# Randomly Selected Questions - Set 6

**Question 1 (ID: 2.2.1):** Multiple Choice: Which selector is used to apply styles to elements with a specific class?  
 - (A) #  
 - (B) .  
 - (C) :  
 - (D) \*

**Question 2 (ID: 1.7.10):** True/False: Relative URLs cannot be used within the `<a>` element to link to resources within the same site.

**Question 3 (ID: 2.7.10):** Multi-Select: Which of the following are valid values for the `flex-direction` property? (Select all that apply)  
 - (A) `row`  
 - (B) `row-reverse`  
 - (C) `column`  
 - (D) `column-reverse`

**Question 4 (ID: 1.9.10):** Multiple Choice: What is the purpose of the `<tfoot>` element in an HTML table?  
 - (A) To provide a summary or total row at the bottom of the table sections  
 - (B) To define the main content of the table  
 - (C) To add a header to the table  
 - (D) To decorate the table with additional styling

**Question 5 (ID: 2.4.10):** Multiple Choice: Which of the following is a generic family name in CSS?  
 - (A) Arial  
 - (B) sans-serif  
 - (C) Georgia  
 - (D) Garamond

**Question 6 (ID: 4.11.3):** Multi-Select: Which of the following are common methods for performing form validation using JavaScript? (Select all that apply)  
  
- (A) Validating data while the user is typing  
- (B) Validating data immediately after the form is submitted  
- (C) Using regular expressions to validate patterns like ZIP codes  
- (D) Using server-side validation only

**Question 7 (ID: 4.5.5):** Multiple Choice: What happens when you set `cursor: pointer` on a submit button?  
  
- (A) The button becomes clickable, but the pointer does not change.  
- (B) The cursor changes to a hand icon when hovering over the button.  
- (C) The button cannot be clicked.  
- (D) The button changes color on hover.

**Question 8 (ID: 4.1.2):** Multiple Choice: What is the output of the following code?  
  
let currDateTime = new Date();  
console.log(currDateTime);  
  
- (A) The current time in UTC  
- (B) The current time in the local time zone  
- (C) Jan 1, 1970, 00:00:00 UTC  
- (D) An error

**Question 9 (ID: 1.7.4):** Multiple Choice: Which URL scheme starts an email program to send an email?  
 - (A) http://  
 - (B) ftp://  
 - (C) mailto:  
 - (D) https://

**Question 10 (ID: 3.8.8):** Multi-Select: Which of the following methods can be used to add elements to an array? (Select all that apply)  
  
(A) push()  
(B) unshift()  
(C) splice()  
(D) pop()  
[3.8.9] Multiple Choice: What does the splice() method do in an array?  
  
(A) It adds an element to the beginning of the array.  
(B) It removes an element from the end of the array.  
(C) It removes or adds elements from/to the array at a specific index.  
(D) It sorts the array.

**Question 11 (ID: 2.6.6):** Multiple Choice: Which of the following CSS properties is typically used to set the stacking order of elements with positioning?  
 - (A) z-index  
 - (B) float  
 - (C) visibility  
 - (D) opacity

**Question 12 (ID: 4.7.1):** Multiple Choice: What is the root node in a DOM tree?  
  
- (A) The `<head>` element  
- (B) The `<body>` element  
- (C) The `<html>` element  
- (D) The first `<div>` element

**Question 13 (ID: 2.6.5):** Multiple Choice: What happens when `position: sticky;` is applied to an element?  
 - (A) The element remains static until it reaches a specified threshold, after which it becomes fixed.  
 - (B) The element is hidden until a scroll event occurs.  
 - (C) The element remains fixed in place once it is rendered.  
 - (D) The element behaves the same as an absolutely positioned element.

**Question 14 (ID: 3.6.7):** Multi-Select: Which of the following are valid function expressions in JavaScript? (Select all that apply)  
  
- (A) let add = function(a, b) { return a + b; }  
- (B) let square = function(x) { return x \* x; }  
- (C) let greet = (name) => "Hello " + name;  
- (D) let divide = (a, b) => { return a / b };

**Question 15 (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 16 (ID: 1.8.8):** Multiple Choice: Which element is most suitable for marking up a sidebar with secondary content like links or advertisements?  
 - (A) `<main>`  
 - (B) `<footer>`  
 - (C) `<aside>`  
 - (D) `<nav>`

**Question 17 (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 18 (ID: 1.9.5):** True/False: The `<tbody>` element is optional in HTML tables.

**Question 19 (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 20 (ID: 1.8.1):** True/False: Containers in HTML are always block-level elements.

**Question 21 (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 22 (ID: 2.5.8):** Multi-Select: What are the possible values for the 'box-sizing' property in CSS? (Select all that apply)  
 - (A) content-box  
 - (B) padding-box  
 - (C) border-box  
 - (D) margin-box

**Question 23 (ID: 4.10.5):** Multiple Choice: What does the `removeProperty()` method do in JavaScript?  
  
- (A) It removes a CSS property from an element's inline style.  
- (B) It removes the entire element from the DOM.  
- (C) It deletes the parent element of the node.  
- (D) It replaces the existing CSS property with a new one.

