WEB TECHNOLOGIES	
CSE 323	**Credits:4**
Instruction : 4 Periods & 1 Tut/ Week	Sessional Marks : 40
End Exam : 3 Periods	End Exam Marks : 60

Prerequisites:

Basic knowledge of computer fundamentals in JAVA programming language.
Student must have knowledge of some programming languages (such as C, C++)

Course Objectives:

- To learn designing of dynamic and interactive web pages by embedding Java Script code in HTML.
- To know how to design and to develop simple database driven web applications using a server-side scripting language and other new technologies.
- To describe how a given web server responds to an HTTP request for a dynamic resource.
- To create good, effective and customized websites.

Course Outcomes:

By the end of the course, the student will be able to:	
1.	Develop the static web pages usingHTML5
2.	Analyze a web project and identify its elements and attributes in comparison to traditional project.
3.	Demonstrate computational and problem solving skills as applied to the computing industry.
4.	Apply the knowledge to create dynamic web pages using Servlets, JSP and PHP.
5.	Develop web application development usingsoftware tools i.e. PHP and XML etc. and identify the environments currently available on the market to design web sites

Mapping of course outcomes with program outcomes :

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

SYLLABUS

UNIT-I : **12 Periods**

HTML5 Common tags:

Basics of HTML5, formatting and fonts, commenting code, color, hyperlink, lists, tables, images, forms,Meta tags, Character entities, frames and frame sets, Web site structure.

Java Script: Introduction to Java Scripts, Objects in Java Script, Dynamic HTML with Java Script.

UNIT-II : **14 Periods**

PHP:

Introduction and basic syntax of PHP, decision and looping with examples, PHP and HTML, Arrays, Functions, Browser control and detection, string, Form processing, Files, Advance Features: Cookies and Sessions, Object Oriented Programming with PHP.

UNIT –III: **16 Periods**

Web Servers and Servlets:

Introduction to web server installation.**Introduction** to Servlets: Lifecycle of a Servlet, The Servlet API, The javax.servelet Package, Reading Servlet parameters, Reading Initialization parameters. The javax.servelet HTTP package, Handling Http Request & Responses, Using Cookies-Session Tracking, Security Issues.

UNIT-IV : **16 Periods**

JSP Application Development:

Generating Dynamic Content, Using Scripting Elements Implicit JSP Objects, Conditional Processing – Displaying Values Using an Expression to Set an Attribute, Declaring Variables and Methods Error Handling and Debugging Sharing Data Between JSP pages, Requests, and Users Passing Control and Date between Pages – Sharing Session and Application Data – Memory Usage Considerations.

UNIT-V : **10 Periods**

Database Access:

Database Programming using JDBC, Studying Javax.sql.* package,Accessing a Database from Servlets &JSP Page , Application – Specific Database Actions.

JSON:

Introduction to JSON,JSON syntax, Need of JSON in real web sites,JSON object,JSON array,Complex JSON objects,Reading JSON objects using jQuery

Text Books:

1. Dietel and Nieto PHI/Pearson Education Asia., "*Internet and World Wide Web – How to program* ",4th edition,Pearson Education
2. Robin Nixon, " *Learning PHP, MySQL, and JavaScript* ", 4th edition O.Reily
3.Lindsay Bassett ," *Introduction to JavaScript Object Notation*", first edition O.Reily

References Books:

1. Steven Holzner**, "***HTML Black Book: The Programmer's Complete HTML Reference Book"* Coriolis Group Books
2. Hans Bergsten , Java Server Pages, 3rd edition,SPD O"Reilly
3. Deitel/Deitel/Santry ,"*Advanced Java™ 2 Platform How to Program,"*2nd edition,O Reily

Web Resources:

http://www.imad.tech/
https://www.w3schools.com/html/
http://www.javatpoint.com/jsp-tutorial
http://www.javatpoint.com/php-json-example