

# CHENNAI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution, Affiliated to Anna University, Chennai)

CHENNAI - 600 069

B.E. / B.Tech. DEGREE END SEMESTER EXAMINATIONS

NOV / DEC 2024

First Semester

CS4101 – WEB DEVELOPMENT ESSENTIALS

(Common to CSE / IT / CSBS / CSE-CS)

(Regulations 2024)

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions

RBT Level : L1- Remembering, L2 – Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 – Creating

## PART – A (10x2=20 Marks)

CO

R

L

M

1. What are the key components of an HTML document structure? CO1
2. State the purpose and usage of meta tags in HTML. CO1
3. Compare and contrast inline CSS and external CSS with examples. CO2
4. Write a CSS code snippet to align text to the center and apply a background color. CO2
5. Mention the significance of JavaScript's "let" and "const". CO3
6. Write a JavaScript program to check if a given year is a leap year. CO3
7. What is the role of the Document Object Model (DOM) in web development? CO4
8. Demonstrate how to add and remove an HTML element dynamically using JavaScript. CO4
9. Write a JavaScript snippet to use a promise for asynchronous operations. CO5
10. Analyze the benefits of using Git for version control in collaborative projects. CO5

PART - B (5x16=80 Marks)

CO RBT M  
Level

11. a) Design a webpage using HTML that includes a table, an image, and hyperlinks. Ensure proper structuring of content. CO1 L3

(OR)

b) Create an HTML form for user registration. Include fields for name, email, password, and a submit button. CO1 L4

12. a) Develop a webpage using CSS Grid layout to organize sections into a header, sidebar, content area, and footer. CO2 L4

(OR)

b) Write a CSS code to design a responsive navigation bar with hover effects. CO2 L3

13. a) Explain the difference between traditional JavaScript and ECMAScript. Write a JavaScript example to demonstrate arrow functions. CO3 L3

(OR)

b) Write a JavaScript program to validate a login form. Ensure fields for username and password are not left blank. CO3 L3

14. a) Develop a dynamic to-do list application where users can add and remove tasks. Use DOM manipulation. CO4 L3

(OR)

b) Illustrate the concept of event listeners in JavaScript with an example of handling form submission. CO4 L3

15. a) Write a JavaScript program to fetch data from a public API and display it dynamically in a table on a webpage. CO5 L3

(OR)

b) Explain the process of setting up a Git repository. Demonstrate Git commands for cloning, adding files, committing, and pushing to a remote repository. CO5 L3

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