# Randomly Selected Questions - Set 7

**Question 1 (ID: 1.3.3):** True/False: Nested <p> tags are valid in HTML and do not cause any errors in document rendering.

**Question 2 (ID: 1.5.8):** True/False: The dimensions specified in the <img> tag always override the natural size of the image.

**Question 3 (ID: 4.10.10):** Multiple Choice: What is the purpose of the CSS Object Model (CSSOM)?  
  
- (A) To provide APIs for accessing and manipulating CSS styles via JavaScript.  
- (B) To store JavaScript functions.  
- (C) To create HTML elements.  
- (D) To validate CSS properties.

**Question 4 (ID: 4.10.4):** Multiple Choice: What is the output of the following code?  
  
let myDiv = document.getElementById("mydiv");  
myDiv.style.setProperty("width", "200px");  
myDiv.style.setProperty("background-color", "red");  
  
- (A) The div's width changes to 200px and the background color changes to red.  
- (B) The div's width changes to 100px and the background color stays green.  
- (C) The div is hidden.  
- (D) The code throws an error.

**Question 5 (ID: 1.6.2):** Multiple Choice: Which HTML element is used to create an unordered list?  
 - (A) <ol>  
 - (B) <ul>  
 - (C) <li>  
 - (D) <list>

**Question 6 (ID: 1.2.10):** Multiple Choice: Which tag is specifically designed to programmatically access the content?  
 - (A) <script>  
 - (B) <output>  
 - (C) <template>  
 - (D) <object>

**Question 7 (ID: 3.9.3):** Multi-Select: Which of the following methods can be used to access object properties? (Select all that apply)  
  
(A) Dot notation  
(B) Bracket notation  
(C) Object.keys()  
(D) Object.getOwnPropertyNames()

**Question 8 (ID: 3.2.8):** Multiple Choice: What happens when you try to add a number and a string in JavaScript?  
- (A) The number is converted to a string, and concatenation occurs  
- (B) The string is converted to a number, and addition occurs  
- (C) An error is thrown  
- (D) The result is always NaN (Not a Number)

**Question 9 (ID: 1.8.6):** Multiple Choice: What does it mean if an element is described as an "inline" element?  
 - (A) It occupies the full width of its parent container.  
 - (B) It does not start on a new line and only takes up as much width as necessary.  
 - (C) It cannot contain other elements.  
 - (D) It is always hidden from view.

**Question 10 (ID: 4.8.5):** Multiple Choice: What happens when you call `removeChild()` on a DOM node?  
  
- (A) It moves the child node to another parent.  
- (B) It deletes the child node from the DOM.  
- (C) It hides the child node without removing it.  
- (D) It duplicates the child node.

**Question 11 (ID: 1.1.9):** True/False: Every device connected to the Internet must have a unique IP address in the IPv4 or IPv6 standard.

**Question 12 (ID: 1.5.4):** True/False: The 'alt' attribute is required in <img> tags to pass HTML validation.

**Question 13 (ID: 2.3.8):** Multiple Choice: Which CSS property combines the definitions of `background-color`, `background-image`, `background-position`, and `background-repeat`?  
 - (A) background-combine  
 - (B) background  
 - (C) background-set  
 - (D) background-all

**Question 14 (ID: 2.1.2):** Multiple Choice: Which CSS property is used to change the text color of an element?  
 - (A) color  
 - (B) background-color  
 - (C) font-style  
 - (D) text-decoration

**Question 15 (ID: 4.3.8):** Multiple Choice: What is the primary difference between the `GET` and `POST` methods when submitting form data?  
  
- (A) GET sends data as part of the URL, while POST sends data in the request body.  
- (B) GET is faster than POST.  
- (C) POST can only be used for file uploads.  
- (D) POST does not send data.

