

## WEB TECHNOLOGIES LABORATORY

<b>V Semester: IT</b>								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
ACS105	Core	L	T	P	C	CIA	SEE	Total
		-	-	3	2	30	70	100
<b>Contact Classes: Nil</b>	<b>Tutorial Classes: Nil</b>	<b>Practical Classes: 36</b>			<b>Total Classes: 36</b>			
<p><b>OBJECTIVES:</b></p> <p><b>The course should enable the students to:</b></p> <ol style="list-style-type: none"> <li>Construct web pages that meet guidelines for efficient download and cater to the needs of an identified audience using HTML.</li> <li>Evaluate the functions of specific types of web pages in relationship to an entire web site using HTML and CSS.</li> <li>Understand the use of JavaScript to access and web services for dynamic content.</li> <li>Demonstrate Improve problem solving skills using arrays, strings and functions in PHP.</li> <li>Demonstrate the ability to retrieve data from a database and present it in a web page using PHP.</li> </ol> <p><b>COURSE OUTCOMES (COs):</b></p> <p>CO 1: Implements static web pages using Hypertext Markup Language.</p> <p>CO 2: Understand markup languages for processing, identifying, and presenting of information in web pages.</p> <p>CO 3: Use scripting languages and web services to transfer data and add interactive components to web pages.</p> <p>CO 4: Understand basic concepts in PHP like arrays, strings and functions in PHP.</p> <p>CO 5: Create and communicate between client and server using PHP and create a good, effective and dynamic website.</p> <p><b>COURSE LEARNING OUTCOMES (CLOs):</b></p> <p><b>The students should enable to:</b></p> <ol style="list-style-type: none"> <li>Understand the basic HTML tags.</li> <li>Understand and apply the design principles of HTML and Java Script to create static and dynamic web pages.</li> <li>Understand the difference between HTML and XML scripting languages.</li> <li>Analyze the client side validation procedure in web applications.</li> <li>Identify the difference between the JSP and Servlet.</li> <li>Able to use web server and data base servers using specific vendor related software's.</li> <li>Create web applications by using the concepts like JSP and Servlet.</li> <li>Identify and perform requesting and response generation process in web servers Draw and analysis of characteristic curves of flow meters.</li> <li>Understand the PHP downloading, installation and configuring PHP process.</li> <li>Understand branching statements, loop statements and use them in problem solving.</li> <li>Identify the methods to read data from web pages using PHP.</li> <li>Understand how MYSQL server is connected with PHP</li> <li>Able to perform crude operations in data base servers, operations in PHP.</li> <li>Familiar with basic HTML, XML, JSP and PHP techniques: Creation of web pages, that includes verification and validation of web pages.</li> </ol>								

