

## SEMESTER-V

### COURSE 6: WEB DEVELOPMENT USING PHP & MYSQL

Theory

Credits: 3

3 hrs/week

#### Course Objectives:

**Course Outcomes:** Upon Completion of the course, the students will be able to

1. Write simple programs in PHP.
2. Understand how to use regular expressions, handle exceptions, and validate data.
3. Apply In-Built functions and Create User defined functions in PHP programming.
4. Write PHP scripts to handle HTML forms.
5. Write programs to create dynamic and interactive web-based applications using PHP and MYSQL.
6. Know how to use PHP with MySQL DB and can write database driven web pages.

#### Unit-I:

**Using PHP:** PHP Basics: Accessing PHP, Creating Sample Application, Embedding PHP in HTML, Adding Dynamic Content, Identifiers, Variables, Constants, Operators, Data types, Accessing Form Variables, Variable handling Functions, Making Decisions with Conditions, Repeating actions through Iterations, Breaking Out of a Control Structure

**Storing and Retrieving Data:** Processing Files, opening a File, writing to a File, closing a File, Reading from a File, Other File Functions, Locking Files.

**CASE STUDY:** Web Based Social Network Application Development

#### Unit-II:

**Arrays:** Arrays basics, Types, Operators, Array Manipulations.

**String Manipulation and Regular Expressions:** Strings Basics, Formatting Strings, Joining and Splitting Strings with String Functions, Comparing Strings, Matching and Replacing Substrings with String Function, Introducing Regular Expressions, Find, Replace, Splitting in regular Expressions

**CASE STUDY:** Retail E-commerce Application Development for Apparels & Garments

#### Unit-III:

**Reusing Code and Writing Functions:** The Advantages of Reusing, Using require () and include (), Using Functions in PHP, Scope, Passing by Reference Versus Passing by Value, keyword, Recursion.

**Object-Oriented PHP:** OOP Concepts, Creating Classes, Attributes, and Operations in PHP, Implementing Inheritance in PHP, Understanding Advanced Object-Oriented Functionality in PHP.

**Error and Exception Handling:** Error and Exception Handling, Exception Handling Concepts.

**CASE STUDY:** e-Commerce Application for Manufacturing Industry

#### Unit-IV:

**Using MySQL:** Relational Database Concepts, Web Database Architecture, Introducing MySQL's Privilege System, Creating Database Tables, Understanding MySQL, Identifiers, Database

Operations, querying a Database, Understanding the Privilege System, Making Your MySQL Database Secure, Optimization, Backup, Restore.

**CASE STUDY:** Custom CMS Website Development

**Unit-V:**

**Introduction of Laravel PHP Framework:** Why Lavarel, setting up Lavarel Development Environment, Routing and Controllers: introduction to MVC, the HTTP verbs, and REST, Route Definitions, Route Groups, Signed Routes, Views, Controllers, Route Model Binding, Redirects, Custom Responses

**Case Study:** E-commerce Business Solution delivered for Groceries Vendor

**Prescribed Text Books:**

1. Luke Welling, Laura Thomson, “PHP and MySQL Web Development”, 5th Edition
2. Matt Stauffer, “Lavarel: Up & Running”, 2nd Edition
3. Julie C. Meloni, SAMS Teach yourself PHP MySQL and Apache, Pearson Education (2007).
4. Steven Holzner , PHP: The Complete Reference, McGraw-Hill
5. Robin Nixon, Learning PHP, MySQL, JavaScript, CSS & HTML5, Third Edition O'reilly, 2014
6. Xue Bai Michael Ekedahl, The web warrior guide to Web Programming, Thomson (2006).
7. Web resources:  
<http://www.codecademy.com/tracks/ph>  
<http://www.w3schools.com/PHP>  
<http://www.tutorialpoint.com>
8. Other web sources suggested by the teacher concerned and the college librarian including reading material.

**SEMESTER-V**  
**COURSE 6: WEB DEVELOPMENT USING PHP & MYSQL**

Practical

Credits: 1

2 hrs/week

**Course Outcomes:** On successful completion of this practical course, student shall be able to:

- Write, debug, and implement the Programs by applying concepts and error handling techniques of PHP.
- Create an interactive and dynamic website.
- Create a website with reports generated from a database.
- Create an interactive website for e-commerce sites like online shopping, etc.

**Practical (Laboratory) Syllabus: (30 hrs.)**

1. Write a PHP program to Display “Hello”, and today’s date.
2. Write a PHP program to display Fibonacci series.
3. Write a PHP Program to read the employee details.
4. Write a PHP program to prepare the student marks list.
5. Write a PHP program to generate the multiplication of two matrices.
6. Create student registration form using text box, check box, radio button, select, submit button. And display user inserted value in new PHP page.
7. Create Website Registration Form using text box, check box, radio button, select, submit button. And display user inserted value in new PHP page.
8. Write PHP script to demonstrate passing variables with cookies.
9. Write a program to keep track of how many times a visitor has loaded the page.
10. Write a PHP application to add new Rows in a Table.
11. Write a PHP application to modify the Rows in a Table.
12. Write a PHP application to delete the Rows from a Table
13. Write a PHP application to fetch the Rows in a Table.
14. Develop an PHP application to implement the following Operations.  
Registration of Users. Insert the details of the Users. Modify the Details.  
Transaction Maintenance. No of times Logged in Time Spent on each login. Restrict the user for three trials only.  
Delete the user if he spent more than 100 Hrs of transaction.
15. Write a PHP script to connect MySQL server from your website.
16. Write a program to read customer information like cust-no, cust-name, item purchased, and mob-no, from customer table and display all these information in table format on output screen.
17. Write a program to edit name of customer to “Kiran” with cust-no =1, and to delete record with cust-no=3.
18. Write a program to read employee information like emp-no, emp-name, designation and salary from EMP table and display all this information using table format.
19. Create a dynamic web site using PHP and MySQL.