

**UNIVERSITY OF MADRAS**  
**BACHELOR OF COMPUTER APPLICATIONS (BCA)**  
**DEGREE PROGRAMME**  
**SYLLABUS WITH EFFECT FROM 2023-2024**

**Year: III**

**Semester: V**

<b>Web Technology</b> Common for B.C.A. , B.Sc.-SA	<b>320C5C</b>
<b>Credits 5</b>	<b>Lecture Hours:5 per week</b>
<b>Learning Objectives:</b> (for teachers: what they have to do in the class/lab/field) <ul style="list-style-type: none"> <li>• To use PHP and MySQL to develop dynamic web sites for user on the Internet</li> <li>• To develop web sites ranging from simple online information forms to complex e-commerce sites with MySQL database, building, connectivity, and maintenance</li> </ul>	
<b>Course Outcomes:</b> (for students: To know what they are going to learn) <ol style="list-style-type: none"> <li>1. Understand the general concepts of PHP scripting language for the development of Internetwebsites.</li> <li>2. Understand the basic functions of MySQL database program and XML concepts</li> <li>3. Learn the relationship between the client side and the server side scripts.</li> </ol>	

Units	Contents
<b>I</b>	Introducing PHP – Basic development Concepts – Creating first PHP Scripts – Using Variable and Operators – Storing Data in variable – Understanding Data types – Setting and Checking variables Data types – Using Constants – Manipulating Variables with Operators.
<b>II</b>	Controlling Program Flow: Writing Simple Conditional Statements - Writing More Complex Conditional Statements – Repeating Action with Loops – Working with String and Numeric Functions.
<b>III</b>	Working with Arrays: Storing Data in Arrays – Processing Arrays with Loops and Iterations – Using Arrays with Forms - Working with Array Functions – Working with Dates and Times.
<b>IV</b>	Using Functions and Classes: Creating User-Defined Functions - Creating Classes – Using Advanced OOP Concepts. Working with Files and Directories: Reading Files- Writing Files Processing Directories.
<b>V</b>	Working with Database and SQL : Introducing Database and SQL- Using MySQL- Adding and modifying Data- Handling Errors – Using SQLite Extension and PDO Extension. Introduction XML - Simple XML and DOM Extension.

**TEXT BOOK:**

1. Vikram Vaswani, “PHP A Beginner's Guide”, Tata McGraw Hill 2008.

**REFERENCE BOOKS:**

1. Steven Holzner , “The PHP Complete Reference”, Tata McGraw Hill, 2007.

2. Steven Holzer , “Spring into PHP”, Tata McGraw Hill 2011, 5th Edition.

**WEB REFERENCES:**

<https://www.w3schools.com/php/>

<https://www.phptpoint.com/php-tutorial-pdf/>

<http://www.xmlsoftware.com/>