# Randomly Selected Questions - Set 4

**Question 1 (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 2 (ID: 1.2.7):** Multiple Choice: Which statement is true about the <footer> element?  
 - (A) It should only appear once at the bottom of the document.  
 - (B) It can be used multiple times within sections or articles.  
 - (C) It is deprecated in HTML5.  
 - (D) It is reserved for bottom page copyrights only.

**Question 3 (ID: 3.10.10):** Multiple Choice: What will this code output?  
  
let students = {  
 123: { name: "Tiara", gpa: 3.3 },  
 444: { name: "Lee", gpa: 2.0 }  
};  
console.log(444 in students);  
  
- (A) true  
- (B) false  
- (C) undefined  
- (D) null

**Question 4 (ID: 4.2.4):** Multiple Choice: What does the following regular expression match?  
  
/[aeiou]/g  
  
- (A) Matches a single vowel in a string.  
- (B) Matches all vowels in a string.  
- (C) Matches all consonants in a string.  
- (D) Matches numbers in a string.

**Question 5 (ID: 4.7.5):** Multiple Choice: Which of the following is true about the DOM?  
  
- (A) It is a representation of the HTML structure in the browser.  
- (B) It is only used for static web pages.  
- (C) It does not allow manipulation of HTML elements.  
- (D) It can only be modified using CSS.

**Question 6 (ID: 4.6.1):** Multiple Choice: What is the Document Object Model (DOM) in relation to JavaScript?  
  
- (A) A model representing the visual design of a webpage  
- (B) A data structure representing the content, structure, and style of a document  
- (C) A method for storing variables in JavaScript  
- (D) A technique for minimizing JavaScript files

**Question 7 (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 8 (ID: 4.3.2):** Multiple Choice: What is the default method used if the `method` attribute is not specified in a form?  
  
- (A) POST  
- (B) GET  
- (C) PUT  
- (D) DELETE

**Question 9 (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 10 (ID: 1.5.3):** Multiple Choice: Which attribute specifies the image source in an <img> tag?  
 - (A) href  
 - (B) src  
 - (C) rel  
 - (D) type

**Question 11 (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 12 (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 13 (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 14 (ID: 2.3.6):** Multiple Choice: What is the result of using the `float` property with a value of `left` on an image within a paragraph?  
 - (A) The image is removed from the flow of the document  
 - (B) The image floats to the left, and text wraps around it on the right  
 - (C) The image stays fixed at the left edge of its container  
 - (D) The image aligns to the left, but text does not wrap around it

**Question 15 (ID: 3.2.7):** Multi-Select: Which of the following are valid compound assignment operators in JavaScript? (Select all that apply)  
- (A) `+=`  
- (B) `-=`  
- (C) `\*\*=`  
- (D) `//=`

**Question 16 (ID: 2.6.9):** Multiple Choice: When `position: fixed;` is applied, the element is positioned relative to:  
 - (A) The nearest positioned ancestor  
 - (B) The document’s root element  
 - (C) The viewport  
 - (D) The container's padding box

**Question 17 (ID: 2.4.5):** Multiple Choice: What is the default size of the font-size property if not specified?  
 - (A) 16px  
 - (B) 12px  
 - (C) 10px  
 - (D) 14px

**Question 18 (ID: 3.6.2):** Multiple Choice: What is the output of the following code?  
  
function displaySum(a, b, c) {  
 let sum = a + b + c;  
 console.log(sum);  
}  
displaySum(2, 4, 6);  
  
- (A) 6  
- (B) 10  
- (C) 12  
- (D) 24

**Question 19 (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 20 (ID: 1.4.1):** True/False: HTML comments are rendered in the browser and visible to the user.

**Question 21 (ID: 1.8.4):** Multiple Choice: Which HTML element is typically used as a generic container for styling purposes without any semantic meaning?  
 - (A) `<p>`  
 - (B) `<span>`  
 - (C) `<div>`  
 - (D) `<header>`

**Question 22 (ID: 1.7.7):** Multiple Choice: What attribute would you use to open a hyperlink in a new browser tab?  
 - (A) target="\_self"  
 - (B) target="\_parent"  
 - (C) target="\_blank"  
 - (D) target="\_top"

**Question 23 (ID: 1.9.9):** True/False: Table headers created with `<th>` are automatically bolded and centered by default in most browsers.

