# Randomly Selected Questions - Set 7

**Question 1 (ID: 1.7.3):** True/False: The `mailto:` URL scheme in an `<a>` tag's href attribute is used to link to another webpage.

**Question 2 (ID: 3.6.3):** Multi-Select: Which of the following are valid ways to call a function in JavaScript? (Select all that apply)  
  
- (A) myFunc()  
- (B) call myFunc()  
- (C) myFunc(3, 4)  
- (D) myFunc;

**Question 3 (ID: 1.9.1):** True/False: The `<table>` tag is used for creating structured layouts for web pages.

**Question 4 (ID: 4.2.3):** Multi-Select: Which of the following characters are considered special characters in regular expressions? (Select all that apply)  
  
- (A) `\*`  
- (B) `+`  
- (C) `/`  
- (D) `$`

**Question 5 (ID: 3.4.1):** Multiple Choice: Which of the following is considered a falsy value in JavaScript?  
 - (A) "0"  
 - (B) 1  
 - (C) 0  
 - (D) "false"

**Question 6 (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 7 (ID: 1.4.9):** True/False: It is considered good practice to use comments to explain complex parts of the code.

**Question 8 (ID: 3.7.2):** Multiple Choice: In JavaScript, what type of scope does a variable declared with `var` inside a function have?  
  
- (A) Global scope  
- (B) Block scope  
- (C) Function scope  
- (D) Lexical scope

**Question 9 (ID: 4.11.6):** Multiple Choice: What is the output of the following validation code?  
  
```html  
<input type="text" id="zipCode" pattern="\d{5}" required>  
(A) It checks that the input is a 5-digit number and is required.  
(B) It checks that the input is exactly 5 letters.  
(C) It checks that the input can be a number or letters.  
(D) It does not perform any validation.

**Question 10 (ID: 4.10.8):** Multiple Choice: Which CSS property is modified in the following code?  
  
document.getElementById("box").style.backgroundColor = "blue";  
  
- (A) `background-color`  
- (B) `color`  
- (C) `border-color`  
- (D) `width`

**Question 11 (ID: 4.7.6):** Multiple Choice: What happens when you modify the `textContent` property of a DOM element?  
  
- (A) It replaces the element with a new element.  
- (B) It updates the text inside the element.  
- (C) It changes the element's CSS styling.  
- (D) It removes the element from the DOM.

**Question 12 (ID: 2.2.8):** Multi-Select: Which statements are true about ID selectors? (Select all that apply)  
 - (A) They can be used on more than one element per page.  
 - (B) They are unique to a single element on a page.  
 - (C) They have higher specificity than class selectors.  
 - (D) They are denoted by a period (.)

**Question 13 (ID: 3.4.7):** Multiple Choice: What is the main difference between using a switch statement and an if-else chain?  
- (A) Switch uses strict equality (===) while if-else does not  
- (B) If-else can only evaluate strings while switch can evaluate numbers  
- (C) If-else is faster in execution than switch  
- (D) Switch allows for more flexible comparisons than if-else

**Question 14 (ID: 1.3.2):** Multiple Choice: What is the purpose of the <p> tag in an HTML document?  
 - (A) To define a line break  
