

Programme	B.Sc (CA & IT) Honours				Branch	Computer Applications			
Semester	VI				Version	1.0.0.0			
Effective from Academic Year	2026-27				Effective for the batch Admitted in	June 2024			
Subject code	U16A2WDT	Subject Name			WEB DEVELOPMENT TECHNOLOGIES				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CCE	SEE	Total
	L	TU	P	TW					
Credit	2	-	2	-	4	Theory	50	50	100
Hours	2	-	4	-	6				

Objective:

- To enable students to develop dynamic, data-driven web applications using PHP and MySQL.

Pre-requisites:

- knowledge of HTML/CSS, basic programming logic
- Basic Knowledge of Php fundamentals

Learning Outcome:

Name of CO	Description
CO1	Understand the fundamentals of server-side scripting and PHP syntax to create dynamic web pages
CO2	Implement Object Oriented Programming Concept in web application
CO3	Integrate payment gateway and social media API in web application.
CO4	Implement security in web application
CO5	Deploy and manage web application

Mapping of CO and PO:

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

Content:

Unit	Content	Hrs.
1	PHP Essentials PHP Language Basics, Data Types and Type Handling, Variables and Scope (with Security Focus), Optimize nested conditionals in legacy code , Debug and rewrite loops for better performance	06
2	Working with OPP and Advance OOP Basic PHP construction for OOP, Advance OOP future, Uploading and downloading files , Advance State management - URL rewriting, Hidden Form Field ,Securing PHP Sessions and Custom Session Handling, Persistent Login using cookies	06
3	Working with data using PDO, XML and JSON Introduction to PDO, Driver installation for PDO, Database manipulation using PDO, Introduction to XML Parser in PHP, Reading and writing to XML file, Web	06

	Services, JSON	
4	Payment Gateway, Email, Social Media Integration of payment gateway, Integrating of emails and SMS to web application, Integrating of social media networks to web application	06
5	Web Security, Deployment and Backup of Web Application Data Validation, SQL Injection, Cross Site Scripting, Deployment of Web Application, Creating Backup and Restore Script of Database, Web Application Management: FTP, Github, Filezilla.	06
Practical Content:		
List of practical specified by subject teacher based on above mentioned topics		
Reference Books:		
1	PHP and MySQL Web Development – Luke Welling, Laura Thomson – Pearson	
2	PHP Web Application Up & Running by Matt Stauffer – O'Reilly Publication	
3	The Complete Reference PHP, by Steven Holzner, TATA McGraw-Hill Publication	
Web Reference:		
1	https://www.php.net/manual/en/index.php	
2	https://code.tutsplus.com/c/php	
3	https://www.bitdegree.org/courses/course/php-basics	
MOOC/Certificate Course:		
1	https://www.youtube.com/playlist?list=PLz_6dB4PitBEQEbVSA6vrTOACQZD1K1E	
2	https://www.youtube.com/playlist?list=PLjVLYmrlmjGfC44WZSTvlsZFzxnQsysJb	
Question Paper Scheme:		
	<p>End Semester Examination Duration: (2 Hours Theory Examination)</p> <p>Note for Examiner: - Q-1 Any Five out of Seven (25 Marks) Q-2 Any Two out of Three (06 Marks) Q-3 Mandatory question (05 Marks) Q-4 Any Two out of Three (08 Marks) Q-5 Any Two out of Three(06 Marks)</p> <p>*The question paper must comprehensively address all Course Outcomes (COs), align with Bloom's Taxonomy levels, and ensure complete syllabus coverage</p>	