**Question 24 (ID: 3.5.3):** Multi-Select: Which of the following loops always execute at least once? (Select all that apply)  
  
- (A) `while` loop  
- (B) `for` loop  
- (C) `do-while` loop  
- (D) Infinite loop

**Question 25 (ID: 4.4.1):** Multiple Choice: What does the `checked` attribute do in a checkbox input?  
  
- (A) It specifies the value of the checkbox.  
- (B) It sets the checkbox to be selected by default.  
- (C) It prevents the checkbox from being unselected.  
- (D) It submits the checkbox value as "on" to the server.

**Question 26 (ID: 3.4.5):** Multiple Choice: What will be the value of `result` after the following code executes?  
let age = 25; let result = age >= 18 ? "Adult" : "Minor";  
- (A) "Adult"  
- (B) "Minor"  
- (C) undefined  
- (D) NaN

**Question 27 (ID: 1.3.10):** Multiple Choice: How should line breaks be managed in HTML for content such as addresses or poetry?  
 - (A) Using <p> tags at the end of each line  
 - (B) Using CSS to manage spacing  
 - (C) Using <br> tags at the end of each line  
 - (D) Using <div> tags for each new line

**Question 28 (ID: 2.7.6):** Multiple Choice: Which flexbox property allows items to grow to fill available space in the container?  
 - (A) `flex-grow`  
 - (B) `flex-shrink`  
 - (C) `flex-basis`  
 - (D) `align-self`

**Question 29 (ID: 1.6.1):** True/False: An unordered list in HTML is used when the order of the items is important.

**Question 30 (ID: 3.9.2):** Multiple Choice: Which of the following is a valid way to add a new property to an existing object?  
  
(A) book.author = "Malcolm Gladwell";  
(B) book.addProperty("author", "Malcolm Gladwell");  
(C) book["author"] = "Malcolm Gladwell";  
(D) Both (A) and (C)

**Question 31 (ID: 3.3.4):** Multiple Choice: What is the purpose of an `if-else` statement in JavaScript?  
- (A) To execute one block of code if a condition is true and another if it is false  
- (B) To execute multiple blocks of code if multiple conditions are true  
- (C) To compare two variables and return a Boolean value  
- (D) To loop through an array of values

**Question 32 (ID: 3.10.3):** Multi-Select: Which of the following are valid ways to loop through an object’s properties? (Select all that apply)  
  
- (A) for (let key in object)  
- (B) for (let key of object)  
- (C) Object.keys(object).forEach()  
- (D) for (let value of Object.values(object))

**Question 33 (ID: 2.3.10):** Multiple Choice: What is the CSS `background-clip` property used for?  
 - (A) To define the painting area of the background  
 - (B) To clip the background to fit the content area only  
 - (C) To add animation effects to the background  
 - (D) To prevent the background from scrolling with the content

**Question 34 (ID: 1.10.3):** True/False: The `value` attribute of an input element is visible to the user and can be modified.

**Question 35 (ID: 2.2.10):** Multiple Choice: How do you select all elements that are the direct children of a <div> element?  
 - (A) div > \*  
 - (B) div + \*  
 - (C) div \*  
 - (D) div ~ \*

**Question 36 (ID: 2.5.5):** Multiple Choice: What is the effect of setting the 'margin' property to 'auto'?  
 - (A) It removes the margin.  
 - (B) It maximizes the margin based on the available space.  
 - (C) It centers the element within its containing element if width is specified.  
 - (D) It minimizes the margin to zero pixels.

**Question 37 (ID: 3.5.8):** Multiple Choice: What does the `continue` statement do in a loop?  
  
- (A) It skips the rest of the loop body for the current iteration and jumps to the next iteration.  
- (B) It exits the loop immediately.  
- (C) It stops the loop temporarily and then resumes from where it left off.  
- (D) It restarts the loop from the beginning.

**Question 38 (ID: 4.4.3):** Multi-Select: Which of the following are valid attributes for a checkbox input in HTML? (Select all that apply)  
  
- (A) `checked`  
- (B) `value`  
- (C) `name`  
- (D) `method`

**Question 39 (ID: 3.5.1):** Multiple Choice: What is the key difference between a `while` loop and a `do-while` loop in JavaScript?  
  