 - (B) To emphasize text  
 - (C) To create a paragraph  
 - (D) To insert an image

**Question 15 (ID: 1.9.3):** True/False: The `<caption>` tag must appear after the table rows.

**Question 16 (ID: 1.3.4):** Multiple Choice: How do browsers typically display paragraphs?  
 - (A) With no spacing between paragraphs  
 - (B) With extra spacing above and below paragraphs  
 - (C) By indenting the first line of each paragraph  
 - (D) By making the text bold

**Question 17 (ID: 1.2.6):** True/False: The <aside> tag is used to denote content that is tangentially related to the content around it.

**Question 18 (ID: 1.5.8):** True/False: The dimensions specified in the <img> tag always override the natural size of the image.

**Question 19 (ID: 2.4.7):** Multiple Choice: What does the `font-variant` property affect?  
 - (A) The transformation of text to uppercase or lowercase  
 - (B) The embellishment of text like underlining  
 - (C) The presentation of lowercase letters as small capitals  
 - (D) The alignment of text

**Question 20 (ID: 3.6.6):** Multiple Choice: What is the default value returned by a function if there is no explicit return statement?  
  
- (A) 0  
- (B) null  
- (C) undefined  
- (D) An error is thrown

**Question 21 (ID: 1.1.2):** Multiple Choice: What is the maximum number in any single part of an IPv4 address?  
 - (A) 100  
 - (B) 255  
 - (C) 500  
 - (D) 1024

**Question 22 (ID: 4.11.10):** Multiple Choice: How does the maxlength attribute help with form validation?  
  
(A) It limits the number of characters a user can enter into a field.  
(B) It prevents users from submitting the form.  
(C) It automatically corrects the length of input.  
(D) It replaces the entered text with a default value.)

**Question 23 (ID: 4.11.5):** Multiple Choice: What happens if a form input field is marked as `required` but left empty when submitting the form?  
  
- (A) The form will not submit, and the field will be highlighted as invalid.  
- (B) The form will submit with an empty value.  
- (C) The form will automatically fill in the required field.  
- (D) The form will be submitted, but a warning will be shown.

**Question 24 (ID: 3.11.1):** Multiple Choice: What does the `charAt()` method do in JavaScript?  
  
- (A) Returns the character at the specified index in a string.  
- (B) Returns the Unicode value of a character.  
- (C) Converts the character at the specified index to uppercase.  
- (D) Removes the character at the specified index.

**Question 25 (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 26 (ID: 2.6.3):** Multi-Select: Which positioning values remove an element from the normal document flow? (Select all that apply)  
 - (A) `position: absolute;`  
 - (B) `position: relative;`  
 - (C) `position: fixed;`  
 - (D) `position: sticky;`

**Question 27 (ID: 3.6.4):** Multiple Choice: Which of the following is the correct way to return a value from a function?  
  
- (A) output()  
- (B) return  
- (C) return value;  
- (D) output value;

**Question 28 (ID: 3.8.1):** Multiple Choice: What is the result of the following code?  
  