**Question 16 (ID: 3.4.9):** Multiple Choice: In a switch statement, what happens if a case block does not include a `break` statement?  
- (A) The code execution stops and no further cases are evaluated  
- (B) The next case's block is executed, even if it does not match  
- (C) The default case is automatically executed  
- (D) The code throws an error

**Question 17 (ID: 4.5.10):** Multi-Select: Which of the following CSS properties can be applied to improve the usability of input fields in a form? (Select all that apply)  
  
- (A) padding  
- (B) border  
- (C) width  
- (D) height

**Question 18 (ID: 3.6.10):** Multi-Select: Which of the following are advantages of using arrow functions in JavaScript? (Select all that apply)  
  
- (A) Shorter syntax compared to regular functions  
- (B) Implicit return when only one expression is present  
- (C) They automatically bind `this` to the current context  
- (D) Arrow functions are faster than regular functions

**Question 19 (ID: 2.7.8):** Multiple Choice: How do you center flex items along the cross-axis in a flex container?  
 - (A) `justify-content: center;`  
 - (B) `align-items: center;`  
 - (C) `flex-grow: 1;`  
 - (D) `flex-shrink: 0;`

**Question 20 (ID: 4.4.5):** Multiple Choice: What is the difference between checkboxes and radio buttons?  
  
- (A) Only checkboxes can be used in forms.  
- (B) Checkboxes allow multiple selections, while radio buttons only allow one selection per group.  
- (C) Radio buttons are limited to numerical input.  
- (D) Radio buttons can be selected or deselected, while checkboxes cannot.

**Question 21 (ID: 1.2.6):** True/False: The <aside> tag is used to denote content that is tangentially related to the content around it.

**Question 22 (ID: 3.8.4):** Multiple Choice: What will be the output of the following code?  
  
javascript  
Copy code  
let teams = ["Tigers", "Bisons", "Eagles", "Cobras"];  
console.log(teams.length);  
(A) 0  
(B) 2  
(C) 4  
(D) undefined

**Question 23 (ID: 1.9.4):** Multiple Choice: What attribute of the `<td>` element makes it span multiple columns?  
 - (A) `expand`  
 - (B) `colspan`  
 - (C) `stretch`  
 - (D) `widthspan`

**Question 24 (ID: 3.1.3):** Multiple Choice: JavaScript uses an interpreter to execute code. What is an interpreter's main role?  
 - (A) To compile code into machine language before execution  
 - (B) To execute code without compiling it into machine language first  
 - (C) To optimize JavaScript code for web browsers  
 - (D) To compile JavaScript into assembly code

**Question 25 (ID: 3.10.5):** Multiple Choice: What is the output of the following code?  
  
let contacts = {  
 Rosa: { phone: "303-555-4321", email: "rosa@gmail.com" },  
 Dave: { phone: "501-533-9988", email: "dave@yahoo.com" }  
};  
console.log(contacts["Dave"].email);  
  
- (A) rosa@gmail.com  
- (B) 501-533-9988  
- (C) dave@yahoo.com  
- (D) undefined

**Question 26 (ID: 2.7.7):** Multi-Select: Which values can the `align-items` property accept? (Select all that apply)  
 - (A) `flex-start`  
 - (B) `center`  
 - (C) `space-between`  
 - (D) `flex-end`

**Question 27 (ID: 1.3.9):** True/False: The use of the <br> tag is recommended for managing the layout and spacing of elements in a webpage.

**Question 28 (ID: 1.2.9):** True/False: Inline styles added directly to HTML elements using the 'style' attribute are discouraged in modern web development practices.

**Question 29 (ID: 4.8.9):** Multiple Choice: Which method is used to insert a node before another node in the DOM?  
  
- (A) `removeChild()`  
- (B) `appendChild()`  
- (C) `insertBefore()`  
- (D) `createElement()`

**Question 30 (ID: 3.5.6):** Multiple Choice: What is the output of the following code?  
let count = 10; do {   
 console.log(count); count--;   
 } while (count > 5);  
  
- (A) 10, 9, 8, 7, 6  
- (B) 9, 8, 7, 6, 5  
- (C) 10, 9, 8, 7, 6, 5  
- (D) The code will not execute.

**Question 31 (ID: 3.8.6):** Multiple Choice: What is the purpose of the forEach() method in JavaScript?  
  
(A) To return a new array with modified values.  
(B) To loop through each element of an array and apply a function to each element.  
(C) To remove elements from an array.  
(D) To concatenate two arrays.

