

## WEB TECHNOLOGIES LABORATORY

| <b>V Semester: CSE   IT</b>   |  |                              |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
|---|--|------------------------------|---|------------------------------|---------|--------------------------|-----|-------|------|--|-------|------|--|-------|------|---|-------|------|---|-------|------|--|-------|------|--|-------|
| Course Code   | Category   | Hours / Week                 |   |                              | Credits | Maximum Marks            |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| AITB11  | Core   | L                            | T | P                            | C       | CIA                      | SEE | Total |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
|   |  | -                            | - | 2                            | 1       | 30                       | 70  | 100   |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| <b>Contact Classes: Nil</b>   |  | <b>Tutorial Classes: Nil</b> |   | <b>Practical Classes: 30</b> |         | <b>Total Classes: 30</b> |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| <p><b>I. COURSE OVERVIEW:</b><br/>           This Laboratory course provides a foundation for the development of a broad range of increasingly influential and strategic technologies, supporting a large variety of applications and services, both in the private and public sectors. There is a growing need for management and decision makersto gain a clearer understanding of the application development process, from planning through to deployment and maintenance. This module will give you an insight into architectures, protocols, standards, languages, tools and techniques; an understanding of approaches to more dynamic and mobile content; and demonstrate how you can analyze requirements, plan, design, implement and testarrange of web applications.</p> <p><b>II. OBJECTIVES:</b><br/> <b>The course should enable the students to:</b></p> <ul style="list-style-type: none"> <li>I The fundamentals of designing static and dynamic web pages using HTML and DHTMLfor creation of websites.</li> <li>II The concepts of client - server programming with JavaScript, XML, Servest, JSP andPHP.</li> <li>III The project-based experience needed for designing real time web based client-serverapplications.</li> </ul> <p><b>III. COURSE OUTCOMES:</b><br/> <b>After successful completion of the course, students should be able to:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">CO 1</td> <td style="width: 70%;">Develop static web pages using HTML and CSS. .</td> <td style="width: 20%; text-align: right;">Apply</td> </tr> <tr> <td>CO 2</td> <td>Develop effective and interactive web pages using elements and selectors in style sheets and dynamic HTML.</td> <td style="text-align: right;">Apply</td> </tr> <tr> <td>CO 3</td> <td>Make use of functions in JavaScript and PHP for implementing datavalidations in web applications.</td> <td style="text-align: right;">Apply</td> </tr> <tr> <td>CO 4</td> <td>Develop dynamic web site using server side PHP programming and database connectivity.</td> <td style="text-align: right;">Apply</td> </tr> <tr> <td>CO 5</td> <td>Build dynamic web pages using XML and PHP with database connectivity to perform CRUD operations.</td> <td style="text-align: right;">Apply</td> </tr> <tr> <td>CO 6</td> <td>Construct website by using front end and back end programming.</td> <td style="text-align: right;">Apply</td> </tr> </table> |  |                              |   |                              |         |                          |     |       | CO 1 | Develop static web pages using HTML and CSS. . | Apply | CO 2 | Develop effective and interactive web pages using elements and selectors in style sheets and dynamic HTML. | Apply | CO 3 | Make use of functions in JavaScript and PHP for implementing datavalidations in web applications. | Apply | CO 4 | Develop dynamic web site using server side PHP programming and database connectivity. | Apply | CO 5 | Build dynamic web pages using XML and PHP with database connectivity to perform CRUD operations. | Apply | CO 6 | Construct website by using front end and back end programming. | Apply |
| CO 1  | Develop static web pages using HTML and CSS. .   | Apply                        |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| CO 2  | Develop effective and interactive web pages using elements and selectors in style sheets and dynamic HTML. | Apply                        |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| CO 3  | Make use of functions in JavaScript and PHP for implementing datavalidations in web applications.          | Apply                        |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| CO 4  | Develop dynamic web site using server side PHP programming and database connectivity.                      | Apply                        |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| CO 5  | Build dynamic web pages using XML and PHP with database connectivity to perform CRUD operations.           | Apply                        |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| CO 6  | Construct website by using front end and back end programming.   | Apply                        |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| <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>  |                              |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |
| <ol style="list-style-type: none"> <li>1. Create a table to show your class time table.</li> <li>2. Use tables to provide layout to your HTML page describing your college infrastructure.</li> </ol>   |  |                              |   |                              |         |                          |     |       |      |  |       |      |  |       |      |   |       |      |   |       |      |  |       |      |  |       |