```javascript  
let scores = [6, 15, 8];  
console.log(scores[1]);  
(A) 6  
(B) 15  
(C) 8  
(D) undefined

**Question 29 (ID: 4.3.5):** Multiple Choice: What does the `enctype` attribute do in a form element?  
  
- (A) It specifies how the form data should be encoded when submitted.  
- (B) It specifies the URL where the form should be submitted.  
- (C) It specifies the HTTP method to use when submitting the form.  
- (D) It formats the form data as JSON.

**Question 30 (ID: 3.7.3):** Multi-Select: Which of the following statements about `let` and `var` are true? (Select all that apply)  
  
- (A) Variables declared with `let` are not hoisted.  
- (B) Variables declared with `var` are hoisted.  
- (C) Variables declared with `let` have block scope.  
- (D) Variables declared with `var` have function scope.

**Question 31 (ID: 1.1.1):** True/False: An IP address can consist of any four numbers between 1 and 1000.

**Question 32 (ID: 1.1.4):** True/False: IPv6 uses 128-bit addresses to allow for a greater number of unique IP addresses compared to IPv4.

**Question 33 (ID: 3.7.9):** Multiple Choice: In the following code, which variables are in scope inside the if block?  
  
javascript  
let a = 10;  
function checkScope() {  
 var b = 20;  
 if (true) {  
 let c = 30;  
 console.log(a);  
 console.log(b);  
 console.log(c);  
 }  
}  
checkScope();  
(A) Only a  
(B) Only c  
(C) a, b, and c  
(D) Only a and b

**Question 34 (ID: 2.1.4):** Multi-Select: Which of the following are valid ways to integrate CSS into a webpage? (Select all that apply)  
 - (A) Inline styles  
 - (B) Internal stylesheets  
 - (C) External stylesheets  
 - (D) Importing CSS via JavaScript

**Question 35 (ID: 1.1.8):** Multiple Choice: Which version of IP is used to create a private network?  
 - (A) IPv3  
 - (B) IPv4  
 - (C) IPv6  
 - (D) IPv8

**Question 36 (ID: 4.10.1):** Multiple Choice: Which JavaScript method is used to get the value of an element's CSS property?  
  
- (A) `getPropertyValue()`  
- (B) `setProperty()`  
- (C) `removeProperty()`  
- (D) `querySelector()`

**Question 37 (ID: 4.9.1):** Multiple Choice: What is an event in JavaScript?  
  
- (A) A user action or occurrence detected by the browser  
- (B) A method to style HTML elements  
- (C) A type of variable in JavaScript  
- (D) A function that loads the page

**Question 38 (ID: 4.7.7):** Multi-Select: Which of the following methods are used to search for nodes in the DOM? (Select all that apply)  
  
- (A) `document.getElementById()`  
- (B) `document.querySelector()`  
- (C) `document.createTextNode()`  
- (D) `document.getElementsByTagName()`

**Question 39 (ID: 4.9.7):** Multi-Select: Which of the following are valid ways to register an event handler in JavaScript? (Select all that apply)  
  
- (A) Embedding the event handler in the HTML as an attribute  
- (B) Using `addEventListener()`  
- (C) Overwriting the event property on a DOM node  
- (D) Using the CSS `event-handler` property

**Question 40 (ID: 2.2.3):** Multi-Select: Which of the following are true about class selectors? (Select all that apply)  
 - (A) They can be used to style multiple elements simultaneously.  
 - (B) They must be unique within a page.  
 - (C) They are represented by a period (.) prefix.  
 - (D) They have higher specificity than element selectors.

**Question 41 (ID: 4.6.7):** Multiple Choice: What is the window object in JavaScript?  
  
- (A) It represents the browser's window or frame that displays the document.  
- (B) It represents an HTML element in the DOM.  
- (C) It is a method for creating pop-up windows.  
- (D) It is a method for closing a webpage.

**Question 42 (ID: 3.7.8):** Multiple Choice: What happens when you declare a variable without var, let, or const inside a function?  
  
(A) It becomes a local variable.  
(B) It becomes a block-scoped variable.  
(C) It becomes a global variable.  
(D) It throws an error.

**Question 43 (ID: 3.7.4):** Multiple Choice: What happens when you try to access a `let` variable before it has been declared?  
  
- (A) The variable is undefined.  
- (B) The variable is set to `null`.  
- (C) A ReferenceError is thrown.  
- (D) It automatically assigns a default value.

**Question 44 (ID: 1.3.5):** True/False: Adding extra spaces within the text in an HTML document will affect the spacing between words in most web browsers.

**Question 45 (ID: 4.3.9):** Multi-Select: Which of the following input types are valid in an HTML form? (Select all that apply)  
  
- (A) text  
- (B) password  
- (C) file  
- (D) hyperlink

**Question 46 (ID: 4.9.10):** Multiple Choice: What does the `stopPropagation()` method do in an event handler?  
  
- (A) It prevents further propagation of the current event in the capturing or bubbling phase.  
- (B) It stops the current event from completing.  
- (C) It cancels the event and removes all listeners.  
- (D) It triggers the event multiple times.

**Question 47 (ID: 4.4.4):** Multiple Choice: What does the `for` attribute in a `<label>` tag do?  
  
- (A) Associates the label with a specific form element using the element's `id`.  
- (B) Makes the label clickable.  
- (C) Specifies the form's action URL.  
- (D) Makes the label submit the form when clicked.