**Question 32 (ID: 1.7.9):** Multiple Choice: How do you create a hyperlink that points to a specific section of the same webpage?  
 - (A) Use the `id` attribute in the `<a>` tag  
 - (B) Use the `name` attribute in the `<a>` tag  
 - (C) Use a hash (`#`) followed by the section's identifier in the `href` attribute  
 - (D) Use the `link` element

**Question 33 (ID: 3.11.3):** Multi-Select: Which of the following methods can be used to extract a substring from a string? (Select all that apply)  
  
- (A) `substring()`  
- (B) `substr()`  
- (C) `slice()`  
- (D) `charAt()`

**Question 34 (ID: 2.4.2):** Multiple Choice: Which unit is relative to the parent element’s font size?  
 - (A) px  
 - (B) em  
 - (C) cm  
 - (D) pt

**Question 35 (ID: 2.6.1):** Multiple Choice: What does `position: relative;` do in CSS?  
 - (A) Positions an element relative to its parent element  
 - (B) Positions an element based on the top-left corner of the viewport  
 - (C) Positions an element relative to its normal position in the document flow  
 - (D) Positions an element relative to the first parent with a position other than `static`

**Question 36 (ID: 2.2.2):** Multiple Choice: What does an ID selector begin with in CSS?  
 - (A) A hash (#)  
 - (B) A dot (.)  
 - (C) An at sign (@)  
 - (D) A dollar sign ($)

**Question 37 (ID: 1.5.1):** Multiple Choice: What is the purpose of the 'alt' attribute in an <img> tag?  
 - (A) To provide a caption for the image  
 - (B) To display an alternative text description if the image cannot be loaded  
 - (C) To increase the image size  
 - (D) To link to another webpage

**Question 38 (ID: 3.10.8):** Multiple Choice: What will the following code output?  
  
let courses = {  
 "101": "Math",  
 "102": "English",  
 "103": "History"  
};  
for (let course in courses) {  
 console.log(course + ": " + courses[course]);  
}  
  
- (A) "101: Math", "102: English", "103: History"  
- (B) "Math", "English", "History"  
- (C) "101: History", "102: English", "103: Math"  
- (D) undefined

**Question 39 (ID: 3.10.9):** Multiple Choice: How do you check if an object contains a specific key?  
  
- (A) if (object.key !== undefined)  
- (B) if (key in object)  
- (C) if (Object.hasKey(object, key))  
- (D) if (object.includes(key))

**Question 40 (ID: 3.11.6):** Multiple Choice: What is the result of this code?  
  
let text = "Hello World!";  
let newText = text.replace("World", "JavaScript");  
console.log(newText);  
  
- (A) Hello World!  
- (B) Hello JavaScript!  
- (C) Hello Java!  
- (D) Error

**Question 41 (ID: 3.1.7):** Multi-Select: Which of the following are valid data types in JavaScript? (Select all that apply)  
 - (A) string  
 - (B) boolean  
 - (C) number  
 - (D) char

**Question 42 (ID: 2.7.2):** Multiple Choice: In a flex container, how do you align the items along the main axis?  
 - (A) `align-items`  
 - (B) `justify-content`  
 - (C) `align-content`  
 - (D) `flex-direction`

**Question 43 (ID: 3.5.2):** Multiple Choice: What is the output of the following code?  
  
let i = 1; while (i <= 3) {   
 console.log(i); i++;   
 }   
 console.log("Done!");  
  
  
- (A) 1, 2, 3, Done!  
- (B) 1, 2, 3  
- (C) 1, 2, 3, 4, Done!  
- (D) Done!

**Question 44 (ID: 2.2.1):** Multiple Choice: Which selector is used to apply styles to elements with a specific class?  
 - (A) #  
 - (B) .  
 - (C) :  
 - (D) \*

**Question 45 (ID: 4.10.6):** Multiple Choice: What is the effect of the following code?  
  
let myDiv = document.getElementById("mydiv");  
myDiv.style.removeProperty("width");  
  
- (A) The div's width is removed, making it span the entire width of the page.  
- (B) The div is deleted from the DOM.  
- (C) The div's background color changes.  
- (D) The div's height is set to 0.

**Question 46 (ID: 4.10.9):** Multiple Choice: What happens when `getPropertyValue("width")` is called on an element?  
  
- (A) It returns the current value of the element's width property.  
- (B) It sets the element's width to 100px.  
- (C) It removes the width property from the element.  
- (D) It adds a new width property to the element.

