JHARKHAND Rai University
RANCHI

PRACTICE SET

End Semester Examination, December -2025

Program: BCA

Semester: Fifth

Course: Internet Technologies using HTML, CSS & JavaScript

Course Code: 3CCC302

Course Outcomes	Description
CO1	Explain the functioning and structure of the Internet and Intranet, domain registration, IP addressing, and web communication components.
CO2	Create basic HTML pages with formatted text, images, and lists using appropriate tags and attributes.
CO3	Design dynamic web pages using tables, hyperlinks, frames, and apply CSS to enhance layout and styling.
CO4	Develop client-side scripts using JavaScript for capturing input, applying logic, and manipulating webpage behavior.
CO5	Implement form validation, event handling, and interact with the DOM using advanced JavaScript techniques and built-in objects.

Section-A

(20 x 5 = 100)

1. Define Internet and explain its basic components. **[CO1] [UNIT-I] [Remember][LOT]**
2. What is Intranet? Differentiate Internet vs Intranet with examples. **[CO1] [UNIT-I] [Understand][LOT]**

3. Explain the role of a Web Browser and a Web Server. **[CO1] [UNIT-I] [Understand][LOT]**
4. Describe the concept and process of Domain Registration. **[CO1] [UNIT-I] [Understand][LOT]**
5. Define IP Address. Explain how IP addresses are assigned. **[CO1] [UNIT-I] [Understand][LOT]**
6. Write the basic structure of an HTML document. **[CO2] [UNIT-II] [Remember][LOT]**
7. List different types of HTML tags with examples. **[CO2] [UNIT-II] [Remember][LOT]**
8. Explain the purpose of paragraph and line break tags in HTML**. [CO2] [UNIT-II] [Understand][LOT]**
9. What are Ordered and Unordered Lists? Write syntax for each. **[CO2] [UNIT-II] [Understand][LOT]**
10. Explain how to add an image to a webpage using HTML. **[CO2] [UNIT-II] [Understand][LOT]**
11. What is a Hyperlink? Write syntax for linking two web pages. **[CO3] [UNIT-III] [Remember][LOT]**
12. Describe how Frames are used in HTML with example**. [CO3] [UNIT-III] [Understand][LOT]**
13. What is CSS? Explain inline, internal, and external styles with examples. **[CO3] [UNIT-III] [Understand][LOT]**
14. List and explain different font attributes in CSS. **[CO3] [UNIT-III] [Remember][LOT]**
15. Define JavaScript. Mention any four advantages of JavaScript. **[CO4] [UNIT-IV] [Remember][LOT]**
16. Explain variables and data types in JavaScript. **[CO4] [UNIT-IV] [Understand][LOT]**
17. Describe the difference between while and do-while loops with examples. **[CO4] [UNIT-IV] [Analyze][LOT]**
18. Develop a JavaScript program to calculate the factorial of a number using loops. **[CO4] [UNIT-IV] [Create][LOT]**
19. Write a JavaScript program to check whether a number is a Prime Number. **[CO5] [UNIT-V] [Apply][LOT]**

20. Write a JavaScript function to check whether a number is a Palindrome. **[CO5] [UNIT-V] [Apply][LOT]**

Section – B

(14 x 10 = 140)

