



Course Title : Web Technologies			
Course Code : P18CS552	Semester : 5	L :T:P : 2:2:0	Credits: 3
Contact Period: Lecture: 52 Hrs, Exam: 3 Hrs		Weightage: CIE:50%, SEE:50%	

### Course Content

#### Unit-1

**Fundamentals of Web:** Internet, WWW, Web Browsers and Web Servers, URLs, MIME, HTTP, Security, the Web Programmers Toolbox.

**Introduction to XHTML:** Origins and evolution of HTML and XHTML, Basic syntax, Standard XHTML document structure, Basic text markup, Images, Hypertext Links, Lists, Tables, Forms, HTML5.

Self study Component: Differences between HTML and XHTML

10 Hours

#### Unit-2

**CSS:** 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.

**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, Constructor.

Self study Component: Pattern matching using regular expressions.

11 Hours

#### Unit-3

**JAVASCRIPT AND HTML DOCUMENTS:** The JavaScript execution environment; The Document Object Model; Element access in JavaScript; Events and event handling; Handling events from the Body elements, Button elements, Text box and Password elements

**DYNAMIC DOCUMENTS WITH JAVASCRIPT:** Introduction to dynamic documents; Positioning elements; Moving elements; Element visibility; Changing colors and fonts; Dynamic content; Stacking elements; Locating the mouse cursor; Reacting to a mouse click; Slow movement of elements.

Self study Component: Dragging and dropping elements.

10 Hours

#### Unit-4

**XML:** Introduction; Syntax; Document structure; Document Type definitions; Namespaces; XML schemas; Displaying raw XML documents; Displaying XML documents with CSS; XSLT style sheets; XML processors.

**PHP:** Origins and uses of PHP, Overview of PHP, General syntactic characteristics, Primitives, Operations and expressions, Output, Control statements, Arrays, Functions, Pattern Matching Form handling, Files, Cookies.

Self study Component: Session tracking

11 Hours



### Unit-5

**Introduction to Ajax:** Overview of Ajax, The Basics of Ajax, Return Documents Forms, Ajax Toolkits, Security and Ajax.

**Introduction to ASP.NET:** Introduction to ASP.NET, ASP.NET Controls, ASP.NET AJAX,

**Self study Component:** Web Services

10 Hours

**Text Book:**

1. Programming the World Wide Web – Robert W. Sebesta, 7<sup>th</sup> Ed., Pearson Ed. 2013.

**Reference Books:**

1. Internet & World Wide Web How to program – M. Deitel, P.J Deitel, A. B. Goldberg, 3<sup>rd</sup> Edition, Pearson Education / PHI, 2004.
2. Web Programming Building Internet Applications–Chris Bates, 3<sup>rd</sup> Ed., Wiley India, 2006.
3. The Web Warrior Guide to Web Programming – Xue Bai et al,

**Course Outcomes**

1. **Develop** web pages using various XHTML tags.
2. **Design** interactive web pages using java script.
3. **Create** dynamic documents using DOM object model.
4. **Develop** web pages using PHP scripts.
5. **Implement** simple application using Ajax.

### CO-PO Mapping

Semester: 5 <sup>th</sup>		Course code : P18CS552							Title : Web Technologies							
CO	Statement	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS 01	PS 02	
CO1	Develop web pages using various XHTML tags	3	2	3										2		
CO2	Design interactive web pages using CSS	2	2	2	3									2		
CO3	Create dynamic documents using DOM object model.	2	2	3										2		
CO4	Develop web pages using PHP scripts	2	2	3										2		
CO5	Implement simple application using Ajax.	2	2	2	3									3		
		2.2	2	2.6	3									2.2		