Department of Computer Science
Revised Syllabus of III Year Diploma Program (UG)

Title of Program: WEB Development

Syllabus Structure (UG)

Year	Semester	Course No.	Course Code	Contact Hours	Credits (1Credit=15 H)	Total Marks
2	V	CT V	DCST 505	30	2	75
		CLV	DCSL505	60	2	75
	VI	CT VI	DCST 606	30	2	75
		CL VI	DCSL606	60	2	75
	Annual	CP III	DCSP303	60	2	100
	Industrial and or Incubation and or Research and or Field Training			30	1	-
		Total		**270**	**11**	**400**

D: Diploma, *: Departmental Code (C: Chemistry, MI: Microbiology, CSE: Computer Science (Entire), etc)

C: Course, T: Theory, L: Lab (Practical), P: Project

Total No. of Courses: 6 (Theory: 02, Practical: 02, Project: 01)

Theory and Practical: Semester, Project: Annual

Semester V

CT-V: D CST 505: Title: Introduction to PHP
(Contact Hrs: 30 Credits: 2)

Learning Objectives:

Students will be able to

1. Understand the basic concepts of PHP and its applications.
2. Apply various statement and looping techniques on web designing.

Unit-I: Fundamental of PHP (15)

PHP introduction, inventions and versions, important tools and software requirements (like Web Server, Database, Editors etc.),PHP with other technologies, scope of PHP,Basic Syntax, PHP variables and constants,Types of data in PHP , Expressions, scopes of a variable (local, global),PHP Operators : Arithmetic, Assignment, Relational , Logical operators, Bitwise , ternary and MOD operator,PHP operator Precedence and associativity.

Unit-II: Branching-Looping statements and functions (15)

PHP IF Else conditional statements (Nested IF and Else),Switch case, while ,for, foreach and do while loop,goto , break ,continue and exit ,PHP Functions: Function, Need of Function , declaration and calling of a function,PHP Function with arguments, Default Arguments in Function,Function argument with call by value, call by reference ,Scope of Function Global ,Local and Static.

Learning Outcomes:

After completion of the unit, Student is able to

1. Learn Knowledge in the basics role in designing websites.
2. Understand how to develop simple web application using server side PHP programing.

Reference Books:

1. PHP and MySQL , W. Jason Gilmore , Apress Media LLC, 3rd edition,2008.
2. PHP 5.1 for Beginners – By Ivan Bayross and Sharanam Shah ,Shroff Publishers & Distributors, First edition,2010 .
3. Beginning PHP 6, Apache, MySQL Web Development- By Timothy Boronczyk, Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Zeremy Stolz, 1st edition 2009.
4. PHP and MySQL by Rajendra Salokhe,Aruta Publications, First edition,2014.
5. Luke Welling, Laura Thompson, PHP and MySQL Web Development", Addition Paperback, Addison-Wesley Professional, 4th Edition, 2008.

CL-V: DCS L505: Title(Practical): Lab Course on Basics of PHP
(Contact Hrs: 60 Credits: 02)

Learning Objectives:

Students will be able to

1. Identify basic PHP syntax and its uses.
2. Analyze the basic structure of a PHP web application.
3. Apply variables, strings, and constants to a PHP a script.
4. Analyze Web Services, secure web services and web designing.

List of Practical's (15)

1. Write a PHP program to check prime number.
2. Write a PHP program to print table of a number.
3. Write a PHP program to print factorial of a number.
4. Write a PHP program to check armstrong number.
5. Write a PHP program to reverse given number.
6. Create a PHP page using functions for comparing three integers and print the largest number.
7. Write a PHP program to swap two numbers with and without using third variable.
8. Write a PHP program to print alphabet triangle.
9. Write a PHP programs to print star triangle.
10. Write a PHP program to print numbers from 1 to 9 in four different ways using for loop.
11. Create a PHP page which accepts string from user. After submission that page displays the reverse of provided string.
12. Write a PHP script that finds out the sum of first n odd numbers.
13. Write a PHP function that checks if a string is all lower case.
14. Write a PHP script that checks whether a passed string is palindrome or not? (A palindrome is word, phrase, or sequence that reads the same backward as forward, e.g., madam or nurses run)
15. Write a PHP script that finds out the sum of first n odd numbers.

Learning Outcomes:

After completion of the unit, Student is able to

1. Understand and demonstrate various php operators and data types with example.
2. Analyze implementation of PHP Programming.
3. Demonstrate different functions in PHP.
4. Apply Branching, Looping in PHP Programing.

Reference Books:

1. PHP and MySQL , W. Jason Gilmore , Apress Media LLC, 3rd edition,2008.
2. PHP 5.1 for Beginners – By Ivan Bayross and Sharanam Shah ,Shroff Publishers & Distributors, First edition,2010 .
3. Beginning PHP 6, Apache, MySQL Web Development- By Timothy Boronczyk, Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Zeremy Stolz, 1st edition 2009.
4. PHP and MySQL by Rajendra Salokhe,Aruta Publications, First edition,2014.
5. Luke Welling, Laura Thompson, PHP and MySQL Web Development", Addition Paperback, Addison-Wesley Professional, 4th Edition, 2008.

Semester VI

CT-VI: D CST 606: Title: PHP and MySQL
(Contact Hrs: 30 Credits: 2)

Learning Objectives:

Students will be able to

1. To analyze PHP array and apply into programming with its different types.
2. To learns skill set to develop online information system using the open sources PHP and MySQL.

