

CP301: WEB TECHNOLOGIES
CREDITS = 6 (L=2, T=0, P=4)

Course Objective:

To impart knowledge of Web Designing using HTML, DHTML, CSS, Client side scripts and Server side scripts.

Teaching and Assessment Scheme:

Teaching Scheme			Credits	Assessment Scheme				Total Marks
L	T	P	C	Theory		Practical		
				ESE	CE	ESE	CE	
2	0	4	6	70	30	30	20	150

Course Contents:

Unit No.	Topics	Teaching Hours
1	<u>Introduction to the Web:</u> Concept of WWW, Internet and WWW, HTTP Protocol : Request and Response, Web browser and Web servers, Features of Web 2.0, Designing an Effective Web Site, Web Site Design Issues, Planning a Web Site, Navigation.	04
2	<u>HTML & XML:</u> Basics of HTML, formatting and fonts, commenting code, color, hyperlink, lists, tables, images, forms, XHTML, Meta tags, Character entities, frames and frame sets, Browser architecture and Web site structure, features of HTML5, Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, Using XML with application. Transforming XML using XSL and XSLT.	06
3	<u>Style sheets:</u> Need for CSS, introduction to CSS, basic syntax and structure, using CSS, background images, colors and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS, CSS2, Overview and features of CSS3, Responsive website templates.	05
4	<u>Client Side scripting using JavaScript:</u> Client side scripting with JavaScript, variables, functions, conditions, loops and repetition, Pop up boxes, Advance JavaScript: JavaScript and objects, JavaScript own objects, the DOM and web browser environments, Manipulation using DOM, forms and validations, DHTML : Combining HTML, CSS and JavaScript, Events and buttons.	06

Unit No.	Topics	Teaching Hours
5	<u>Server Side scripting using PHP:</u>	
	Introduction and basic syntax of PHP, decision and looping with examples, PHP and HTML, Arrays, Functions, Browser control and detection, string, Form processing, Files, Advance Features: Cookies and Sessions, Object Oriented Programming with PHP.	06
6	<u>Database Connectivity with MySQL:</u>	
	Basic commands with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names, creating a table, inserting data, altering tables, queries, deleting database, deleting data and tables, PHP myadmin and database bugs.	03
TOTAL		30

List of References:

1. A Paul, J. Deitel, Harvey M. Deitel, Abbey Deitel, “*Internet & World Wide Web How to Program*”, Deitel series, 5th edition.
2. Jason Gilmore, “*Beginning PHP and MySQL from Novice to Professional*”, 4th Edition, Apress Publications.
3. “*Web Technologies*”, Black Book, dreamtech Press.
4. Harwani, “*Developing Web Applications in PHP and AJAX*”, McGrawHill
5. Ralph Moseley and M.T.Savaliya, “*Developing Web Applications*”, Wiley-India.

Course Outcomes (COs):

At the end of this course students will be able to

1. Understand the concepts of WWW including web protocols and web browser architecture.
2. Develop the static web pages using the HTML, XML and CSS with different layouts as per need of applications.
3. Design and develop client side scripting using JavaScript.
4. Install and configure web server.
5. Develop dynamic web pages using server side scripting language such as a PHP to with database connectivity.
6. Develop real world applications.