**Question 47 (ID: 3.11.2):** Multiple Choice: What is the output of the following code?  
  
let str = "JavaScript";  
console.log(str.charAt(4));  
  
- (A) "J"  
- (B) "S"  
- (C) "v"  
- (D) "a"

**Question 48 (ID: 2.4.6):** Multiple Choice: Which CSS property changes the text style to italic?  
 - (A) font-weight  
 - (B) font-style  
 - (C) text-decoration  
 - (D) text-align

**Question 49 (ID: 3.10.6):** Multiple Choice: What is the result of this code?  
  
let stateCapitals = {  
 AR: "Little Rock",  
 CO: "Denver"  
};  
delete stateCapitals["CO"];  
console.log("CO" in stateCapitals);  
  
- (A) true  
- (B) false  
- (C) undefined  
- (D) An error is thrown

**Question 50 (ID: 1.8.3):** True/False: The `<span>` element is used for creating block containers.

# Answers

**Answer to Question 1:** False

**Answer to Question 2:** False

**Answer to Question 3:** (A) To provide APIs for accessing and manipulating CSS styles via JavaScript.

**Answer to Question 4:** (A) The div's width changes to 200px and the background color changes to red.

**Answer to Question 5:** (B) <ul>

**Answer to Question 6:** (A) <script>

**Answer to Question 7:** (A) Dot notation, (B) Bracket notation

**Answer to Question 8:** (A) The number is converted to a string, and concatenation occurs

**Answer to Question 9:** (B) It does not start on a new line and only takes up as much width as necessary.

**Answer to Question 10:** (B) It deletes the child node from the DOM.

**Answer to Question 11:** True

**Answer to Question 12:** True

**Answer to Question 13:** (B) background

**Answer to Question 14:** (A) color

**Answer to Question 15:** (A) GET sends data as part of the URL, while POST sends data in the request body.

**Answer to Question 16:** (B) The next case's block is executed, even if it does not match

**Answer to Question 17:** (A) padding, (B) border, (C) width, (D) height

**Answer to Question 18:** (A) Shorter syntax compared to regular functions, (B) Implicit return when only one expression is present, (C) They automatically bind `this` to the current context

**Answer to Question 19:** (B) `align-items: center;`

**Answer to Question 20:** (B) Checkboxes allow multiple selections, while radio buttons only allow one selection per group.

**Answer to Question 21:** True

**Answer to Question 22:** (C) 4

**Answer to Question 23:** (B) `colspan`

**Answer to Question 24:** (B) To execute code without compiling it into machine language first

**Answer to Question 25:** (C) dave@yahoo.com

**Answer to Question 26:** (A) `flex-start`, (B) `center`, (D) `flex-end`

**Answer to Question 27:** False

**Answer to Question 28:** True

**Answer to Question 29:** (C) `insertBefore()`

**Answer to Question 30:** (A) 10, 9, 8, 7, 6

**Answer to Question 31:** (B) To loop through each element of an array and apply a function to each element.

**Answer to Question 32:** (C) Use a hash (`#`) followed by the section's identifier in the `href` attribute

**Answer to Question 33:** (A) `substring()`, (B) `substr()`, (C) `slice()`

**Answer to Question 34:** (B) em

**Answer to Question 35:** (C) Positions an element relative to its normal position in the document flow

**Answer to Question 36:** (A) A hash (#)

**Answer to Question 37:** (B) To display an alternative text description if the image cannot be loaded

**Answer to Question 38:** (A) "101: Math", "102: English", "103: History"

**Answer to Question 39:** (B) if (key in object)

**Answer to Question 40:** (B) Hello JavaScript!

**Answer to Question 41:** (A) string, (B) boolean, (C) number

**Answer to Question 42:** (B) `justify-content`

**Answer to Question 43:** (A) 1, 2, 3, Done!

**Answer to Question 44:** (B) .

**Answer to Question 45:** (A) The div's width is removed, making it span the entire width of the page.

**Answer to Question 46:** (A) It returns the current value of the element's width property.

**Answer to Question 47:** (D) "a"

**Answer to Question 48:** (B) font-style

**Answer to Question 49:** (B) false

**Answer to Question 50:** False