B. Tech. Computer Engineering/Computer Science & Engineering
Examination to be held in the Year December 2023, 2024, 2025, 2026

BRANCH: COMPUTER ENGINEERING/COMPUTER SCIENCE & ENGINEERING
SEMESTER: 3rd   **CREDITS: 3**
COURSE NO: CST3303
COURSE TITLE: WEB TECHNOLOGY
DURATION OF EXAM: 3 HOURS

L	T	P	MARKS	
			External	Internal
2	1	0	100	50

COURSE OUTCOMES	
At the end of the course the student will be able to:-	
CO1	Describe the fundamentals of Web.
CO2	Adapt HTML and CSS syntax and semantics to build web pages.
CO3	Construct and visually format tables and forms using HTML and CSS.
CO4	Develop Client-Side Scripts using Java Script and Server-Side Scripts using PHP to generate and display the contents dynamically.
CO5	Appraise the principles of object-oriented development using PHP.

Detailed Syllabus
Section–A

Introduction to Web: Internet, WWW, Web Browsers and Web Servers, URLs, MIME, Websites, Web pages and Web applications, Website Design Principles, Web Programmers Toolbox.   **(4 hrs)**

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, HTML Tables and Forms, Introducing Tables, Styling Tables, Introducing Forms, Form Control Elements, Table and Form Accessibility.   **(8 hrs)**

CSS: What is CSS, CSS Syntax using CSS, CSS Selectors, The Cascade: How Styles Interact, The Box Model, CSS Text Styling, CSS Layout, Positioning Elements, Floating Elements, Constructing Multicolumn Layouts, Approaches to CSS Layout.   **(8 hrs)**

Section–B

Client-Side Scripting: Client-Side Scripting, what is JavaScript and What can it do? JavaScript Design Principles,JavaScriptSyntax,variables,functions,conditions,loopsandrepetition,JavaScriptObjects,TheDocument Object Model(DOM),JavaScript Events, Forms and Validations,   **(10 hrs)**

Server-Side Scripting: What is Server-Side Development? A web Server's responsibilities, Introduction to Server-Side Development with PHP, Quick Tour of PHP, Program Control, Arrays, Functions and Forms. Classes and Objects in PHP, Object Oriented Design, Error Handling and Validation.   **(10 hrs)**

BOOKS RECOMMENDED:
1. "Fundamentals of Web Development",Randy Connolly,RicardoHoar, Pearson Education India
2. "Programming the World Wide Web", Robert Wsebesta, Pearson Education.

NOTE: There will be eight questions of 20 marks each, four from each section. Students are required to attempt five questions selecting atleast two questions from each section.

BRANCH: COMPUTER ENGINEERING/COMPUTER SCIENCE & ENGINEERING
SEMESTER: 3ʳᵈ
COURSE NO: CSP3313   **CREDIT: 1**
COURSE TITLE: WEB TECHNOLOGY LAB

L	T	P	Practical Marks
-	-	2	50

COURSEOUTCOMES	
At the end of the course the student will be able to:-	
CO1	Develop Web Pages using HTML and CSS.
CO2	Develop Client-Side Scripts using JavaScript.
CO3	Develop Server-Side scripts using PHP.

Lab Practicals:

Practical 1   Write a program to create an HTML page which has properly aligned paragraphs with image.

Practical 2   Write a program to create in HTML to create Student feedback form(use textbox,textarea checkbox, radio button, select box etc.)

Practical 3   Create a web page using frame.Divide the page into two parts with Navigation links on left hand side of page(width=20%) and content page on right hand side of page(width=80%).On clicking the navigation Links corresponding content must be shown on the right-hand side.

Practical 4   Create your class timetable using table tag. Use External CSS to format it.

Practical 5   Create your resume using HTML tags and then use inline CSS for the formatting.

Practical 6   Develop a Java Script to display today's date.

Practical 7   Develop simple calculator for addition, subtraction, multiplication and division operation using JavaScript.

Practical 8   Write a JavaScript that calculates the squares and cubes of the numbers from 0 to10 and outputs HTML text that displays the resulting values in an HTML table format.

Practical 9   Write a JavaScript code that displays text "TEXT-GROWING" with increasing font size in the interval of 100m sin RED COLOR, when the font size reaches 50pt it displays "TEXT SHRINKING "in BLUE color.Then the font size decreases to 5pt.

Practical 10   Write a PHP program to keep track of the number of visitors visiting the webpage and to display this count of visitors, with proper headings.

Practical 11   Write a php program to display today's date in dd- mm-yyyy format.

Practical 12   Write a php program to check if number is prime or not.

Practical 13   Create HTML page that contain textbox,submit/reset button. Write php program to display this information and also store into text file.

NOTE: Additional Lab Experiments/Practical will be performed based on the course content requirements.