Unit-I: Arrays in PHP (15)

Creating arrays,Inserting elements in arrays,Retrieving elements from array,Displaying arrays,Sorting array elements,Anatomy of an Array ,Creating index based and Associative array ,Accessing array,Looping with Index based array, with associative array using each() and foreach() ,Some useful Library function.

Unit-II: Developing Applications in PHP using MySQL (15)

Introduction to Databases,Creating database,Creating tables,Inserting values in table, Displaying, changing, searching, deleting records from the table,Developing applications in PHP,Arithmetic operators through GUI,Web calculator,SQL queries- insert, select, delete, update, where, order by, Php framework, Bootstrap, Drupal.

Learning Outcomes:

After completion of the unit, Student is able to

1. Create dynamic styles and dynamic webpages.
2. Analyze the Database Connectivity using MySQL.

Reference Books:

1. PHP and MySQL , W. Jason Gilmore , Apress Media LLC, 3rd edition,2008.
2. PHP 5.1 for Beginners – By Ivan Bayross and Sharanam Shah ,Shroff Publishers & Distributors, First edition,2010 .
3. Beginning PHP 6, Apache, MySQL Web Development- By Timothy Boronczyk, Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Zeremy Stolz, 1st edition 2009.
4. PHP and MySQL by Rajendra Salokhe,Aruta Publications, First edition,2014.
5. Luke Welling, Laura Thompson, PHP and MySQL Web Development", Addition Paperback, Addison-Wesley Professional, 4th Edition, 2008.

CL-VI:DCS L606: **Title (Practical): Lab Course on PHP and MySQL**
(Contact Hrs: 60 Credits: 02)

Learning Objectives:

Students will be able to

1. To understand different types of arrays in PHP.
2. To create database connectivity.
3. To Analyze and solve various database tasks using the PHP language.
4. To understand how to develop web applications using a combination of client-side (JavaScript, HTML) and server- side technologies (MySQL).

List of Practical's (15)

1. Write a PHP program which will display the Cars using different arrays.
2. Create an array in php using index[] operator and display array elements stored within array.
3. Write a PHP program to get the Second element of the given array.
4. Write a PHP program that inserts a new item in an array in any position.
5. Create an array in php using range() function which containing a range of elements.
6. Write a PHP program to sort given array in ascending and descending order, according to the key.
7. WAP to sort an array.Sample string : 'The quick " " brown fox'
   Expected Output : Thequick""brownfox.
8. Create a login page having user name and password. On clicking submit, a welcome message should be displayed if the user is already registered (i.e.name is present in the database) otherwise error message should be displayed.
9. Write a simple PHP program to check that emails are valid.
10. Write a php program to create connection with MySQL database with message.
11. Create database using MySQL and insert differents tables.
12. Create Department database and execute different queries on tables including that database.
13. Create a php page and create a user form which asks for users information like: name, address, e-mail ID, mobile number and store this information in database.
14. Create a php page which accepts employee information and apply various queries on that information.
15. Create a php page and create a user form which asks for marks in five subjects out of 100 and then displays the marksheet of the student. The format is as follows:
    Name of Student*:
    Marks in Each Subject : Subject 1*, Subject 2*,Subject 3*,Subject 4*,Subject 5*
    Total Marks Obtained:
    Total Marks:
    Percentage:
    Note: All the entries marked (*) are to be input by the user. And use a
    submit button to post the entries in the form using the POST method.

Learning Outcomes:

After completion of the unit, Student is able to

1. Create various types of Arrays.
2. Develop simple web application using server side PHP programing and Database Connectivity using MySQL.
3. Learn different ways of connecting to MySQL through PHP.
4. Demonstrates a working knowledge of Dynamic Website Design.

Reference Books:

1. PHP and MySQL , W. Jason Gilmore , Apress Media LLC, 3rd edition,2008.
2. PHP 5.1 for Beginners – By Ivan Bayross and Sharanam Shah ,Shroff Publishers & Distributors, First edition,2010 .
3. Beginning PHP 6, Apache, MySQL Web Development- By Timothy Boronczyk, Elizabeth Naramore, Jason Gerner, Yann Le Scouarnec, Zeremy Stolz, 1st edition 2009.
4. PHP and MySQL by Rajendra Salokhe,Aruta Publications, First edition,2014.
5. Luke Welling, Laura Thompson, PHP and MySQL Web Development", Addition Paperback, Addison-Wesley Professional, 4th Edition, 2008.

CP-III: D CSP303: Project

(Contact Hrs. 30, Credits: 1)

Every student should take up a project and submit in the report the work he/she has carried out. Project work will be accessed independently at the time of practical examination.

Industrial and or Incubation and or Research and or Field Training

(Contact Hrs. 30, Credits: 1)

Every student should submit in the report the work he/she has carried out about Industrial and or Incubation and or Research and or Field Training.

BOS Sub-Committee

1. Ms. Pawar V. N. Chairman
   (Asst. Prof. YCIS, Satara)
2. Ms. Mane A. V. Member
   (Asst. Prof. YCIS, Satara)

Expert Committee

1. Mr. Akshay Dilip Homkar Academic Expert
   (Assistant Professor, Dnyashree Institute of Engineering and Technology, Satara)
2. Mr. Asif Hamid Shaikh Industrial Expert
   (Software Engineer, Utopia automation and Control Pvt. Ltd., Satara)