLICATION DEVELOPMENT USING HTML, JAVA SCRIPT, DHTML AND PHP by IVAN BAYROSS, BPB PUBLICATIONS