Subject Code	Subject Name	Teaching Scheme (Contact Hours per Week)			Credits Assigned			
		Theory	Practical	Tutorial	Theory	Practical	Tutorial	Total
MCA L102	**Lab-II: Web Technologies and Mini Project Lab**	**---**	**06**	**---**	**---**	**03**	**---**	**03**

Examination Scheme				
End Semester Exam [Once in a Semester]				
Laboratory Name	Term Work	Practical	Oral	Total
MCAL102: Lab-II: Web Technologies and Mini Project Lab	**25**	**50**	**25**	**100**

Pre-requisites: Basic understanding of programming fundamentals

Course Educational Objectives (CEO):

CEO 1	To study the concept and architecture of World Wide Web.
CEO 2	To learn web application development using open source technology.
CEO 3	To provide skills to design and develop dynamic web sites.

Course Outcomes: At the end of the course student will be able to

MCA L102.1	Acquire knowledge about functionality of world wide web
MCA L102.2	Develop web based applications using open source technology.
MCA L102.3	Design and develop dynamic web sites.

Syllabus

Sr. No.	Module	Detailed Contents	Hours
1.	**Introduction to the Web Technologies**	Concept of WWW, Internet and WWW, HTTP Protocol: Request and Response, Web browser and Web servers.	**06**
2.	**HTML**	Basics of HTML, Structure of HTML code, formatting and fonts, color, hyperlink, lists, tables, images (Programming Assignments based on above topics)	**12**
3.	**Style Sheets**	Need for CSS, introduction to CSS, basic syntax and structure, Classes and Pseudo Classes, CSS tags for setting background images, colors and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning etc. (Programming Assignments based on above topics)	**12**

4.	**Introduction to PHP**	Configuration and Installation of PHP, basic syntax of PHP, Expressions, Statements, Arrays, Functions, string, Regular Expressions, Date and Time Functions (Programming Assignments based on above topics)	**12**
5.	**PHP and MySQL**	File Handling- Creating a File, Reading from Files, Copying Files, Moving File, Deleting File, Updating File, Uploading Files, Form Designing using HTML 5, Validation's using PHP Connection to server, creating database, selecting a database, listing database, listing table names, creating a table, inserting data, altering tables, queries, deleting database, deleting data and tables, Master-Detail relationships using Joins. Session Management- Using Cookies in PHP, HTTP Authentication, Using Sessions (Programming Assignments based on above topics)	**10**
6	**Mini Project**	A Mini – Project based on DS and WAD using an integrated approach.(Maximum Two students in a Group)	**26**

Reference Books:

1. Web Technologies, Black Book, dreamtech Press
2. HTML 5, Black Book, dreamtech Press
3. Learning PHP, MySQL, JavaScript, CSS and HTML 5, Robin Nixon, O'Reilly publication
4. Developing Web Applications in PHP and AJAX, Harwani, McGrawHill
5. Professional PHP Programming, Jesus Caspagnetto, Etal. Wrox Publication.
6. Internet and World Wide Web How to program, P.J. Deitel & H.M. Deitel, Pearson
7. Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India