**Question 48 (ID: 4.1.10):** Multiple Choice: Which of the following methods can be used to get the day of the week from a `Date` object?  
  
- (A) `getWeekDay()`  
- (B) `getDay()`  
- (C) `getDate()`  
- (D) `getFullDay()`

**Question 49 (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 50 (ID: 1.3.7):** True/False: The <br> tag requires a closing tag.

# Answers

**Answer to Question 1:** False

**Answer to Question 2:** (A) myFunc(), (C) myFunc(3, 4)

**Answer to Question 3:** False

**Answer to Question 4:** (A) `\*`, (B) `+`, (D) `$`

**Answer to Question 5:** (C) 0

**Answer to Question 6:** (A) To provide APIs for accessing and manipulating CSS styles via JavaScript.

**Answer to Question 7:** True

**Answer to Question 8:** (C) Function scope

**Answer to Question 9:** (A) It checks that the input is a 5-digit number and is required.

**Answer to Question 10:** (A) `background-color`

**Answer to Question 11:** (B) It updates the text inside the element.

**Answer to Question 12:** (B) They are unique to a single element on a page, (C) They have higher specificity than class selectors

**Answer to Question 13:** (A) Switch uses strict equality (===) while if-else does not

**Answer to Question 14:** (C) To create a paragraph

**Answer to Question 15:** False

**Answer to Question 16:** (B) With extra spacing above and below paragraphs

**Answer to Question 17:** True

**Answer to Question 18:** False

**Answer to Question 19:** (C) The presentation of lowercase letters as small capitals

**Answer to Question 20:** (C) undefined

**Answer to Question 21:** (B) 255

**Answer to Question 22:** (A) It limits the number of characters a user can enter into a field.

**Answer to Question 23:** (A) The form will not submit, and the field will be highlighted as invalid.

**Answer to Question 24:** (A) Returns the character at the specified index in a string.

**Answer to Question 25:** (A) color

**Answer to Question 26:** (A) `position: absolute;`, (C) `position: fixed;`

**Answer to Question 27:** (C) return value;

**Answer to Question 28:** (B) 15

**Answer to Question 29:** (A) It specifies how the form data should be encoded when submitted.

**Answer to Question 30:** (B) Variables declared with `var` are hoisted., (C) Variables declared with `let` have block scope., (D) Variables declared with `var` have function scope.

**Answer to Question 31:** False

**Answer to Question 32:** True

**Answer to Question 33:** (C) `a`, `b`, and `c`

**Answer to Question 34:** (A) Inline styles, (B) Internal stylesheets, (C) External stylesheets

**Answer to Question 35:** (B) IPv4

**Answer to Question 36:** (A) `getPropertyValue()`

**Answer to Question 37:** (A) A user action or occurrence detected by the browser

**Answer to Question 38:** (A) `document.getElementById()`, (B) `document.querySelector()`, (D) `document.getElementsByTagName()`

**Answer to Question 39:** (A) Embedding the event handler in the HTML as an attribute, (B) Using `addEventListener()`, (C) Overwriting the event property on a DOM node

**Answer to Question 40:** (A) They can be used to style multiple elements simultaneously, (C) They are represented by a period (.) prefix, (D) They have higher specificity than element selectors.

**Answer to Question 41:** (A) It represents the browser's window or frame that displays the document.

**Answer to Question 42:** (C) It becomes a global variable.

**Answer to Question 43:** (C) A ReferenceError is thrown.

**Answer to Question 44:** False

**Answer to Question 45:** (A) text, (B) password, (C) file

**Answer to Question 46:** (A) It prevents further propagation of the current event in the capturing or bubbling phase.

**Answer to Question 47:** (A) Associates the label with a specific form element using the element's `id`.

**Answer to Question 48:** (B) `getDay()`

**Answer to Question 49:** (A) 10, 9, 8, 7, 6

**Answer to Question 50:** False