21. Discuss the need and working of the Internet and its importance in web communication. **[CO1] [UNIT-I] [Understand][LOT]**
22. Explain the role of ISP and DNS in Internet communication. **[CO1] [UNIT-I] [Understand][LOT]**
23. Compare and contrast Client and Server models with examples. **[CO1] [UNIT-I] [Analyze][HOT]**
24. Explain the various text formatting tags in HTML with examples. **[CO2] [UNIT-II] [Apply][LOT]**
25. Illustrate the use of image tag and its attributes with a suitable example. **[CO2] [UNIT-II] [Apply][LOT]**
26. Design an HTML webpage using ordered and unordered lists for a college timetable. **[CO2] [UNIT-II] [Create][HOT]**
27. Explain the concept of hyperlinks and types of linking in HTML. **[CO3] [UNIT-III] [Understand][LOT]**
28. Compare and contrast inline, internal, and external CSS. Give one example for each. **[CO3] [UNIT-III] [Analyze][HOT]**
29. Design an HTML webpage containing frames and hyperlinks between them. **[CO3] [UNIT-III] [Create][HOT]**
30. Explain the difference between CSS class and ID selectors with syntax. **[CO3] [UNIT-III] [Analyze][HOT]**
31. Develop a JavaScript program to verify whether a given number is an Armstrong Number. **[CO4] [UNIT-IV] [Apply][LOT]**
32. Explain different types of operators used in JavaScript with examples. [**CO4] [UNIT-IV] [Understand][LOT]**
33. Analyse the role of conditional statements (if, else, switch) in JavaScript programming. **[CO4] [UNIT-IV] [Analyse][HOT]**
34. Explain the use of different dialog boxes in JavaScript (alert, prompt, confirm) with examples. **[CO5] [UNIT-V] [Understand][LOT]**
35. Explain the Document Object Model (DOM) and evaluate its role in web programming. **[CO5] [UNIT-V] [Evaluate][LOT]**

Section – C

(10 x 20 = 200)

36. Analyse the difference between Internet and Intranet in terms of architecture, usage, and security. **[CO1] [UNIT-I] [Analyse][HOT]**
37. Analyze the process of Domain Name Registration and IP Address Assignment, and evaluate how they work together to ensure accessibility of websites on the Internet **[CO1] [UNIT-I] [Evaluate][HOT]**
38. Create a complete HTML webpage for a student portfolio using heading, paragraph, list, and image tags. **[CO2] [UNIT-II] [Create][HOT]**
39. Develop a webpage using tables and hyperlinks to represent a product catalog for an online store. **[CO3] [UNIT-III] [Create][HOT]**
40. Design a multipage website using frames and navigation links with external CSS for styling. **[CO3] [UNIT-III] [Create][HOT]**
41. Create a JavaScript function to validate a user login form (username & password). **[CO5] [UNIT-V] [Create][HOT]**
42. Develop a JavaScript program to calculate the sum of digits of a number and display it using an alert box. **[CO5] [UNIT-V] [Create][HOT]**
43. Construct a JavaScript program that checks whether an entered string is a palindrome and displays result dynamically on a webpage. **[CO5] [UNIT-V] [Create][HOT]**
44. Explain and evaluate the concept of DOM manipulation using JavaScript. Provide examples of getElementById(), innerHTML, and event handling. **[CO5] [UNIT-V] [Evaluate][HOT]**
45. Create an interactive HTML form for student registration with JavaScript validation for all input fields. **[CO5] [UNIT-V] [Create][HOT]**

Summary Sheet

Course Outcomes (CO) Wise

CO	Q. No	Marks
CO1	1,2,3,4,5,21,22,23,36,37	95
CO2	6,7,8,9,10,24,25,26,38	75
CO3	11,12,13,14,27,28,29,30,39,40	100
CO4	15,16,17,18,31,32,33	50
CO5	19,20,34,35,41,42,43,44,45	130
Total		**450**

Unit Wise

Unit	Q. No	Marks
Unit 1	1,2,3,4,5,21,22,23,36,37	95
Unit 2	6,7,8,9,10,24,25,26,38	75
Unit 3	11,12,13,14,27,28,29,30,39, 40	100
Unit 4	15,16,17,18,31,32,33	50
Unit 5	19,20,34,35,41,42,43,44,45	130
Total		**450**

Blooms Taxonomy Level (BTL) Wise

BTL	Q. No	Marks
LOT	1-20,21,24,25,27,30,31,32,34	180
HOT	22,23,26,28,29,33,35,36-45	270
Total		**450**

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Disclaimer: - This is a Practice Set. The Question in End term examination will differ from the Practice set. This Practice set is meant for practice only.