

**E.M.G. YADAVA WOMENS COLLEGE, MADURAI -14.**  
**(An Autonomous Institution – Affiliated to Madurai Kamaraj University)**  
**Re –accredited (3<sup>rd</sup> cycle) with Grade A<sup>+</sup> and CGPA 3.51 by NAAC**  
**CBCS with OBE**

**DEPARTMENT OF COMPUTER APPLICATIONS-UG**  
**ADD ON COURSE**

**Open Source Technology**  
**(w.e.f. 2021 – 2022 Batch Onwards)**

**COURSE STRUCTURE**

**Contact Hours: 30 hrs**

**Credits:1**

S.No.	Sem	Course Code	Title of the Paper
1.	I	22CAAOC	Theory: Open Source Technology
2.	I	22CAAOC P	Practical: Open Source Technology Lab

Department of Computer Applications			Class : I B.C.A		
Sem.	Category	Course Code	Course Title	Credit	Contact Hours
I	Add On Course	22CAAOC	Theory: Open Source Technology	1	30
		22CAAOC P	Practical: Open Source Technology Lab		

### Course Objective:

1. To understand the basics of web page languages and PHP
2. To study the Conditional and Looping statements in PHP
3. To analyze the PHP operating system
4. To gain knowledge in object oriented programming
5. To recognize the PHP security, session and cookies concept

### Unit-I:

**Understanding the Languages of the Web:** Understanding How the Web Works- Understanding Web Page Languages-Understanding the Language of Web Servers - **Installing PHP:** Checking the PHP Installation-Obtaining PHP-Installing PHP-Configuring Your Web Server for PHP-Configuring PHP-Testing PHP-Troubleshooting.

### Unit-II:

**Understanding PHP Basics:** Writing PHP Code-Displaying Content in a Web Page-Using PHP Variables-Using PHP Constants-**Building PHP Scripts:** Setting Up Conditions-Using Conditional Statements-Repeating Actions with Loops.

### Unit-III:

**PHP and Your Operating System:** Managing Files-Using Operating System Commands-Using FTP-Reading and Writing Files-Exchanging Data with Other Programs-Using SQLite.

**Unit-IV:**

**Object-Oriented Programming:** Introducing Object-Oriented Programming-Developing an Object-Oriented Script-Defining a Class-Using a Class in a Script-Using Abstract Methods in Abstract Classes and Interfaces.

**Unit-V:**

**Considering PHP Security:** Securing the Server-Securing Apache-Setting Security Options in php.ini-Handling Errors Safely-Sanitizing Variables-**Tracking Visitors with Sessions:** Understanding Sessions and Cookies-Using Sessions to Pass Data.

**Books for Study:**

Janet Valade (2018) *PHP & MySQL, Java Script & HTML5 All-in-one For Dummies*, 4th edition A Wiley Brand,.

**Chapters:**

**Unit-I** : Book I: Getting Started with PHP & MySQL  
Chapter 1,3

Book IV: PHP

**Unit-II** : Chapter 1,2

**Unit-III** : Chapter 3

**Unit-IV** : Chapter 4

**Unit-V** : Chapter 5,6

**Book for Reference :**

1. Jamie Chan, *PHP: Learn PHP in One Day and Learn It Well*, 2<sup>nd</sup> Edition 2020.
2. Lokesh Gupta, *CodeIgniter: Web Framework (PHP Book 1)*, Oxford University Press, 2<sup>nd</sup> edition 2018.
3. Steven Holzner, *PHP: The Complete Reference*, McGraw Hill Education, 2<sup>nd</sup> edition, 2017.

## **PRACTICALS**

### **PROGRAM LIST**

1. Program using String.
2. Program using PHP Time zone
3. Program using Sorting Array.
4. Program using Global Array
5. Program using Function.
6. Program for reading data in Web pages.
7. Program using browser handling Power.
8. Program using Oops concept.
9. Program using File.
10. Program using Form Validation.
11. Program using PHP XML Parser
12. Program using PHP Filter
13. Program using MySQL Database Creation.
14. Program using MySQL Database table
15. Program using Session , Cookies and FTP.
16. Program using Web application Security.