18MC206 WEB SCRIPTING THROUGH PHP & MYSQL

Course Description and Objectives:

This course offers the basic concepts used to develop static and dynamic web pages. It also provides the knowledge of a Web server, MYSQL, and form handling with PHP. The objective of this course is to build web applications with PHP and MYSQL database using XAMPP/WAMP tool.

Course Outcomes:

Student will be able to:

- Use different data types to design programs involving decisions, loops, and functions.
- Work with HTML forms and handling HTML forms using PHP.
- Familiar with MYSQL database and perform insert, update and delete operations on DBMS tables.
- Implement and debug programs in PHP and MYSQL for a specific application.

Skills:

- Apply control statements for decision making problems.
- Create the database tables with application related constraints (primary key, foreign key, candidate key etc...)
- Designing HTML forms with validations on them.

Activities:

- Design an application to perform various operations of a real world problem.
- Develop and design a user interface for web applications.
- Implement the Data Base-Oriented Projects like student management system, stock management systems, library management system etc…

Syllabus

UNIT – 1   **12 Hours**

ESSENTIALS OF PHP: Define PHP, WAMP/XAMP server installation, Creating & running first PHP script, Variables, Data types;Operators -Arithmetic Operators, Assignment Operators, Bitwise Operators, Comparison Operators, Incrementing /Decrementing Operators, Logical Operators, String Operators, Expressions, Constants.

UNIT – 2   **12 Hours**

DECISIONS AND LOOPS:if, if-else, else if and switch statements,Compact coding with the Ternary operator, while, do- while, for,break, continue; Strings - Creating and Accessing Strings, Searching Strings, Replacing Text within Strings, Dealing with Upper case and Lowercase.

UNIT – 3 12 Hours

ARRAYS AND FUNCTIONS: Creating Arrays, Outputting an Entire Array with print_r()- Extracting a Range of Elements with array_slice()-Counting Elements in an Array, Arrays with foreach loops, Working with multidimensional arrays; Functions - Use of function, Calling functions, Writing your own functions, Defining parameters, Optional parameters and Default values, Returning values from your functions, Understanding variable scope, Writing recursive functions.

UNIT – 4 12 Hours

HANDLING HTML FORMS WITH PHP:HTML Forms, Capturing form data with PHP, Dealing with Multi-value fields, Creating file upload forms.

UNIT – 5 12 Hours

DATA BASE CONCEPTS: MySQL data types - Numeric data types, Date and Time data types, String data types; MySQL Commands - Creating a new database, Creating a table, Adding data to a table, Reading data from a table, Updating data in a table, Deleting data from a table, Deleting tables and databases, Retrieving data with select; Connecting to MySQL from PHP, Manipulating MySQL data with PHP - Inserting records, Updating records, Deleting records.

List of Experiments:

1. Write a Program to check and print whether a given number is even or odd.
2. Write a program to compute net amount from the given quantity purchased and rate per quantity. Discount @10% is allowed if the quantity purchased exceeds 100.
3. Write a program to find largest among three numbers using conditional operator and ternary operators.
4. Write a program to print Fibonacci series upto a given number.
5. Write a program to enter numbers till the user wants. At the end it should display the count of positive, negative and zeros entered. (Using do-while loop)
6. Write a PHP Program to demonstrate the variable function: Gettype() and Settype()
7. Write a PHP Program to demonstrate the variable unction: isset() and unset()
8. Write a function countWords ($str) that takes any string of characters and finds the Number of times each word occurs. You should ignore the distinction between capital and lowercase letters.
9. Create a form with one text field and submit buttons for string length, string reverse and uppercase, lowercase. Display the result accordingly.

10. Write a Menu-Driven program to implement a calculator which performs only addition, subtraction, multiplication and division. The operation should happen based on the user choice. (use switch case)
11. Write a function to swap two string values using call by value and call by references.
12. Write a program that will accept an array of integers as input, and output an array where for each item in the source array, the new array will perform the following operations:
    - For even numbers divide by 2
    - For odd numbers multiply by 3
13. Create a login form with two text fields called "login" and "password". When user enters "Galgotias" as a user name and "university" as a password it should be redirected to a Welcome.HTML page or to Sorry.HTML in case of wrong username/password.
14. Write PHP code to upload image.
15. Write a PHP program to insert record into a table using MySQL.
16. Write a PHP program to delete record from a table using MySQL.
17. Write a program to update record from a table using MySQL.
18. Write a PHP program to select data from a given table and show into table format.

Text Book:

Matt Doyle, "Beginning PHP 5.3", 1st Edition, Wiley Publishing, Inc., 2010.

Reference Book:

Kevin Tatroe, Peter MacIntyre, and RasmusLerdorf,"Programming PHP", 3rd Edition, 2013.