

MSC (CA&IT) - Semester: II

(Effective from year 2023-24)

Course Code:	CAIT-202	Course Title:	Web Designing and Programming - I I
Course Credits:	02	Hour of Teaching/Week:	04
Internal Assessment Marks:	25	External Exam Marks:	25
Exam Duration	2Hrs		

Unit	Contents
1.	<p>Introduction to Javascript</p> <p>What is JavaScript?, What Is AJAX?, Writing your first script, Internal vs. external scripts, Using comments in scripts, Using the NoScript tag in HTML</p> <p>JavaScript Language Essentials (Creating alert dialogs, Understanding conditional statements, Getting confirmations from users, Creating prompts for users, Understanding functions, Making links smarter, Using switch/case statements, Creating loops, Handling errors, functions, arrays)</p> <p>Creating Rollovers and More:</p> <p>Creating a basic image rollover, How to write a better rollover, Creating a three-state rollover, Making rollovers accessible and 508 compliant, Making disjointed rollovers, Creating slideshows, Displaying random images.</p> <p>Building Smarter Forms :</p> <p>Creating jump menus, Creating dynamic menus, Requiring fields, Cross-checking fields, Displaying more informative errors, Verifying radio button selections, Setting one field with another field, Verifying email addresses.</p> <p>Handling Events:</p> <p>Responding to window events, Responding to mouse movements, Responding to mouse clicks, Responding to onBlur form events, Responding to onFocus form events, Responding to keyboard events</p>

Introduction to JQuery

2. JQuery Intro, JQuery Syntax, JQuery Selectors, JQuery Events JQuery Effects (JQuery Hide/Show, JQuery Fade, JQuery Slide, JQuery Animate, JQuery stop(), JQuery Callback, JQuery Chaining) , JQuery Get, JQuery Set, JQuery Add, JQuery Remove, JQuery CSS Classes, JQuery css()
- Traversing (JQuery Traversing, JQuery Ancestors, JQuery Descendants, JQuery Siblings), JQuery with AJAX (JQuery AJAX Intro JQuery Load JQuery Get/Post), noConflict(), JQuery Filters

Text Books

1. Dayley Brad and Dayley Brendan, “AngularJS, JavaScript, and jQuery All in One, Sams Teach Yourself”
2. Jon Duckett , “Web Design with HTML, CSS, JavaScript and JQuery Set”
3. Helder da Rocha :Learn Chart.js: Create interactive visualizations for the Web with Chart.js

References

1. Kyle Simpson: JavaScript and HTML5 Now
2. DT Editorial Services: HTML 5 Black Book (Covers CSS3, JavaScript, XML, XHTML, AJAX, PHP, JQuery)
3. Laurence Lars Svekis , Maaike van Putten: JavaScript from Beginner to Professional: Learn JavaScript quickly by building fun, interactive, and dynamic web apps, games, and pages
- 4.Oswald Campesato : jQuery, CSS3, and HTML5 for Mobile/Desktop Devices

External Exam Format : As per Table 1.1, 1.2 and 1.3

MSC (CA&IT) - Semester: II

(Effective from year 2023-24)

Course Code:	CAIT-202-P	Course Title:	Lab: Practical Based on CAIT-202
Course Credits:	02	Hour of Teaching/Week:	04
Internal Assessment Marks:	25	External Exam Marks:	25
Exam Duration	2Hrs		

Topics:

Unit 1 and 2 of CAIT-202 and Following components of Chart.js: Corel Draw and Photoshop Practical from CAIT-207

Introduction, Installation , Syntax , Basics , Color , Options , Interactions , Legend , Title , Animation , Tooltip , Line Chart , Bar Chart , Radar Chart , Doughnut Chart , Pie Chart , Polar Area Chart , Bubble Chart , Scatter Chart , Mixed Chart , Cartesian Axis , Category Axis, Radial Axis

List of Sample Programs

1. Write a JavaScript program to display the current day and time in the following format.

Sample Output : Today is : Tuesday.

Current time is : 10 PM : 30 : 38

2. Write a JavaScript program to print the current window contents.

3. Write a JavaScript program to get the current date.

Expected Output :

mm-dd-yyyy, mm/dd/yyyy or dd-mm-yyyy, dd/mm/yyyy

4. Write a JavaScript program to find the area of a triangle where three sides are 5, 6, 7.

5. Write a JavaScript program to rotate the string 'w3resource' in the right direction. This is done by periodically removing one letter from the string end and attaching it to the front.

6. Write a JavaScript program to determine whether a given year is a leap year in the Gregorian calendar.

7. Write a JavaScript program to find out if 1st January will be a Sunday between 2014 and 2050.

8. Write a JavaScript program where the program takes a random integer between 1 and 10, and the user is then prompted to input a guess number. The program displays a message "Good Work" if the input matches the guess number otherwise "Not matched".

9. Write a JavaScript program to test whether the first character of a string is uppercase or not.

10. Write a JavaScript program to check a credit card number.

11. Write a pattern that matches e-mail addresses.

The personal information part contains the following ASCII characters.

- Uppercase (A-Z) and lowercase (a-z) English letters.
- Digits (0-9).
- Characters ! # \$ % & ' * + - / = ? ^ _ ` { | } ~
- Character . (period, dot or fullstop) provided that it is not the first or last character and it will not come one after the other.

12. Write a JavaScript program to search a date within a string.

13. Write a JavaScript program that works as a regular expression trim function (string).

14. Write a JavaScript program to count number of words in string.

Note :

- Remove white-space from start and end position.
- Convert 2 or more spaces to 1.
- Exclude newline with a start spacing.

15. Write a JavaScript function to check whether a given value is IP value or not.

16. Write a JavaScript function to count the number of vowels in a given string.

Test Data :

```
console.log(alphabetize_string('United States'));
```

Output :

"SUadeeinsttt"

17. Display appropriate charts using chart.js library.

External Exam Format : As per Table 1.1, 1.2 and 1.3