

Course Objectives:

The main objectives of this course are to:

1. Basic technologies to develop web documents.
2. Dynamic HTML Pages and Event handling mechanism.
3. XML, Web Servers, Java Servlet technologies.
4. Java Server Page Technologies

Course Outcomes:

After successful completion of the course, the students are able to

1. Create web pages with HTML, CSS, and JavaScript.
2. Design dynamic web pages using client side scripting.
3. Create XML documents using XML Technologies
4. Develop Server side web applications with Java Servlets.
5. Design server side programs with Java Server Pages.

LAB CYCLE –I

1.
 - a. Create a web page having the background in green and title "My First Page".
 - b. Create a web page of pink colour and display a moving message in red colour.
 - c. Design a web page containing text, in form of paragraphs giving suitable heading style
2.
 - a. Create a web page which displays WELCOME text using heading tags(h1 to h6)
 - b. Create a web page which displays WELCOME text using tag
 - c. Create a web page which displays h2o and x2+y2 using <sup> tag and <sub> tag
3.
 - a. Create a web page to show different attributes of Font tag.
 - b. Create a web page to show different attributes: italics, bold, underline.
 - c. Design a web page having background colour yellow and giving text colour red
4.
 - a. Create a web page using href attribute of anchor tag & the attribute: alink, vlink etc.
 - b. Create links on the words e.g. —Wi-Fi and —LAN|| to link them to Wikipedia pages.
 - c. Create a web page with appropriate content and insert an image towards the left hand side of the page. When user clicks on the image, it should open another Web page.
5.
 - a. Create a web page, showing an ordered list of the names of five of your friends.
 - b. Create a web page containing a nested list showing the content page of any book
 - c. Create a web page, showing an unordered list of names of five of your friends
6.
 - a. Create a table to show your class timetable using rowspan and colspan attributes.
 - b. Use tables to provide layout to your HTML page describing your college infrastructure.
 - c. Create a web page in the following table fields

Name of train	place	Destination	Train No	Time		Fare
				Arrival	Departure	

7.
 - a. Develop a web page having two frames that divide the Web page into two equal rows.

- b. Develop a web page having two frames that divide the Web page into two equal rows and then divide the second row into two equal columns.
 - c. Develop a web page having frames as described in the above web page and then fill each frame with a different background colour
- 8.
- a. Create your bio-data form on a web page using all input types
 - b. Create a web page having radio buttons labeled as name of colours. Clicking on each radio button should change the colour of the Web page
 - c. Embed Audio and Video into your web page
- 9.
- a. Create a webpage which displays the class time table and apply the following effects on the table:
 - b. For the table header apply blue as the background colour and white for the colour of the text in the table header. b. Display days in a week (Mon, Tue etc...) in bold format with the first letter in the day name in uppercase.
 - c. Display lunch slightly in bigger font other than the remaining text.
- 10.
- a. Create a webpage which displays "Hello World" with font size 20 pixels, bold format, in "Times New Roman" font and green in colour using inline CSS, embedded CSS and external CSS.
 - b. Create a web page containing two images, where one image overlaps another image by using the z-index CSS property.
 - c. Demonstrate the usage of CSS Inheritance and Specificity with an example.
- 11.
- a. Create a div element with a width and height of 500px. Create a diagonal linear gradient using the colors of the rainbow—Red, Orange, Yellow, Green, Blue, Indigo, Violet. (Linear Gradient)
 - b. Create a div element with a width and height of 500px. Create a radial gradient with three colors. Start the gradient in the bottom-left corner with the colors changing as they move along the gradient line to the right. (Radial Gradient)
 - c. Create an infinite animation of an element moving in a square pattern. (Animation)

LAB CYCLE –II **JAVA SCRIPT**

- 1. Write a java scripts to
 - a) find the given year is leap year or not
 - b) compute the biggest of three numbers
 - c) perform the arithmetic operations using switch statement
- 2. Write a java script to
 - a) calculate the sum of the digits of a give number
 - b) reverse of a given number
 - c) print the first 10 natural numbers except 5
- 3. Write a java script to
 - a) functions (GCD, reverse, random numbers)
 - b) recursive function(factorial, Fibonacci , power)
 - c) image generator

4. a) Write a java script to
 - a) sort the array element using bubble sort technique
 - b) search a given element in the given set of given elements using binary search technique.
 - c) compute i) addition of two matrices ii) multiplication of two matrices
5. a) Write a java script to
 - a) implement string operations using String object
 - b) implement the mathematical operations using Math object
 - c) display Greeting messages using Date object
5. demonstrate collect objects
 - a) All collection
 - b) Children collection
 - c) Anchor collection
6. Demonstrate event model
 - a) Form events(onchange, onfocus ,onblur)
 - b) Mouse events (onclick, onmousedown,onmouseup,onmouseover)
 - c) Event bubbling

LAB CYCLE –III

7. Write a valid XML document using DTD
8. Write a servlet program to validate a user
9. Write a web application using servlet and JDBC.
10. Write a JSP program on Implicit objects
11. Write a JSP program on Action tags.
12. Demonstrate cookies and session information using JSP