## **BVM ENGINEERING COLLEGE [AN AUTONOMOUS INSTITUTION]**

# 2CP08: WEB TECHNOLOGIES CREDITS - 4 (LTP:3,0,1)

#### **Course Objective:**

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

### **Teaching and Assessment Scheme:**

Oriented Programming with PHP

Teaching Scheme (Hours per week)			Credits	Assessment Scheme				Total
L	Т	P	С	Theory		Practical		Marks
				ESE	CE	ESE	CE	
3	0	2	4	60	40	20	30	150

#### **Course Contents:**

Unit No.	Topics				
1	Introduction to the Web:  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				
2	HTML&XML: 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	08			
3	<b>Style sheets:</b> 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	<b>JavaScript and AngularJS:</b> Introduction, variables, functions, conditions, loops and repetition, Pop up boxes, DOM-Document Object Model, Manipulation using DOM, forms and validations, DHTML, Events, AngularJS: MVC architecture, Directives, Expressions, Controllers, HTML DOM, forms.	12			
5	Server Side scripting using PHP: 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	10			

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Unit No.	Topics	Teaching Hours	
6	Database Connectivity with MySQL: 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		
	Total	45	

#### **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
- 6. Ken Williamson, "Learning AngularJS: A Guide to AngularJS Development" O'Reilley

#### **Course Outcomes (COs):**

After successful completion of the course, the 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 and CSS with different layouts as per need of applications.
- 3. Construct and validate semi-structured database.
- 4. Develop client side scripting using JavaScript and AngularJS.
- 5. Develop dynamic web pages using server side scripting language such as a PHP with database connectivity.
- 6. Develop real world applications.