

**Web Technologies****COURSE OBJECTIVES:**

- Understand the fundamentals of the web and thereby develop web applications using various development languages and tools.
- Enrich knowledge about XHTML control and Cascading Style Sheets.
- Provide in- depth knowledge about Javascript.
- To enhance knowledge in XML documents with presentations using CSS and XSLT.
- Deliver depth knowledge about PHP, Angular JS, JQuery.

**UNIT -I**

**WEB FUNDAMENTALS AND HTML:** A Brief Introduction to the Internet - The World Wide Web - Web Browsers - Web Servers -URLs, MIME, HTTP, Security- Introduction to HTML- Origins and Evolution of HTML and HTML - Basic Syntax - Standard HTML Document Structure - Basic Text Markup - Images- Hypertext Links - Lists, Tables, Forms, The Audio Element, The Video Element - Organization Elements, The Time Element

**UNIT – II**

**INTRODUCTION TO XHTML AND CSS:** Basic syntax, Standard structure, Basic text-markup, Images, Hypertext Links. Lists, Tables, Forms, Frames, syntactic differences between HTML and XHTML-Introduction, Levels of style sheets, Style specification formats, Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text, The box model, Background images, The<span> and <div>tags, Conflict resolution.

**UNIT - III**

**THE BASICS OF JAVASCRIPT:** Overview of JavaScript, Object orientation and JavaScript, general Syntactic characteristics, Primitives, operations, and expressions, Screen output and keyboard input, Control statements, Object creation and modification, Arrays, Functions, Constructors, Pattern matching using regular expressions, Errors in scripts.

**JAVASCRIPT AND XHTML DOCUMENTS:** The JavaScript Execution Environment, The Document Object Model, Elements Access in Java Script, Events and Event Handling, Handling Events from Body Elements, Handling

Events from Text Box and password Elements, The DOM2 Model

## **UNIT- IV**

**DYNAMIC DOCUMENTS WITH JAVASCRIPT AND XML:** Introduction, Positioning Elements, Moving Elements, Element Visibility, Changing Color and Fonts, Dynamic Content, Stacking Elements, Locating the Mouse Cursor, Reacting to a Mouse Click, Slow Movement of Elements, Dragging and Dropping Elements. Introduction to XML, Syntax of XML, XML Document Structure, Document type definitions, Namespaces, XML schemas, displaying raw XML documents, Displaying XML documents with CSS, XSLT Style Sheets, Web services.

## **UNIT - V**

**PHP, ANGULAR JS AND JQUERY:** Introduction to PHP: Overview of PHP - General Syntactic Characteristics - Primitives, Operations, and Expressions - Output - Control Statements - Arrays - Functions - Pattern Matching - Form Handling - Cookies - Session Tracking - Introduction to JQuery, Syntax, selectors, events, JQuery HTML, JQuery Effects, JQuery CSS. Introduction to Angular JS, Directives, Expressions, Controllers, Filters, Services, Events, Forms, Validations, Examples.

## **TEXT BOOKS:**

1. Robert W. Sebesta: Programming the World Wide Web, Eighth Edition, Pearson education, 2015. **UNITS:** 1,2,3,4
2. Dayley Brad, Dayley Brendan , "AngularJS, JavaScript, and jQuery All in One", Sams Teach Yourself 1st Edition, Kindle Edition, 2015. **UNIT:** 5

## **REFERENCE BOOKS:**

1. M. Srinivasan: Web Programming Building Internet Applications, 3<sup>rd</sup> Edition, Wiley India, 2009.
2. Jeffrey C. Jackson: Web Technologies-A Computer Science Perspective, Pearson Education, 7<sup>th</sup> Impression, 2012.
3. Chris Bates: Web Technology Theory and Practice, Pearson Education, 2012.
4. Raj Kamal: Internet and Web Technologies, McGraw Hill Education.

## COURSE OUTCOMES:

On the successful completion of the course, students will be able

C01	Design dynamic web pages using Javascript, JQuery and Angular Java script	K1	LO
C02	Develop Web pages using HTML, CSS and XML	K2	IO
C03	Create web application using PHP and MySQL	K3, K4	HO
C04	To design dynamic web pages using Angular javascript	K2,K3	HO
C05	Develop interactive web pages using JQuery	K4,K5	HO

## MAPPING WITH PROGRAMME OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	M	S	S	S	S	M	M	S	M	M	S	S
C02	S	S	M	S	S	S	M	S	S	S	S	S
C03	S	S	S	M	S	S	M	M	S	M	M	S
C04	S	S	S	M	S	M	M	S	S	M	S	M
C05	S	S	S	M	S	S	M	S	M	S	S	M

**S- STRONG; M-MEDIUM; L-LOW**