PARUL UNIVERSITY - FACULTY OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

SYLLABUS (PROPOSED) FOR 6th SEM B. TECH. PROGRAMME

WEB PROGRAMMING (SUBJECT CODE: 203105353)

Type of Course: B.Tech.

Prerequisite: Basic knowledge of web application.

Rationale: This course is designed to provide understanding and implementation capabilities of web publishing. The web technology covers the networking and publishing aspects with advanced client side technology like CSS, JavaScript.

Teaching and Examination Scheme:

Teaching Scheme (Hrs/Week)			Cr	Examination Scheme					Total
				External		Internal			
L	T	P		Theory	Practical	Theory	*C.E.	Practical	
3	0	0	3	60	-	20	20	-	100

L- Lectures; **T**- Tutorial/Teacher Guided Student Activity; **P- Practical**; **Cr**- Credit; ***C.E** – Continuous Evaluation (Presentation, Assignment, Progressive assessment etc.)

Contents:

Sr. No.	Topic	Weightage	Teaching Hrs.
1.	**Introduction to HTML :** The development process, basic HTML, formatting and fonts, commenting code, color, hyperlink, lists, tables, images, simple HTML Forms, web site structure, frames and frame sets. **Introduction to HTML5**: what is HTML5, Main Structure, basic tags like header, footer, <nav>, article, section, Text, Forms, Video and Audio, Canvas, Drag & Drop, Geolocation.	15%	8
2.	**Style sheets:** Introduction to CSS,what is requirement of CSS, basic syntax and structure, CSS Box Model, using CSS, background images, colors and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS, CSS2 **CSS3**: Transparency, Gradients, Backgrounds, Round borders, Typography, Shadows, Transformations, Transitions.	15%	8
3.	**JavaScript:** Overview of JavaScript, Introduction to Client side scripting, need for JavaScript, How to develop JavaScript, simple JavaScript, variables, , Control statements, loops and repetition, JavaScript arrays, functions, Constructors, JavaScript objects and user defined objects, HTML DOM, Browser Object Model, event handling in JavaScript. Form validation using JavaScript regular expression, Pop up boxes. DHTML: Combining HTML, CSS and JavaScript, Events and buttons	20%	10
4.	**XML** Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, Using XML with application. Transforming XML using XSL and XSLT	10%	6
5.	**JSON AND JQUERY** Introduction of jQuery, Uses of jQuery, Syntax, Selectors and Events, JSON, Use of JSON.	10%	4
6.	**PHP:** Environment Setup, Variable Types, Constants, Operator Types, Decision Making, Arrays, Strings, Web Concepts, File Inclusion, GET & POST, Functions, Cookies, Sessions, File Uploading, Object Oriented Programming with PHP	15%	6
7.	**PHP and MySQL:** Basic commands with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names, creating a table,	15%	6

Sr. No.	Topic	Weightage	Teaching Hrs.
	inserting data, altering tables, queries, deleting database, deleting data and tables, PHP myadmin and database		

Reference Books:

1.HTML5 Black Book by DT Editorial Services.
2. Developing Web Applications by Ralph Moseley - Wiley India
3. Web Technologies Black Book by dreamtech press.
4. Web Design, Joel Sklar, Cengage Learning
5.U. K. Roy, Web Technologies, Oxford Higher Education
6. Internet and World Wide Web : How to Program by Deitel – Pearson Publications.
7.Dynamic HTML: The Definitive Reference (2nd Edition) – Danny Goodman;

Course Outcome:

After learning the course the students should be able to:

1. Understand the various steps in designing a creative and dynamic website
2. Code and design web page using HTML5 & CSS3
3. Understand the best practices for creating a good website / application.
4. Develop dynamic web pages.
5. Able to Develop Website using Web Technology
6. Create web pages, web sites and web applications using client scripting languages.