Question Paper Code	14060

M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2025

Fifth Semester

M.Tech. - Computer Science and Engineering (5 Years Integrated)

20CJPC503 - WEB TECHNOLOGY FOUNDATION

Regulations - 2020

Duration: 3 Hours   Max. Marks: 100

PART - A (MCQ) (10 × 1 = 10 Marks)
Answer ALL Questions

		Marks	K–Level	CO
1.	Which tag is used to create a hyperlink? (a) <link> (b) <a> (c) <href> (d) <url>	1	K1	CO1
2.	The correct HTML tag for inserting an image is (a) <imgsrc="pic.jpg"> (b) <image src="pic.jpg"> (c) <picture href="pic.jpg"> (d) <srcimg="pic.jpg">	1	K1	CO1
3.	Which property is used to change text color in CSS? (a) font-color (b) text-color (c) color (d) fgcolor	1	K1	CO2
4.	The property used to control the space inside an element's border is (a) margin (b) padding (c) spacing (d) border	1	K1	CO2
5.	What is the correct syntax to output "Hello World" in javascript? (a) print("Hello World") (b) console.log("Hello World") (c) echo("Hello World") (d) document.write("Hello World")	1	K1	CO3
6.	How do you create a function in javascript? (a) function myFunction() (b) def myFunction() (c) create myFunction() (d) method myFunction()	1	K1	CO3
7.	Which symbol is used to define an arrow function in ES6? (a) -> (b) => (c) <= (d) =<	1	K1	CO4
8.	What does the await keyword do? (a) Pauses execution until a promise resolve (b) Executes functions immediately (c) Waits for user input (d) Delays script for 1 second	1	K1	CO4
9.	What does jQuery primarily simplify? (a) CSS styling (b) JavaScript DOM manipulation (c) HTML table design (d) Database connections	1	K1	CO5
10.	Which tag is used to include JavaScript code in HTML? (a) <js> (b) <script> (c) <javascript> (d) <link>	1	K1	CO6

PART - B (12 × 2 = 24 Marks)
Answer ALL Questions

		Marks	K–Level	CO
11.	List the HTML tags that do not require a closing tag.	2	K1	CO1
12.	Differentiate HTML and HTML5.	2	K2	CO1
13.	Define Cascading Style Sheets and list the features.	2	K1	CO2
14.	Compare absolute and relative positioning.	2	K2	CO2
15.	Name the data types in javascript.	2	K1	CO3
16.	Identify the function of justify-content and align-items in Flexbox.	2	K2	CO3
17.	Write the syntax for declaring a variable in JavaScript.	2	K1	CO4
18.	Differentiate between var, let, and const.	2	K2	CO4
19.	Write how the DOM is structured in java script.	2	K1	CO5
20.	Show how jQuery simplifies the event handling.	2	K2	CO5

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create   **14060**

21. Interpret the concept of variable hoisting in javascript	2	K2 CO6
22. Mention any two jQuery traversal methods in javascript.	2	K1 CO6

PART - C (6 × 11 = 66 Marks)
Answer ALL Questions

23. a) Explain the structure and working of a web page using HTML with suitable examples. — 11 K2 CO1

OR

   b) Describe in detail about forms in HTML and create a form to validate user name and password. — 11 K2 CO1

24. a) Design a web page layout using CSS float and positioning techniques. Explain how each property affects the layout. — 11 K2 CO2

OR

   b) Demonstrate the difference between Mobile-First and Desktop-First design approaches with a practical CSS example. — 11 K2 CO2

25. a) Elaborate how control flow and conditional statements affect program logic. Write a program to demonstrate nested conditions. — 11 K2 CO3

OR

   b) Discuss the process of error handling in JavaScript using try-catch blocks. Illustrate with a program that handles runtime errors. — 11 K2 CO3

26. a) Describe the use of template literals and string interpolation in ES6 with example. — 11 K2 CO4

OR

   b) Illustrate the working of map, filter, and reduce functions in javascript with suitable example programs. — 11 K2 CO4

27. a) Demonstrate how JavaScript can manipulate HTML elements using the Document Object Model with suitable examples. — 11 K2 CO5

OR

   b) Illustrate Bootstrap components and CSS classes to design a responsive webpage layout. — 11 K2 CO5

28. a) Elaborate how AJAX improves web application performance through asynchronous data exchange. — 11 K2 CO6

OR

   b) Differentiate between inline scripting and external javascript linking and analyze their impact on webpage maintainability. — 11 K2 CO6