



# **WEB DESIGN LABORATORY**

## **LAB MANUAL**

### **B.E IN COMPUTER ENGINEERING (TECO - SEM V)**

**(2019-20)**

#### **DEPARTMENT OF COMPUTER ENGINEERING**



#### **ANJUMAN-I-ISLAM'S KALSEKAR TECHNICAL CAMPUS** **School of Engineering & Technology**

Affiliated to : University of Mumbai, Recognised by : DTE (Maharashtra) & Approved by : AICTE (New Delhi)

**Address** - Plot No. 2 & 3, Sector - 16, Near Thana Naka, Khandagaon, New Panvel - 410206

**Phone** - 022-2748-1247 / 48 / 49

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### **COURSE OBJECTIVES:**

1. To design and create web pages using HTML5 and CSS3.
2. To create web pages and provide client side validation.
3. To create dynamic web pages using server side scripting.
4. To use MVC framework for web application development.

### **COURSE OUTCOMES:**

On completion of course learner will be able to:

1. Understand the core concepts and features of Web Technology.
2. Design static web pages using HTML5 and CSS3.
3. Apply the concept of client side validation and design dynamic web pages using JavaScript and JQuery.
4. Evaluate client and server side technologies and create Interactive web pages using PHP , AJAX with database connectivity using MySQL.
5. Understand the basics of XML, DTD and XSL and develop web pages using XML / XSLT.
6. Analyze end user requirements and Create web application using appropriate web technologies and web development framework.



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## **TEXTBOOKS:**

1. Ralph Moseley , M.T. Savliya , Developing Web Application, Willy India, Second Edition, ISBN: 978-81-265-3867-6
2. Web Technology Black Book, Dreamtech Press, First Edition, 978-7722-997
3. Robin Nixon, "Learning PHP, MySQL, JavaScript, CSS & HTML5" Third Edition, O'REILLY, 2014.  
([http://www.ebooksbucket.com/uploads/itprogramming/javascript/Learning\\_PHP\\_MySQL\\_Javascript\\_CSS\\_HTML5\\_Robin\\_Nixon\\_3e.pdf](http://www.ebooksbucket.com/uploads/itprogramming/javascript/Learning_PHP_MySQL_Javascript_CSS_HTML5_Robin_Nixon_3e.pdf))
4. Professional Rich Internet Applications: AJAX and Beyond, Dana Moore, Raymond Budd, Edward Benson, Wiley publications.  
<https://ebooks-it.org/0470082801-ebook.htm>

## **REFERENCE BOOKS:**

1. Harvey & Paul Deitel & Associates, Harvey Deitel and Abbey Deitel, —Internet and World Wide Web - How To Program, Fifth Edition, Pearson Education, 2011.
2. Achyut S Godbole and Atul Kahate, —Web Technologies, Second Edition, Tata McGraw Hill, 2012.
3. Thomas A Powell, Fritz Schneider, —JavaScript: The Complete Reference, Third Edition, Tata McGraw Hill, 2013.
4. David Flanagan, —JavaScript: The Definitive Guide, Sixth Edition, O'Reilly Media, 2011
5. Steven Holzner, —The Complete Reference - PHP, Tata McGraw Hill, 2008
6. Mike Mcgrath, —PHP & MySQL in easy Steps, Tata McGraw Hill, 2012.

## **DIGITAL MATERIALS:**

1. [www.nptelvideos.in](http://www.nptelvideos.in)
2. [www.w3schools.com](http://www.w3schools.com)
3. <http://spoken-tutorial.org>