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| 3. Use <span> and <div> tags to provide a layout to the above page instead of a table layout.  |                              |
| <b>Week-3</b>  | <b>HTML</b>                  |
| <ol style="list-style-type: none"> <li>1. 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>2. Embed Audio and Video into your HTML web page.</li> </ol>  |                              |
| <b>Week -4</b>   | <b>HTML</b>                  |
| <ol style="list-style-type: none"> <li>1. Create a webpage with HTML describing your department use paragraph and list tags.</li> <li>2. Apply various colors to suitably distinguish key words, also apply font styling like italics, underline and two other fonts to words you find appropriate, also use header tags.</li> <li>3. Create links on the words e.g. "Wi-Fi" and "LAN" to link them to Wikipedia pages.</li> <li>4. Insert an image and create a link such that clicking on image takes user to other page.</li> <li>5. Change the background color of the page; At the bottom create a link to take user to the top of the page.</li> </ol> |                              |
| <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>CASCADING STYLE SHEET</b> |
| Let your visitors change the style sheet on your web site, this script will let your visitors choose between five style sheets, which can create yourself or use the one's included.   |                              |
| <b>Week -8</b>   | <b>JAVASCRIPT</b>            |
| <ol style="list-style-type: none"> <li>1. Write a Java Script program to test the first character of a string is uppercase or not.</li> <li>2. Write a pattern that matches e-mail addresses.</li> <li>3. Write a Java Script function to print an integer with commas as thousands separators.</li> </ol>   |                              |
| <b>Week-9</b>  | <b>JAVASCRIPT</b>            |
| <ol style="list-style-type: none"> <li>1. Write a Java Script program to sort a list of elements using quick sort.</li> <li>2. 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> <li>3. Write a Java Script function which will take an array of numbers stored and find the second lowest and second greatest numbers, respectively.</li> </ol>   |                              |
| <b>Week-10</b>   | <b>JAVASCRIPT</b>            |
| <ol style="list-style-type: none"> <li>1. 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>2. Write a Java Script program to sum the multiples of 3 and 5 under 1000.</li> <li>3. To design the scientific calculator and make event for each button using java script.</li> </ol>  |                              |

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| <b>Week-11</b>   | <b>PHP</b> |
| <ol style="list-style-type: none"> <li>1. 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>2. Write php program how to send mail using PHP.</li> </ol>   |            |
| <b>Week-12</b>   | <b>PHP</b> |
| <ol style="list-style-type: none"> <li>1. Write php program to convert a string, lower to upper case and upper case to lower case or capital case.</li> <li>2. Write php program to change image automatically using switch case.</li> </ol>   |            |
| <b>Week-13</b>   | <b>PHP</b> |
| <ol style="list-style-type: none"> <li>1. Write php program to calculate current age without using any pre-define function.</li> <li>2. Write php program to upload image to the server using html and PHP.</li> </ol>   |            |
| <b>Week-14</b>   | <b>PHP</b> |
| <ol style="list-style-type: none"> <li>1. Write php program to upload registration form into database.</li> <li>2. Write php program to display the registration form from the database.</li> </ol>  |            |
| <b>Week-15</b>   | <b>PHP</b> |
| <ol style="list-style-type: none"> <li>1. Write php program to update the registration form present in database.</li> <li>2. Write php program to delete the registration form from database</li> </ol>  |            |
| <b>Reference Books:</b>  |            |
| <ol style="list-style-type: none"> <li>1. Uttam K Roy, “Web Technologies”, Oxford University Press, 1<sup>st</sup> Edition, 2010.</li> <li>2. Steven Holzner, “The Complete Reference PHP”, Tata McGraw-Hill, 1<sup>st</sup> Edition, 2007</li> </ol>  |            |
| <b>Web References:</b>   |            |
| <ol style="list-style-type: none"> <li>1. <a href="http://www.scoopworld.in">http://www.scoopworld.in</a></li> <li>2. <a href="http://www.sxecw.edu.in">http://www.sxecw.edu.in</a></li> <li>3. <a href="http://www.technofest2u.blogspot.com">http://www.technofest2u.blogspot.com</a></li> <li>4. <a href="http://www.ptutorial.com/php-example/php-upload-image">http://www.ptutorial.com/php-example/php-upload-image</a></li> <li>5. <a href="http://www.ptutorial.com/php-example/php-change-case">http://www.ptutorial.com/php-example/php-change-case</a></li> </ol> |            |
| <b>SOFTWARE AND HARDWARE REQUIREMENTS FOR A BATCH OF 36 STUDENTS:</b>  |            |
| <b>HARDWARE:</b> Desktop Computer Systems: 36 nos  |            |
| <b>SOFTWARE:</b> Application Software: XAMPP Server, WAMP 3.0.6.   |            |