**Question 24 (ID: 4.8.7):** Multi-Select: Which of the following methods can be used to create a new node in the DOM? (Select all that apply)  
  
- (A) `createElement()`  
- (B) `createTextNode()`  
- (C) `cloneNode()`  
- (D) `insertBefore()`

**Question 25 (ID: 1.8.3):** True/False: The `<span>` element is used for creating block containers.

**Question 26 (ID: 3.10.4):** Multiple Choice: What is the purpose of the `delete` operator in JavaScript?  
  
- (A) To remove a property from an object  
- (B) To clear all properties from an object  
- (C) To reset a property to `undefined`  
- (D) To throw an error if the property does not exist

**Question 27 (ID: 2.6.8):** Multiple Choice: Which value of the `position` property is the default for all elements in a document?  
 - (A) `relative`  
 - (B) `absolute`  
 - (C) `static`  
 - (D) `fixed`

**Question 28 (ID: 4.10.3):** Multi-Select: Which of the following methods can modify the inline style of a DOM element? (Select all that apply)  
  
- (A) `setProperty()`  
- (B) `getPropertyValue()`  
- (C) `removeProperty()`  
- (D) `addEventListener()`

**Question 29 (ID: 3.8.5):** Multiple Choice: What happens when you try to access an element in an array at an index that doesn’t exist?  
  
(A) It throws an error.  
(B) It returns undefined.  
(C) It returns null.  
(D) It crashes the program.

**Question 30 (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 31 (ID: 1.4.5):** True/False: Placing a comment inside an HTML tag will prevent the tag from being rendered.

**Question 32 (ID: 3.5.7):** Multi-Select: Which of the following are valid uses of the `for` loop in JavaScript? (Select all that apply)  
  
- (A) `for (let i = 0; i < 10; i++) { console.log(i); }`  
- (B) `for (let x = 10; x > 0; x--) { console.log(x); }`  
- (C) `for (let i = 1; i <= 5; i++) { if (i === 3) break; }`  
- (D) `for (let i = 0; i++) { console.log(i); }`

**Question 33 (ID: 4.5.4):** Multi-Select: Which of the following attributes can be used to style form inputs for better usability? (Select all that apply)  
  
- (A) padding  
- (B) border-radius  
- (C) color  
- (D) box-shadow

**Question 34 (ID: 3.3.9):** Multi-Select: Which of the following logical operators can be used to combine multiple conditions in JavaScript? (Select all that apply)  
- (A) `&&`  
- (B) `||`  
- (C) `!=`  
- (D) `!`

**Question 35 (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 36 (ID: 1.6.8):** True/False: The <ol> element's numbering can be changed to alphabetical or Roman numerals using the "type" attribute.

**Question 37 (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 38 (ID: 4.6.3):** Multiple Choice: What does the following code do?  
  
let para = document.createElement('p');  
document.body.appendChild(para);  
  
- (A) It creates a new paragraph and appends it to the document body.  
- (B) It removes the first paragraph in the body.  
- (C) It replaces the first paragraph in the body with a new one.  
- (D) It adds a new CSS style to all paragraphs.

**Question 39 (ID: 3.5.10):** Multiple Choice: What is the effect of an infinite loop in JavaScript?  
  
- (A) The program runs forever, causing the browser to crash.  
- (B) The program runs forever, but the browser continues to respond.  
- (C) The loop stops after a fixed number of iterations.  
- (D) The loop automatically terminates after 1000 iterations.

**Question 40 (ID: 3.1.8):** Multiple Choice: What is the result of the following JavaScript code?  
let x; console.log(typeof x);  
  
- (A) number  
- (B) string  
- (C) undefined  
- (D) null

**Question 41 (ID: 1.4.9):** True/False: It is considered good practice to use comments to explain complex parts of the code.

**Question 42 (ID: 4.11.2):** Multiple Choice: What does the `preventDefault()` method do in a form's submit handler?  
  
- (A) It prevents the form from being submitted to the server.  
- (B) It clears all the input fields in the form.  
- (C) It changes the form's action URL.  
- (D) It submits the form automatically without user input.