<b>LIST OF EXPERIMENTS</b>	
<b>Week-1</b>	<b>INSTALLATIONS</b>
Installation of XAMPP and WAMP servers	
<b>Week-2</b>	<b>HTML</b>
<ul style="list-style-type: none"> <li>a. Create a table to show your class time table.</li> <li>b. Use tables to provide layout to your HTML page describing your college infrastructure.</li> <li>c. Use &lt;span&gt; and &lt;div&gt; tags to provide a layout to the above page instead of a table layout.</li> </ul>	
<b>Week-3</b>	<b>HTML</b>
<ul style="list-style-type: none"> <li>a. Use frames such that page is divided into 3 frames 20% on left to show contents of pages, 60% in center to show body of page, remaining on right to show remarks.</li> <li>b. Embed Audio and Video into your HTML web page.</li> </ul>	
<b>Week-4</b>	<b>HTML</b>
<ul style="list-style-type: none"> <li>a. Create a webpage with HTML describing your department use paragraph and list tags.</li> <li>b. Apply various colors to suitably distinguish keywords , also apply font styling like italics, underline and two other fonts to words you find appropriate , also use header tags.</li> <li>c. Create links on the words e.g. —Wi-Fi and —LAN to link them to Wikipedia pages.</li> <li>d. Insert an image and create a link such that clicking on image takes user to other page.</li> <li>e. Change the background color of the page; At the bottom create a link to take user to the top of the page.</li> </ul>	
<b>Week-5</b>	<b>HTML</b>
Develop static pages (using only HTML) of an online book store, the pages should resemble: www.amazon.com, the website should consist the following pages, home page, registration and user login, user profile page, books catalog, shopping cart, payment by credit card, order confirmation.	
<b>Week-6</b>	<b>CASCADING STYLE SHEET</b>
Write an HTML page that contains a selection box with a list of 5 countries, when the user selects a country, its capital should be printed next to the list; Add CSS to customize the properties of the font of the capital (color, bold and font size).	
<b>Week-7</b>	<b>JAVASCRIPT</b>
<ul style="list-style-type: none"> <li>a. Write a java script program to test the first character of a string is uppercase or not.</li> <li>b. Write a pattern that matches e-mail addresses.</li> <li>c. Write a java script function to print an integer with commas as thousands separators.</li> </ul>	
<b>Week-8</b>	<b>JAVASCRIPT</b>
<ul style="list-style-type: none"> <li>a. Write a java script program to sort a list of elements using quick sort.</li> <li>b. Write a java script for loop that will iterate from 0 to 15 for each iteration, it will check if the current number is odd or even, and display a message to the screen.</li> </ul>	

<b>Week-9</b>	<b>JAVASCRIPT</b>
<ul style="list-style-type: none"> <li>a. Write a java script program which compute, the average marks of the following students then this average is used to determine the corresponding grade.</li> <li>b. Write a java script program to sum the multiple s of 3 and 5 under 1000.</li> <li>c. To design the scientific calculator and make event for each button using java script.</li> </ul>	
<b>Week-10</b>	<b>PHP</b>
<ul style="list-style-type: none"> <li>a. A simple calculator web application that takes two numbers and an operator (+, /,*and %) from an HTML page and returns the result page with the operation performed on the operands.</li> <li>b. Write PHP program how to send mail using PHP.</li> </ul>	
<b>Week-11</b>	<b>PHP</b>
<ul style="list-style-type: none"> <li>a. Write PHP program to convert a string, lower to upper case and upper case to lower case or capital case.</li> <li>b. Write PHP program to change image automatically using switch case.</li> <li>c. Write PHP program to calculate current age without using any pre-define function.</li> <li>d. Write PHP program to upload image to the server using html and PHP.</li> </ul>	
<b>Week-12</b>	<b>PHP</b>
<ul style="list-style-type: none"> <li>a. Write PHP program to upload registration form into database.</li> <li>b. Write PHP program to display the registration form from the database.</li> </ul>	
<b>Week-13</b>	<b>PHP</b>
<ul style="list-style-type: none"> <li>a. Write PHP program to update the registration form present in database.</li> <li>b. Write PHP program to delete the registration form from database.</li> </ul>	
<b>Text Books:</b>	
<ol style="list-style-type: none"> <li>1 Chris Bates, "Web Programming: Building Internet Applications", Wiley DreamTech, 2<sup>nd</sup> Edition,2002</li> <li>2 Jeffrey C K Jackson, "Web Technologies", Pearson Education, 1<sup>st</sup> Edition,2006</li> <li>3 Steven Holzner,"the Complete reference PHP",TataMcGraw-Hill,1<sup>st</sup> Edition,2007</li> </ol>	
<b>Reference Books:</b>	
<ol style="list-style-type: none"> <li>1. WHans Bergsten, "Java Server Pages", O'Reilly, 3<sup>rd</sup> Edition, 2003.</li> <li>2. D. Flanagan, "Java Script", O'Reilly, 6<sup>th</sup> Edition, 2011.</li> <li>3. Jon Duckett, "Beginning Web Programming", WROX, 2<sup>nd</sup> Edition, 2008.</li> <li>4. Herbert Schildt, "Java the Complete Reference", Hill - Osborne, 8<sup>th</sup> Edition, 2011.</li> </ol>	