Web Designing & Development

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

Course: Web Designing & Development	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO1	Understand characteristics of a website.
CO2	Understand web Programming Technologies: Programming Languages, Frameworks, Libraries, Databases
CO3	Learn about design principles such as layout, typography, color theory, and user experience (UX) design, and how these principles apply to web design.
CO4	Learn how to use graphics and multimedia elements, such as images, videos, and animations, to enhance the visual appeal and interactivity of websites.
CO5	Gain practical experience with web development tools and frameworks, such as Bootstrap, jQuery, and AngularJS, to streamline the development process and enhance website functionality.

Detailed Contents:

Module	**Module Name**	**Module Contents**
Module I	**Introduction to Web Programming**	Basic Concepts of WWW, Web page, Hyper Text Markup Language (HTML), Hypertext and Hypermedia, Hypertext Transfer Protocol, Server, Web Browsers, Uniform Resource Locator (URL), Domain Name, IP Address or Number, Characteristics of a Website.

Module II	**HTML**	Client-Side Scripting, Server-Side Scripting, Static and Dynamic Websites, Frontend and Backend Development, Web Application Process Model, Web Programming Technologies: Programming Languages, Frameworks, Libraries, Databases Introduction, HTML Tags, HTML DOM, developing a Web Page, Commonly Used HTML Tags: Header and Footer, Text Formatting, Paragraphs, Text Style, Lists and Bullets, Creating Tables in HTML, Components of table, Border Attribute, Width and Height Attribute, Align Attribute, Cell Padding and Cell Spacing Attributes, Column Span and Row Span Attributes, Inserting Images in HTML, Hyperlinks, Hyperlink of an email, Hyperlink to another browser page, HTML Multimedia, HTML Plugins, HTML Forms
Module III	**JavaScript**	Introduction, JavaScript Syntax, JavaScript Program, JavaScript Variables, JavaScript Operators, JavaScript Data Types, JavaScript Functions, JavaScript Variable Scope: Global Scope, Local Scope, JavaScript Strings: String Length, Special Characters, Breaking Long Code lines, JavaScript Arrays: Converting Array to String, Popping and Pushing Introduction, JavaScript Switch, JavaScript Loops, JavaScript Events, JavaScript Forms, JavaScript - III: Introduction, DOM Introduction, DOM Methods, DOM Document, DOM Events, JavaScript Window Screen, JavaScript Window Location, JavaScript Window Navigator, JavaScript Popup Boxes
Module IV	**AngularJS**	Introduction, AngularJS Development Environment, Expressions in AngularJS, AngularJS Directives, Data Binding, AngularJS Model Modes, One Way Binding, Two Way Binding, AngularJS Controller, AngularJS Scope, AngularJS Filters, AngularJS Forms

Books

1. Steven A. Gabarro, "Web Application Design and Implementation", Wiley, 2006
2. Thomas A. Powell, "HTML: The Complete Refence", McGraw-Hill
3. Pankaj Sharma, "Web Technology", Sk Kataria & Sons Bangalore 2011.
4. Mike Mcgrath, "Java Script", Dream Tech Press 2006, 1st Ed.
5. Achyut S Godbole & Atul Kahate, "Web Technologies", 2002, 2nd Ed.

6. Laura Lemay, Rafe Colburn, Jennifer Kyrnin, "Mastering HTML, CSS & Javascript Web Publishing", 2016.
7. DT Editorial Services (Author), "HTML 5 Black Book (Covers CSS3, JavaScript, XML, XHTML, AJAX, PHP, jQuery)", Paperback 2016, 2nd Ed.
8. C. Xavier, "World Wide Web Design with HTML", TMH Publishers, 2001.
9. Wendy Willard, "A Beginners Guide HTML", Tata McGraw Hill, 2009, 4th Ed.