

## **CS50102:: INTERNET TECHNOLOGIES**

**Credits:** 03

**Teaching Scheme:** - Theory 3 Hrs/Week

**Prerequisites:** Nil

### **Objectives:**

- To increase the students knowledge of available web technologies.
- To become familiar with scripting languages.
- To learn and apply techniques that enhance a users web experience.

### **Unit I**

**(9+2 Hrs)**

#### **HTML & Forms**

**Part A.** Introduction To HTML, WWW, W3C, web publishing, Common HTML, Tags Physical & Logical, Some basic tags like <body>, changing background color of page, text color etc., Text formatting tags, <p> <br>, <hr> tags, Ordered & Unordered Lists Tags, Inserting image, Links: text, image links, image mapping, Tables, Frames, Form, Introduction with text box, buttons, radio buttons

**Part B.** Working with List box, checkbox, text area

### **Unit II**

**(9+2 Hrs)**

#### **Cascaded Style Sheet (CSS)**

**Part A.** Introduction to Style sheet, types of style sheets- Inline, External, Embedded CSS, text formatting properties, CSS Border, margin properties, Positioning, Use of classes in CSS, color properties, use of <div> & <span>, Intro & features of XML, writing XML elements, attributes etc. XML with CSS, XML DTD, Writing Simple sheets using XSLT

**Part B.** CSS background effects, padding properties, image properties

### **Unit III**

**(9+2 Hrs)**

#### **Javascript**

**Part A.** Intro to script, types, intro of JavaScript, JavaScript identifiers, operators, control & Looping structure, Intro of Array, Array with methods, Math, String, Date Objects with methods, User defined & Predefined functions, DOM objects, Event handling, Validations On Forms, Looping structure, Intro of Array, Array with metho

**Part B.** Window Navigator, History, Location.

**(9+2 Hrs)**

### **Unit IV**

#### **PHP Language Core**

**Part A.** Introduction to PHP and the Web Server Architecture Model, HTML

Embedding Tags and Syntax, Simple PHP Script, Decision Making, Flow Control and Loops , Working with Arrays Strings and functions, Outputting Data, Include and Require Statements, Error Handling and Reporting Considerations, Processing HTML Form Input from the User, Creating a Dynamic HTML Form with PHP, Using GET, POST, SESSION and COOKIE variables, Introduction to Object-oriented PHP: Classes and Constructors

**Part B.** PHP and HTTP Environment Variables, Constants and Data Types, and Operators

## **Unit V**

**(9+2 Hrs)**

### **Database Operations with PHP and AJAX**

**Part A.** Built-in Database Functions, Connecting to a MySQL, Selecting a Database, Building and Sending the Query to Database Engine, Retrieving, Updating and Inserting Data, Introduction to AJAX, AJAX with PHP, AJAX with database

Note: Apache Http Server is used at server side

**Part B.** Working of Arrays Strings and functions with database

### **Text Books**

1. *"Complete reference HTML", Thomas A. Powell , 4th edition, Tata McGraw-Hill Publications, ISBN: 948-0-07-058281-1*
2. *"Beginning PHP 5", Dave Mercer, Allan Kent, Dreamtech Publications, ISBN: 81-265-0539-7*

### **Reference Books**

1. *"JavaScript The definitive guide", David Flanagn, SPD Publications, ISBN: 81-7366-382-3*
2. *"Web Enabled Commercial Applications Development using. HTML, DHTML, Javascript, Perl CGI", Ivan Bayross, PBP Publications, ISBN: 81-7656-274-2*