

**III B.Tech – I Semester**  
**(17CS503) WEB APPLICATION DEVELOPMENT**

Int. Marks	Ext. Marks	Total Marks	L	T	P	C
40	60	100	3	1	-	3

**Pre-Requisites:** Web Technology

**Course Objectives:**

- This course is designed to introduce students with no programming experience to the programming languages and techniques associated with the World Wide Web.
- The course will introduce web-based media-rich programming tools for creating interactive web pages.

**UNIT-I:**

**HTML, CSS:** Basic Syntax, Standard HTML Document Structure, Basic Text Markup, Images, Hypertext Links, Lists, Tables, Forms, HTML5

**CSS:** Levels of Style Sheets, Style Specification Formats, Selector Forms, The Box Model, Conflict Resolution

**UNIT-II:**

**Java script:** The Basic of Java script: Objects, Primitives Operations and Expressions, Screen Output and Keyboard Input, Control Statements, Object Creation and Modification, Arrays, Functions, Constructors, Pattern Matching using Regular Expressions **DHTML:** Positioning Moving and Changing Elements

**UNIT-III:**

**XML:** Document type Definition, XML schemas, Document object model, XSLT, DOM and SAX Approaches,

**AJAX A New Approach:** Introduction to AJAX, Integrating PHP and AJAX.

**UNIT-IV:**

**PHP Programming: Introducing PHP:** Creating PHP script, Running PHP script.

**Working with variables and constants:** Using variables, Using constants, Datatypes, Operators.

**Controlling program flow:** Conditional statements, Control statements, Arrays, functions. Working with forms and Databases such as MySQL.

**UNIT-V:**

**Introduction to PERL,** Operators and if statements, Program design and control structures, Arrays, Hashes and File handling, Regular expressions, Subroutines, Retrieving documents from the web with Perl.

**UNIT-VI:**

Introduction to Ruby, Variables, types, simple I/O, Control, Arrays, Hashes, Methods, Classes, Iterators, Pattern Matching. Overview of Rails.

**Course Outcomes:**

1	Design web pages with basic html tags and CSS.	L3
2	Design web pages with java script.	L3
3	Apply XML for web document with XML parsers.	L6
4	Build web applications using PHP.	L5
5	Develop PERL scripts for web applications.	L2
6	Design applications using Ruby.	L6

**Correlation of COs with POs & PSOs:**

	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO-1	PSO-2	PSO-3
CO-1	2	3	2	2	3	-	-	-	1	-	1	2	-	2	-
CO-2	2	3	2	2	3	-	-	-	1	-	1	2	-	2	-
CO-3	2	3	2	2	3	-	-	-	1	-	-	-	-	2	-
CO-4	2	3	2	2	3	-	-	-	1	-	-	-	-	2	-
CO-5	2	3	2	2	3	-	-	-	1	-	-	-	-	2	-
CO-6	2	3	2	2	3	-	-	-	1	-	-	-	-	2	-

**Text Books:**

1. Programming the World Wide Web, Robert W Sebesta, 7ed, Pearson.
2. Web Technologies, Uttam K Roy, Oxford
3. The Web Warrior Guide to Web Programming, Bai, Ekedahl, Farrell, Gosselin, Zak, Karparhi, MacIntyre, Morrissey, Cengage

**Reference Books:**

1. Ruby on Rails Up and Running, Lightning fast Web development, Bruce Tate, Curt Hibbs, Oreilly (2006)
2. Programming Perl, 4ed, Tom Christiansen, Jonathan Orwant, Oreilly (2012)
3. Web Technologies, HTML< JavaScript, PHP, Java, JSP, XML and AJAX, Black book, Dream Tech.
4. An Introduction to Web Design, Programming, Paul S Wang, Sanda S Katila, Cengage Learning
5. <http://www.upriss.org.uk/perl/PerlCourse.html>