Subject Name :Web Technology

Subject Code : CE 506

Teaching Scheme (Credits and Hours)

Teaching scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Mid Sem Exam	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
02	00	04	06	4	3	70	30	20	30	150

Learning Objectives:

This Subject is useful for Making own Web page and how to host own web site on internet. Along with that Students will also learn about the protocols involv in internet technology.

Outline of the Course:

Sr. No	Title of the Unit	Minimum Hours
1	Introduction to WWW	4
2	Introduction to HTML	5
3	Style Sheet	5
4	Javascript	6
5	XML	3
6	PHP and Mysql	7

Total hours (Theory): 30

Total hours (Lab): 60

Total hours: 90

Detailed Syllabus

Sr. No	Topic	Lecture Hours	Weightage(%)
1	**Introduction to WWW** : Protocols and programs, secure connections, application and development tools, the web browser, What is server, choices, setting up UNIX and Linux web servers, Logging users, dynamic IP **Web Design**: Web site design principles, planning the site and navigation,	4	13
2	**Introduction to HTML** : The development process, Html tags and simple HTML forms, web site structure **Introduction to XHTML** : XML, Move to XHTML, Meta tags, Character entities, frames and frame sets, inside browser.	5	17
3	**Style sheets** : Need for CSS, introduction to CSS, basic syntax and structure, using CSS, background images, colors and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS, CSS2	5	17
4	**Javascript** : Client side scripting, What is Javascript, How to develop Javascript, simple Javascript, variables, functions, conditions, loops and repetition	3	10
5	**Advance script**, Javascript and objects, Javascript own objects, the DOM and web browser environments, forms and validations **DHTML** : Combining HTML, CSS and Javascript, events and buttons, controlling your browser, **Ajax:** Introduction, advantages & disadvantages ,Purpose of it ,ajax based web application, alternatives of ajax	3	10
6	**XML** : Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, Well formed, using XML with application.XML, XSL and XSLT. Introduction to XSL, XML transformed simple example, XSL elements, transforming with XSLT	3	10
7	**PHP** : Starting to script on server side, Arrays, function and forms, advance PHP **Databases :** Basic command with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names creating a table, inserting data, altering tables, queries, deleting database, deleting data and tables, PHP myadmin and database bugs.	7	23
	Total	**30**	**100**

Instructional Method and Pedagogy:

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi-media projector, black board, OHP etc.
- Attendance is compulsory in lecture and laboratory which carries 10 marks in overall evaluation.
- One internal exam will be conducted as a part of internal theory evaluation.
- Assignments based on the course content will be given to the students for each unit and will be evaluated at regular interval evaluation.
- Surprise tests/Quizzes/Seminar/tutorial will be conducted having a share of five marks in the overall internal evaluation.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concepts being taught in lectures.
- Experiments shall be performed in the laboratory related to course contents.

Learning Outcome:

After Studying that subject students would have capability to make own web site and host their own web site on internet. Also students would have enough knowledge about what are the technologies used in internet.

Reference Books:

1. Steven Holzner,"HTML Black Book", Dremtech press.
2. Web Technologies, Black Book, Dreamtech Press
3. Web Applications : Concepts and Real World Design, Knuckles, Wiley-India
4. Internet and World Wide Web How to program, P.J. Deitel & H.M. Deitel Pearson.

Practical List:

Sr. No	Name of Experiment
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 user Student feedback form (use textbox, text area , checkbox, radio button, select box etc.)
4	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.
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 color.
6	Create your resume using HTML tags also experiment with colors, text , link , size and also other tags you studied.
Practical Set -2 CSS	
7	Design a web page of your home town with an attractive background color, text color, an Image, font etc. (use internal 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 college web page that you created.
Practical Set -3 JavaScript	
11	Develop a JavaScript to display today's date.
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 with fields Name, Email, Mobile No , Gender , Favorite Color and a button now write a JavaScript code to combine and display the information in textbox when the button is clicked.
15	Implement Validation in above Feedback Form.
16	Use regular expression for validation in Feedback Form.
17	Using ajax retrieve data from a TXT file and display it.
Practical Set -4 XML	
18	Create XML file to store student information like Enrollment Number, Name , Mobile Number , Email Id.
19	Create DTD for above XML File.
20	Create XML Schema for above (Practical No. 18)
21	Create XSL file to convert above (refer Practical No. 17) XML file into XHTML file.

Practical Set -5 PHP	
22	Write a php program to display today's date in dd-mm-yyyy format.
23	Write a php program to check if number is prime or not.
24	Write a php program to print first 10 Fibonacci Numbers.
25	Create HTML page that contain textbox, submit / reset button. Write php program to display this information and also store into text file.
26	Write a php script to read data from txt file and display it in html table (the file contains info in format Name: Password: Email)
27	Write a PHP Script for login authentication. Design an html form which takes username and password from user and validate against stored username and password in file.
28	Write PHP Script for storing and retrieving user information from MySql table. 1. Design A HTML page which takes Name, Address, Email and Mobile No. From user (register.php) 2. Store this data in Mysql database / text file. 3. Next page display all user in html table using PHP (display.php)
29	Write a PHP script for user authentication using PHP-MYSQL. Use session for storing username.
30	Using ajax fetch information from a database with AJAX.
Practical Set -6 Website (Optional)	
Students have to create a whole Website which contains above topics in Website.	