

Program	Diploma (DE)	Semester - 4
Type of Course	Professional Core	
Prerequisite	Web Designing and basic programming concepts	
Course Objective	This course enables students to become familiar with core concepts of web programming, Server side scripting using PHP, and basics of wordpress.	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	Tutorial	Lab	Credit	Theory Marks		Practical Marks		Total Marks
				SEE (T)	CIA (T)	SEE (P)	CIA (P)	
3	0	2	4	40	30	20	10	100

SEE - Semester End Examination, **CIA** - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content		T - Teaching Hours W - Weightage	
Sr.	Topics	T	W
1	Introduction to PHP Introduction to PHP, Client side scripting v/s Server side scripting, Applications of PHP, Structure of PHP page, Variables, Decision making statements (if and switch), looping statements, Arrays, Types of arrays, Array functions	9	20
2	Functions and Form User defined functions, Recursion, Include, Include_once, Require, Require_once functions, Form attributes, Receiving data submitted using different methods like GET, POST and REQUEST, PHP String, PHP String functions	10	20
3	Form Handling and Session Management Regular expression function, Validation using Regular Expression, Uploading a file, File handling, Query string, Session management using session and cookie.	8	20
4	Database programming using PHP Basic MySql command, PHP functions for database connectivity, What is CRUD, Implementation of CRUD operations using PHP, Prepared statement in PHP, Stored procedure execution in PHP	10	20
5	Introduction to WordPress Introduction of Wordpress, Wordpress installation, Basics of the Wordpress, Creating a new post, Createing a new page, Difference b/w post and page, Creating a new categories, Createing a new tags, Categories V/s Tags, Insert media, Creating a link, Working with widget, Working with menus, Settings, Introduction to themes, Creating users, Installing plugins, Working with plugins	8	20
Total		45	100

Suggested Distribution Of Theory Marks Using Bloom's Taxonomy						
Level	Remembrance	Understanding	Application	Analyze	Evaluate	Create
Weightage	10	35	55	0	0	0

NOTE : This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcomes

At the end of this course, students will be able to:

C01	use conditional statements, looping statements and arrays in PHP.
C02	implement functions and form processing.
C03	demonstrate the usage of file, file upload and session management.
C04	execute the database using PHP.
C05	practice wordpress to create websites.

Reference Books

1.	PHP for Web By Larry Ullman Pearson Education 5th edition
2.	Head First PHP and MYSQL By Lynn Beighley and Michal Morrison O'Reilly Media, Inc.
3.	WordPress All-in-one for Dummies By Lisa Sabin-Wilson John Wiley & Sons, 2011
4.	PHP With MYSQL By Oza Hemant P, Patel Parth G, Patel Keyur B. Atul Prakashan

List of Practical

1.	Demonstration of basics of PHP programming <ol style="list-style-type: none"> WAP to display "Hello World". (A) WAP to display a message using variable. (A) WAP to print name of month based on given number of month (i.e. 1 -> January, 2 -> February...). (B) WAP to swap values of two variables with the help of 3rd variable. (B) WAP to swap values of two variables without using 3rd variable. (C)
2.	Implementation of decision-making statements (Part – I) <ol style="list-style-type: none"> WAP to check whether the given number is odd or even. (A) WAP to check whether the given number is positive, negative or Zero. (A) WAP to find greatest number from 2 numbers. (A) WAP to find greatest number from 3 numbers. (B) WAP to convert temperature from Fahrenheit to Celsius. (B) WAP to print class of result based on percentage (i.e. less than 40% -> Fail, 40% to 50% -> Pass Class, 50% to 60% -> Second Class, 60% to 70% -> First Class, above 70% -> Distinction). (C) WAP that reads a number in meters, converts it to feet, and displays the result. (C)
3.	Implementation of decision-making statements (Part – II) <ol style="list-style-type: none"> WAP to take a value from user from 1-7 and display current day using switch case. (If 1-Monday, 2-Tuesday, etc...) (A) WAP to find a diameter from given area of circle. (A) WAP to make a Simple Calculator using switch...case. (B) Write a program to calculate electricity bill using control structure. For first 50 units – Rs. 3.50/unit For next 100 units – Rs. 4.00/unit For next 100 units – Rs. 5.20/unit For units above 250 – Rs. 6.50/unit (B) WAP that prompts the user to enter a letter and check whether a letter is a vowel or consonants. (C)
4.	Implementation of array <ol style="list-style-type: none"> WAP to create numeric array and print it. (A) WAP to create associative array and print it. (A) WAP to create multidimensional array and print it. (A) WAP to count number of even or odd number from an array of n number. (A) WAP to create user define function for adding two numbers and display the result. (A)