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**INDEX PAGE**

**Name:** \_\_\_\_\_

**Roll No:** \_\_\_\_\_

**Class:** TE **Semester:** V

**Scheme:** CBCS

**Programme:** Computer Engineering

**Batch:** 2017-21

**Course:** WEB DESIGN LAB

**Course Code:** CSL504

| Sr No. | Experiment Title  | Page No. | Evaluation Parameters |             |         | Total (10) | DOP | Sign (Dated) |
|--------|---|----------|-----------------------|-------------|---------|------------|-----|--------------|
|        |   |          | Execution (3)         | On Time (2) | Quiz(5) |            |     |              |
| 1      | Installation and Setting of LAMP / WAMP / XAMP  |          |                       |             |         |            |     |              |
| 2      | Create Simple web page using HTML5  |          |                       |             |         |            |     |              |
| 3      | Design and Implement web page using CSS3 and HTML5  |          |                       |             |         |            |     |              |
| 4      | Form Design and Client Side Validation using :<br>a. Javascript and HTML5<br>b. Javascript and JQuery |          |                       |             |         |            |     |              |
| 5      | Develop simple web page using PHP   |          |                       |             |         |            |     |              |
| 6      | Develop interactive web pages using PHP with database connectivity MYSQL                              |          |                       |             |         |            |     |              |
| 7      | Develop XML web page using DTD, XSL   |          |                       |             |         |            |     |              |
| 8      | Implement a webpage using Ajax and PHP  |          |                       |             |         |            |     |              |
| 9      | Hosting the website with Domain Registration Process.   |          |                       |             |         |            |     |              |
| 10     | Design a Web application using Laravel Framework  |          |                       |             |         |            |     |              |
|        | Mini Project  |          |                       |             |         |            |     |              |
|        |   |          |                       |             |         |            |     |              |

Course Owner



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| No | Title   | Page No |
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| 9  | Hosting the website with Domain Registration Process.   |         |
| 10 | Design a Web application using Laravel Framework  |         |

**\* \*Setting up /buying the web host management system for hosting of mini project is recommended.**

**Term Work:** The distribution of marks for term work shall be as follows:

Lab Assignments : 10 Marks

Mini Project : 10 Marks

Attendance : 05 Marks

**Practical & Oral Examination:**

Practical & Oral examination is to be conducted by pair of internal and external examiners based on the above syllabus.



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|                                    |                 |
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| <b>COURSE CODE: CSL504</b>         | <b>ROLL NO:</b> |
| <b>COURSE NAME: WEB DESIGN LAB</b> | <b>NAME:</b>    |
| <b>CLASS : TECO - SEM V</b>        | <b>BATCH:</b>   |

**EXPERIMENT NO : 01**

**AIM: Installation and Setting of LAMP / WAMP / XAMP**

### **PROCEDURE:**

1. Select the Operating System and Database software to setup the web server.  
LAMP - Linux Apache MySQL PHP  
WAMP - Windows Apache MySQL PHP/PERL  
XAMPP - Windows Apache MariaDB PHP/PERL  
MAMP - MacOS Apache MySQL PHP/PERL
2. Execute the command line commands or run the exe depending on the OS selected.
  - a) `sudo apt install apache2`
  - b) `sudo apt install mysql-server`
  - c) `sudo apt install php-pear php-fpm php-dev php-zip php-curl php-xmllrpc php-gd php-mysql php-mbstring php-xml libapache2-mod-php`
  - d) `sudo service apache2 restart`
  - e) <http://localhost/>
  - f) Create a info.php file in /var/www/html folder or type the following command in console under /var/www/html/ folder  
`php -r 'echo "\n\nYour PHP installation is working fine.\n\n\n";'`

### **REFERENCES:**

<https://howtoubuntu.org/how-to-install-lamp-on-ubuntu>  
<https://www.digitalocean.com/community/tutorials/how-to-install-linux-apache-mysql-php-lamp-stack-ubuntu-18-04>  
<https://www.makeuseof.com/tag/how-to-set-up-your-own-wampserver/>  
<https://premium.wpmudev.org/blog/setting-up-xampp/>

### **CONCLUSION:**

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### **SCREENSHOTS / OUTPUTS:**



