Course Structure

Course Code	BCA30020				
Course Category	Program Major				
Course Title	Advanced Web Technologies				
Teaching Scheme	Lectur es	Tutoria ls	Laborator y / Practical	Proje ct	Tot al
Weekly load hours	3	4.5	2	- 1	5
Credits	3		1	211	4
Assessment Scheme Code	TL3				

Pre-requisites: Need basics of web technologies and basics of Programming concepts.

Course Objectives:

- 1. To understand Web programming concepts with respect to web browser and web server.
- 2. To understand basics and lexical structure of PHP.
- 3. Design skills of Web Applications Development using HTML, CSS, Javascript with PHP
- 4. To develop object-oriented concepts of PHP.

Course Outcomes:

Student will able to

- 1. To create dynamic web pages using PHP
- 2. Students will able to use built in array and string functions
- 3. Students will able to use object oriented concepts to design web pages
- 4. Students will able to handle files and directories

Course Contents:

Unit 1: Introduction to PHP:10

Evaluation of PHP, Language Basics, Defining variable and constant, Data type Operator and Expression, Decisions & Loops, Capturing Form Data, Dealing with Multi-value filed, Generating File uploaded form, Redirecting a form after submission

Unit 2: Function & String: 10

What is a function, Define a function, Call by value and Call by reference, Variable function, Anonymous function, Recursive function, Creating and accessing String, Searching & Replacing String, Formatting String, Regular, expression & Pattern matching in Php, Splitting a string with a Regular, Expression, String Related Library function

Unit 3: Working with Array: 10

Anatomy of an Array, Creating index based and Associative array, Accessing array Element, Looping with Index based array, Looping with associative array using each() and foreach() Some useful Library function.

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Unit 4: Introduction to Object Oriented Programming: 10

Introduction, The new keyword and constructor, Destructor, Access method and, properties using \$this, variable, Public, private, protected properties and methods, Static properties and method, Instance of operator, Abstract method and class Interface Final

Unit 5: Working with file and Directories: 5

Understanding file& directory, Opening and closing a file, Copying, renaming and deleting a file, Working with directories, File Uploading & Downloading.

Learning Resources:

Text Books/Reference Books:

- 7. Advanced Web Technologies, Rajinder J. Arora
- 8. ADVANCED WEB TECHNOLOGIES, SHALAKA SAKHREKAR, A B NIMBALKAR, Fifth Edition

Supplementary Reading:

- 6. Programming PHP by Rasmus Lerdorf and Kevin Tatroe, O'Reilly publicatio
- 7. Beginning PHP 5, Wrox publication
- 8. AJAX Black Book, Kogent solution
- 9. Mastering PHP, BPB Publication

Web Resources:

Weblinks:

- 3. http://www.w3schools.com
- 4. https://www.javatpoint.com/php-tutorial
- 5. https://www.php.net/

MOOCs: Online courses for self-learning

Courses by NPTEL and MIT Open Courseware

etc Pedagogy:

Participative Learning, discussions,

problem solving, assignments,

Lab Assignment

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