	6. WAP to accept n numbers in an array. Display the sum of all the numbers which are divisible by either 3 or 5. (B)
5.	Demonstration of function <ol style="list-style-type: none"> 1. WAP to create user define function for print your name and call it using all user defined functions. (A) 2. WAP to create calculator using all four types of UDF. (A) 3. WAP to calculate simple interest using method. (A) 4. WAP to generate Fibonacci series of N given number using method. (A) 5. WAP to find maximum number from given three numbers using method. (A) 6. WAP to accept a number and check whether the number is prime or not. Use method name check (int n). The method returns 1, if the number is prime otherwise, it returns 0. (B) 7. WAP to take two values as an input from the user and display all the prime numbers between the two given numbers using function. (C)
6.	Implementation of recursion and form processing <ol style="list-style-type: none"> 1. WAP to calculate sum of first n numbers using recursion. (A) 2. WAP to demonstrate the use of Include, Require, Include_Once and Require_Once. (A) 3. WAP to demonstrate the use of GET, POST and REQUEST methods. (A) 4. WAP to calculate factorial of a number using recursion. (B) 5. WAP to check whether the number is prime or not using recursion. (C)
7.	Demonstration of server-side validation <ol style="list-style-type: none"> 1. WAP to demonstrate server side validation for name, email, mobile number. (A) 2. Design a student registration form and retrieve data in controller page using following Method: GET, POST, and REQUEST. (B) 3. Implement server side validation on student registration form using PHP. (B)
8.	Demonstration of file upload <ol style="list-style-type: none"> 1. Create a webpage which accepts a file and upload it in specified folder on server. (A) 2. Design a profile page which allows changing profile picture dynamically. (B) 3. Write a program to create file named "students.txt" to store names of the students. (A) 4. Write a program to create file named "students.txt" to read names of the students. (A) 5. Write a program to create file named "employee.txt" to store empno, name, gender and mobileno. Open the same file again to display the content of the file. (A)
9.	Demonstration of session management using COOKIES and SESSION <ol style="list-style-type: none"> 1. WAP to demonstrate the use of COOKIE. (A) 2. WAP to demonstrate the use of SESSION. (A) 3. Create static login application using cookie in PHP. (B) 4. Create static login application using SESSION in PHP. (B)
10.	Implementation of CRUD operation using PHP (Part – I) <ol style="list-style-type: none"> 1. Write PHP script to create Account table with Following Field: (AccountNumber, Balance, Branch). (A) 2. Write a PHP script to read Bank Account related information like Account number, Balance, Branch Name from Account table and display all these information in table format on output screen. (A) 3. Write PHP code to develop Employee information form and store all submitted data in table. (B)
11.	Demonstration of prepared statement and stored procedure <ol style="list-style-type: none"> 1. Implement CRUD operations on students table using prepared statement in PHP. (A) 2. Implement CRUD operations on students table using stored procedure in PHP. (A)
12.	Demonstration of WordPress installation, post creation and post publishing <ol style="list-style-type: none"> 1. Download and install WordPress on the Xampp server. (A) 2. Create minimum 3 posts in WordPress and publish it with text and images. Use different post formats depending on what you want to publish. (A) 3. Create minimum 2 pages in WordPress and publish. Use different page formats depending on the content that is to be published. (A)

	<ol style="list-style-type: none">4. Create, edit, and change categories and Tags for Multiple Posts and pages. (A)5. Create 2 pages for travelling website. (B)6. Create 2 professional posts for travel blog. (B)
13.	Demonstration of WordPress themes and Plugins <ol style="list-style-type: none">1. Install and activate the Theme in wordpress. (A)2. Create 2-3 different pages using different themes. (A)3. Install and activate various Plugins in WordPress. Create content writing for E-commerce sites and product description that sells online. Install and activate various Plugins in WordPress. Design coupon code for selling product and upload stock of item on site. (A)4. Create a travelling website using various plugins. (B)