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**EXPERIMENT NO : 02**

**AIM:** Create a simple web page using HTML5.

**PROCEDURE:**

1. Open Text Editor / Visual Code / Sublime Text
2. Create a new file and save as index.html.
3. Add code by using the HTML5 semantics.
  - a) Header
  - b) Footer
  - c) Article
  - d) Section
  - e) Nav
  - f) Audio
  - g) Video
4. Save the code and open the file in browser.
5. Create contact.html and profile.html similarly by including the following HTML tags.
  - a) HTML Text
  - b) HTML Links
  - c) HTML Lists
  - d) HTML Tables
  - e) HTML Forms
  - f) HTML Images

**REFERENCES:**

[https://www.w3schools.com/html/html5\\_intro.asp](https://www.w3schools.com/html/html5_intro.asp)

<https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5>

<https://html.spec.whatwg.org/>

**CONCLUSION:**

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**EXPERIMENT NO : 03**

**AIM: Design and Implement web page using CSS3 and HTML5**

**PROCEDURE:**

1. Create about.html and registration.html page in your project folder.
2. Create a navigation bar and link all the pages using anchor tag.
3. Add the content of your team members in about.html page and create a sign-up form in registration.html by considering the following attributes:
  - name, rollno, department, class, sem, gender, email, phone, dob, password, batch, etc.
4. Create a css file as mystyle.css and save it in css folder in your project folder.
5. Add the CSS3 styles for all the elements used in the HTML page.
6. Link the CSS file with each of your HTML pages by adding the following code:  
`<link rel="stylesheet" href="css/mystyle.css" type="text/css"`
7. Open the webpages (about.html and registration.html) in browser.

**REFERENCES:**

<https://www.w3schools.com/css/>

<https://developer.mozilla.org/en-US/docs/Web/CSS>

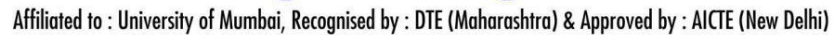
<https://css-tricks.com/>

**CONCLUSION:**

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**EXPERIMENT NO : 05**

**AIM: Develop simple web page using PHP**

**PROCEDURE:**

1. Create two pages in text editor (login.php and home.php) in the project folder under /var/www/html directory.
2. Update the navigation menu with the proper links.
3. Write the code for login.php and home.php using PHP and JQuery.
4. Open the php page by using the link :  
[http://localhost/<your\\_project\\_folder\\_name>/login.php](http://localhost/<your_project_folder_name>/login.php)
5. Enter the credentials and navigate to home.php.

**REFERENCES:**

<https://www.php.net/>

<https://www.w3schools.com/php/default.asp>

<https://www.codecademy.com/learn/learn-php>

**CONCLUSION:**

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**EXPERIMENT NO : 06**

**AIM: Develop interactive web pages using PHP with database connectivity MYSQL**

**PROCEDURE:**

1. Create your own mysql user by login from root user.
  - a) create user 'abdul' @ 'localhost' identified by 'pass123';
  - b) grant all on \*.\* to 'abdul' @ 'localhost';
  - c) flush privileges;
  - d) exit
2. Login with your mysql account and create a new database.
  - a) mysql - u abdul - p
  - b) create database smartsystem;
  - c) use smartsystem;
3. Create two tables (users and contactform) by identifying the elements of HTML webpage - register.html and contact.html
4. Create two php webpages (checkdb.php and submitreg.php) for linking the HTML webpages with the MySQL database.
5. Write the DB connectivity code in checkdb.php and check for any errors.
6. Write the PHP code for fetching the values submitted through HTML form and inserting those values in the MySQL database.
7. Similarly repeat the above step for linking the contact HTML form with MySQL table.
8. Create a new php page ( viewusers.php ) and write the PHP-MYSQL code to view the registered users.
9. Create action buttons in the viewusers.php for editing and deleting a record.

**REFERENCES:**

<https://www.php.net/manual/en/book.mysql.php>  
[https://www.w3schools.com/php/php\\_mysql\\_intro.asp](https://www.w3schools.com/php/php_mysql_intro.asp)  
<http://www.mysqltutorial.org/php-mysql/>

**CONCLUSION:**

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