**Question 43 (ID: 3.7.5):** Multiple Choice: What will be the output of the following code?  
  
```javascript  
function testVar() {  
 if (true) {  
 var x = 10;  
 }  
 console.log(x);  
}  
testVar();  
(A) 10  
(B) undefined  
(C) ReferenceError  
(D) null

**Question 44 (ID: 1.9.1):** True/False: The `<table>` tag is used for creating structured layouts for web pages.

**Question 45 (ID: 3.8.10):** Multiple Choice: What is the result of the following code?  
  
javascript  
Copy code  
let groceries = ["bread", "milk", "peanut butter"];  
groceries.push("eggs");  
console.log(groceries.length);  
(A) 2  
(B) 3  
(C) 4  
(D) 5

**Question 46 (ID: 3.6.9):** Multiple Choice: What will be the output of the following arrow function?  
  
let double = (x) => x \* 2;  
console.log(double(5));  
  
- (A) 5  
- (B) 10  
- (C) undefined  
- (D) An error will occur

**Question 47 (ID: 2.5.7):** Multiple Choice: When does margin collapsing occur?  
 - (A) When adjacent margins of floated elements combine  
 - (B) When vertical margins of block elements touch each other  
 - (C) Only when horizontal margins of inline elements combine  
 - (D) It never occurs in modern CSS

**Question 48 (ID: 1.1.3):** Matching: Match the following domain types to their description:  
 - (A) .com  
 - (B) .edu  
 - (C) .gov  
 - \_\_\_ Commercial  
 - \_\_\_ Educational  
 - \_\_\_ Government

**Question 49 (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 50 (ID: 2.2.9):** Multiple Choice: What is the result of applying multiple CSS rules with different selectors to the same element?  
 - (A) Only the first rule is applied.  
 - (B) Only the last rule is applied.  
 - (C) All rules are applied, but properties are combined based on specificity.  
 - (D) The browser randomly chooses which rule to apply.

# Answers

**Answer to Question 1:** (B) .

**Answer to Question 2:** False

**Answer to Question 3:** (A) `row`, (B) `row-reverse`, (C) `column`, (D) `column-reverse`

**Answer to Question 4:** (A) To provide a summary or total row at the bottom of the table sections

**Answer to Question 5:** (B) sans-serif

**Answer to Question 6:** (A) Validating data while the user is typing, (B) Validating data immediately after the form is submitted, (C) Using regular expressions to validate patterns like ZIP codes

**Answer to Question 7:** (B) The cursor changes to a hand icon when hovering over the button.

**Answer to Question 8:** (B) The current time in the local time zone

**Answer to Question 9:** (C) mailto:

**Answer to Question 10:** (A) push(), (B) unshift(), (C) splice()

**Answer to Question 11:** (A) z-index

**Answer to Question 12:** (C) The `<html>` element

**Answer to Question 13:** (A) The element remains static until it reaches a specified threshold, after which it becomes fixed.

**Answer to Question 14:** (A) let add = function(a, b) { return a + b; }, (B) let square = function(x) { return x \* x; }, (C) let greet = (name) => "Hello " + name;, (D) let divide = (a, b) => { return a / b; }

**Answer to Question 15:** (B) `justify-content`

**Answer to Question 16:** (C) `<aside>`

**Answer to Question 17:** (C) undefined

**Answer to Question 18:** True

**Answer to Question 19:** (A) `position: absolute;`, (C) `position: fixed;`

**Answer to Question 20:** False

**Answer to Question 21:** (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 22:** (A) content-box, (C) border-box

**Answer to Question 23:** (A) It removes a CSS property from an element's inline style.

**Answer to Question 24:** (A) `createElement()`, (B) `createTextNode()`

**Answer to Question 25:** False

**Answer to Question 26:** (A) To remove a property from an object

**Answer to Question 27:** (C) `static`

**Answer to Question 28:** (A) `setProperty()`, (C) `removeProperty()`

**Answer to Question 29:** (B) It returns undefined.

**Answer to Question 30:** (C) return value;

**Answer to Question 31:** False

**Answer to Question 32:** (A) `for (let i = 0; i < 10; i++) { console.log(i); }`, (B) `for (let x = 10; x > 0; x--) { console.log(x); }`, (C) `for (let i = 1; i <= 5; i++) { if (i === 3) break; }`

**Answer to Question 33:** (A) padding, (B) border-radius, (C) color, (D) box-shadow

**Answer to Question 34:** (A) `&&`, (B) `||`, (D) `!`

**Answer to Question 35:** (A) color

**Answer to Question 36:** True

**Answer to Question 37:** (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 38:** (A) It creates a new paragraph and appends it to the document body.

**Answer to Question 39:** (A) The program runs forever, causing the browser to crash.

**Answer to Question 40:** (C) undefined

**Answer to Question 41:** True

**Answer to Question 42:** (A) It prevents the form from being submitted to the server.

**Answer to Question 43:** (A) 10

**Answer to Question 44:** False

**Answer to Question 45:** (C) 4

**Answer to Question 46:** (B) 10

**Answer to Question 47:** (B) When vertical margins of block elements touch each other

**Answer to Question 48:** (A) Commercial, (B) Educational, (C) Government

**Answer to Question 49:** (B) `align-items: center;`

**Answer to Question 50:** (C) All rules are applied, but properties are combined based on specificity.