



Ganpat University
॥ विद्यया समाजोत्कर्षः ॥

Faculty of
Computer Applications



FACULTY OF COMPUTER APPLICATIONS

Programme	BCA Honors				Branch	Computer Applications			
Semester	IV				Version	1.0.0.0			
Effective from Academic Year	2025-26				Effective for the batch Admitted in	June 2024			
Subject Code	U34A1OST		Subject Name	OPEN SOURCE TECHNOLOGY					
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	2	-	2	-	4	Theory	50	50	100
Hours	2	-	4	-	6	Practical	-	-	-

Objective:

To enable the student to develop website using core PHP and with WordPress.

Pre-requisites:

Students should have knowledge regarding HTML basic, concept of computer language and fundamental of SQL.

Course Outcomes :

Name of CO	Description
CO1	Understand the fundamentals of open source software and basic PHP programming constructs.
CO2	Implement string manipulation, array operations, and error handling in PHP.
CO3	Manage data exchange between pages and handle sessions and cookies in PHP.
CO4	Perform file operations and database manipulation using MySQL and PDO in PHP.
CO5	Develop and configure WordPress websites, including themes, plugins, media, and links.

Mapping of CO and PO

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	2	1	2	1	1	0	1	1
CO2	2	3	2	2	3	1	2	2	2	0	1	1
CO3	2	2	2	2	2	1	2	1	2	0	1	1
CO4	3	3	2	2	2	2	2	2	2	0	1	1
CO5	2	2	3	2	3	1	2	2	2	0	1	1

Content:

Unit		Hrs
1	<p>Introduction to Open Source and PHP</p> <p>What is Open Source? Pros and Cons, Features of Open Source Software (Linux, ERP, CMS), What is PHP? Features, Client-side vs Server-side Scripting PHP Syntax, Comments, Variables, Data types, Output data to the browser, Boolean Expressions, Branching Statements, Looping Using Functions PHP Tags: Canonical, Short-open tags, Including files</p>	6
2	<p>Strings, Arrays, and Exception Handling in PHP</p> <p>String Functions, Mathematical Operators and Functions, Creating and Using Arrays, Multidimensional Arrays, Iteration Functions, Using foreach, Errors and Exceptions, Exception Class, try/catch Block, Throwing Exceptions, Custom Exception Subclasses</p>	6
3	<p>Passing Information Between Pages and Session Management</p> <p>Passing Information Between Pages: HTTP, GET, and POST Arguments, Formatting Form Variables, Session Management and Cookies: Using Sessions in PHP, Session Functions, Using Sessions in PHP, The setcookie() Function, Deleting Cookies, Reading Cookies</p>	6
4	<p>File System and Database Manipulation</p> <p>File System in PHP: File Permissions, Reading and Writing Functions, Directory Functions, File Upload, Database Manipulation with MySQL and PDO, HTML Tables and Database Tables, Database Manipulation: Select, Insert, Update, Delete, PHP/MySQL Connection, MySQL Functions, MySQLi Functions, Introduction to PDO, Driver Installation, Database Manipulation using PDO</p>	6

5	<p>WordPress</p> <p>What is CMS? Features, Advantages and Disadvantages, WordPress Installation, Dashboard, and Settings, Creating/Editing/Publishing Pages, Arranging WordPress Content, Configuring Header, Body, and Footer Themes: Configuration, Installing and Using Plugins, Adding Plugins, Uploading Plugins, Adding Social Media Widgets, Adding/Deleting/Editing Media and Links</p>	6
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Practical Content:

List of programs specified by the subject teacher based on above mentioned topics

Text Books:

1	PHP 6 and MySQL® 6 Bible Steve, Suehring Tim and Converse Joyce Park Wiley Publishing.
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Reference Books:

1	PHP 5 and MySQL Bible Tim Converse and Joyce Park with Clark Morgan Wiley Publishing
2	Beginning WordPress 1st edition by Stephanie Leary, Apress Publication
3	The Complete Reference PHP, by Steven Holzner, TATA McGraw-Hill Publication
4	Beginning PHP and MySQL, by W. Jason Gilmore, Apress Publication

Web References / MOOC / Certification Course

1	https://www.coursera.org/projects/build-a-full-website-using-wordpress
2	https://www.udemy.com/course/wordpress-101-course-beginners/
3	https://www.tutorialspoint.com/wordpress/wordpress_dashboard.htm
4	https://www.coursera.org/learn/web-applications-php

Question Paper Scheme:

Note for Examiners:

Q-1 Must be common from any topics from the syllabus.
 Q-2 And onwards must be from specific topics and internal choice or option can be given.

Paper Structure:

Section 1:

Q-1 Attempt any five Out of Seven: each question must be 5 marks: (25 Marks)
 (CO1, CO2, CO3, CO4, CO5)
 Questions must cover all possible sections.

Section 2:

Q-2 Must be from topics: Introduction to Open Source and PHP: (05 marks) CO1
 Q-3 Must be from topics: Strings, Arrays, and Exception Handling in PHP:
 (05 marks) CO2
 Q-4 Must be from topics: Passing Information Between Pages and Session Management: (05 marks) CO3

	Q-5 Must be from topics: File System and Database Manipulation: (05 marks) CO4 Q-6 Must be from topics: WordPress: (05 marks) CO5
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