SUBJECT: COMPUTER SCIENCE							
SEC-1	BCS-S302	Web Technologies	L	T	P	C	Time for ESE
			2	-	-	2	3 Hrs.

Pre- requisite: NIL

Course Objectives:

- To develop a web application using HTML, DHTMAL and Java script technologies.
- To gain the skills and project-based experience needed for entry into web application and development careers.

Course Outcomes:

CO1	Analyze a web page and identify its elements and attributes.
CO2	Create web pages using HTML and Cascading Style Sheets.
CO3	Build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms.

Course Contents

UNIT	Contents	Lectures Required
1.	**Basics of Internet and Web:** The basics of Internet, World Wide Web, Web page, Home page, Web site, Static, Dynamic and Active web page, Overview of Protocols – Simple Mail Transfer Protocol, Gopher, Telnet, Emails, TFTP, Simple Network Management Protocol, Hyper Text Transfer Protocol, Client server computing concepts. **Web Client and Web Sever:** Web Browser, Browsers e.g. Netscape navigator, Internet Explorer, Mozilla Firefox, ClientSide Scripting Languages- VB Script and Java Script, Active X control and Plug-ins; Web Server Architecture, Image maps, CGI, API web database connectivity-DBC, ODBC.	5
2.	**Introduction to HTML:** Introduction to HTML, What is HTML and Where did it come from?, HTML Syntax, Semantic Markup, Structure of HTML Documents, Quick Tour of HTML Elements, HTML5 Semantic Structure Elements, Introduction to CSS, What is CSS, CSS Syntax, Location of Styles, Selectors, The Cascade: How Styles Interact, The Box Model, CSS Text Styling. **HTML Tables and Forms:** HTML Tables and Forms, Introducing Tables, Styling Tables, Introducing Forms, Form Control Elements, Table and Form Accessibility, Microformats, **Advanced CSS:** Layout, Normal Flow, Positioning Elements, Floating Elements, Constructing Multicolumn Layouts, Approaches to CSS Layout, Responsive Design, CSS Frameworks.	9
3.	**DHTML:** Dynamic HTML, Document Object Model, Features of DHTML, CSSP (Cascading Style Sheet Positioning) and JSSS (JavaScript assisted Style Sheet), Layers of Netscape, The ID Attribute, DHTML Events.	5
4.	**Java Script:** JS Introduction, Where To, Output, Statements, Syntax, Comments, Variables, Operators, Arithmetic, Assignment, Data Types, Functions, Objects, Events, Strings, String Methods, Numbers, Number Methods, Arrays, Array Methods, Array Sort, Array Iteration, Dates, Date	5

	Formats, Date Get Methods, Date Set Methods, Math, Random, Booleans, Comparisons, Conditions, Switch, Loop For, Loop While, Break, Type Conversion, Bitwise, RegExp, Errors, Scope, Hoisting, Strict Mode, JSON, Forms, Forms API JS Functions, Function Definitions, Function Parameters, Function Invocation, Function Call, Function Apply, Function Closures.	
	Total Lectures	24

Suggested Text Book(s):

1.	Burdman, Collaborative Web Development, Addison Wesley.
2.	Sharma & Sharma, Developing E-Commerce Sites, Addison Wesley
3.	Ivan Bayross, Web Technologies, BPB Publications.

Suggested Reference Book(s):

1.	Nicholas C Zakas, Professional JavaScript for Web Developers", Wrox/Wiley India.
2.	Zak Ruvalcaba Anne Boehm, Murach's HTML5 and CSS3, Murachs/Shroff Publishers & Distributors Pvt Ltd.

Other Useful Resource(s)

1.	https://www.egyankosh.ac.in/handle/123456789/618
2.	https://freevideolectures.com/course/3140/internet-technologies

Course Outcomes Contributed to Programme Outcomes

PO→ CO↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	AVERAGE
CO1	3	3	2	3	2	3	2	2	**2.5**
CO2	3	3	2	3	3	3	3	3	**2.9**
CO3	3	3	2	2	3	3	3	3	**2.8**
AVG.	**3.0**	**3.0**	**2.0**	**2.7**	**2.7**	**3.0**	**2.7**	**2.7**	**2.7**

Course Outcomes Contributed to Programme Specific Outcomes

PSO→ CO↓	PSO1	PSO2	PSO3	AVERAGE
CO1	3	3	3	**3.0**
CO2	3	3	3	**3.0**
CO3	3	3	3	**3.0**
AVG.	**3.0**	**3.0**	**3.0**	**3.0**