

SEMESTER-III

COURSE 8: WEB TECHNOLOGIES

Theory

Credits: 3

3 hrs/week

COURSE OBJECTIVES: This subject enables the student to create flexible, attractive, user-friendly web sites comprised of both static and dynamic web pages.. Along with that students will also learn about interactions with web pages through JavaScript and host own web site on internet.

LEARNING OUTCOMES: After Studying this subject students would have capability to make their own web site and host on internet. Also students would have enough knowledge about the technologies used in internet.

UNIT I : HTML: Basic HTML Tags and Attributes, Document body, Text, Hyper links, Adding more Formatting, Lists, Tables, Grouping, Images. More HTML: Multimedia Objects, Frames, Forms, Headers.

UNIT II : Cascading Style Sheets: Introduction, Syntax, Selectors, Background Cursors, Text Fonts, Lists, Tables, Box Model, Using Styles, Simple Examples, Creation of Own Styles, Properties And Values In Styles, Formatting Blocks of Information, Layers.

UNIT III : Introduction to JavaScript: What is DHTML, JavaScript Basics, Variables, String Manipulations, Mathematical Functions, Statements, Operators, Arrays and Functions.

UNIT IV : DHTML with JavaScript: Data Validation, Opening A New Window, Messages and Confirmations, Status Bar, Different Frames, Rollover Buttons, Moving Images.

UNIT V : XML: Defining Data for Web Applications, Basic XML, Document Type Definition, Presenting XML, Document Object Model, Web Services.

TEXT BOOKS: 1. Harvey M. Deitel and Paul J. Deitel, “Internet & World Wide Web How to Program”, 4/e, Pearson Education. 2. Uttam Kumar Roy, Web Technologies from Oxford University Press Student Activities.

Co-curricular Activities:

- We for Web – Students with right mix of skills are formed as groups to develop websites.
- Web Ninja- A platform to showcase creative websites developed by students to their peers.

Assessment Methods:

- Formal Examinations .
- Lab Practical Examination .
- Presentations .
- Simple Project.

SEMESTER-III

COURSE 8: WEB TECHNOLOGIES

Practical

Credits: 1

2 hrs/week

1. Design web pages for your college containing a description of the courses, departments, faculties, library etc, use href, list tags.
2. Create your class timetable using table tag.
3. Create a feedback form for your curriculum. Use textbox, text area, checkbox, radio button etc
4. Create a web page using frame. Divide the page into two parts with Navigation links on lefthand 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.
5. Write html code to develop a webpage having two frames that divide the webpage into two equal rows and then divide the row into equal columns fill each frame with a different background colour.
6. Create your resume using HTML tags. Experiment with colours, text, link, size and also other tags you studied.
7. Design a web page of your College Day Celebrations with an attractive background colour, text colour, images, font etc. Use CSS.
8. Use Inline CSS to format your resume that you created.
9. Use External CSS to format your class timetable as you created.
10. Use External, Internal, and Inline CSS to format web page of your start up.
11. Develop a JavaScript to display your admission details in the college.
12. Develop simple calculator for addition, subtraction, multiplication and division operation using JavaScript.
13. Create HTML page with JavaScript which takes integer number as input and tells whether the number is odd or even.
14. Create HTML page that contains form for registration of your participation in a hackathon. Use relevant fields for input data. Write a JavaScript code to combine and display the input information when the button is clicked.
15. Create a login form with id and password. Perform input validation