- (A) The `while` loop always runs at least once, while the `do-while` loop might not run at all.  
- (B) The `do-while` loop checks the condition before running the loop body.  
- (C) The `while` loop checks the condition before running the loop body, while the `do-while` loop checks the condition after.  
- (D) There is no difference between `while` and `do-while`.

**Question 40 (ID: 1.5.2):** True/False: The 'src' attribute in an <img> tag is optional.

**Question 41 (ID: 2.7.3):** Multiple Choice: What is the default value of the `flex-direction` property in CSS?  
 - (A) `column`  
 - (B) `row`  
 - (C) `column-reverse`  
 - (D) `row-reverse`

**Question 42 (ID: 1.7.1):** True/False: The `<a>` tag is used to define a division or a section in an HTML document.

**Question 43 (ID: 1.6.3):** True/False: List items within an unordered list are automatically numbered by the browser.

**Question 44 (ID: 4.8.10):** Multiple Choice: What does the `previousElementSibling` property return in the DOM?  
  
- (A) The previous sibling node of any type  
- (B) The previous element node that shares the same parent  
- (C) The last sibling of the parent node  
- (D) The first sibling of the parent node

**Question 45 (ID: 4.7.3):** Multi-Select: Which of the following are valid DOM node types? (Select all that apply)  
  
- (A) Element node  
- (B) Attribute node  
- (C) Text node  
- (D) Document node

**Question 46 (ID: 2.6.4):** Multiple Choice: What is the key difference between `position: fixed;` and `position: absolute;`?  
 - (A) Fixed elements scroll with the page, while absolute elements remain in place.  
 - (B) Fixed elements are positioned relative to the viewport, while absolute elements are positioned relative to their nearest positioned ancestor.  
 - (C) Fixed elements are always at the top of the page, while absolute elements move with the page.  
 - (D) Fixed elements cannot have z-index, while absolute elements can.

**Question 47 (ID: 4.2.7):** Multi-Select: Which of the following are valid uses of square brackets `[]` in regular expressions? (Select all that apply)  
  
- (A) To specify a range of characters to match.  
- (B) To negate a set of characters.  
- (C) To group parts of a regular expression together.  
- (D) To match exactly one of the characters in the set.

**Question 48 (ID: 1.6.7):** Multiple Choice: How can you start an ordered list at a number other than one?  
 - (A) Using the "start" attribute with the desired number  
 - (B) Using the "begin" attribute with the desired number  
 - (C) Using the "first" attribute with the desired number  
 - (D) It is not possible to start at a number other than one

**Question 49 (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 50 (ID: 2.5.1):** Multiple Choice: What does the CSS 'box model' refer to?  
 - (A) A method for designing 3D animations  
 - (B) A concept that encompasses padding, border, and margin of HTML elements  
 - (C) The outline used for interactive elements on a webpage  
 - (D) A debugging tool in modern browsers

# Answers

**Answer to Question 1:** (B) `getDay()`

**Answer to Question 2:** (B) It can be used multiple times within sections or articles.

**Answer to Question 3:** (A) true

**Answer to Question 4:** (B) Matches all vowels in a string.

**Answer to Question 5:** (A) It is a representation of the HTML structure in the browser.

**Answer to Question 6:** (B) A data structure representing the content, structure, and style of a document

**Answer to Question 7:** (B) To display an alternative text description if the image cannot be loaded

**Answer to Question 8:** (B) GET

**Answer to Question 9:** (C) It becomes a global variable.

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

**Answer to Question 11:** (C) The presentation of lowercase letters as small capitals

**Answer to Question 12:** (A) The form will not submit, and the field will be highlighted as invalid.

**Answer to Question 13:** (B) <ul>

**Answer to Question 14:** (B) The image floats to the left, and text wraps around it on the right

**Answer to Question 15:** (A) `+=`, (B) `-=`, (C) `\*\*=`

**Answer to Question 16:** (C) The viewport

**Answer to Question 17:** (A) 16px

**Answer to Question 18:** (C) 12

**Answer to Question 19:** (B) em

**Answer to Question 20:** False

**Answer to Question 21:** (C) `<div>`

**Answer to Question 22:** (C) target="\_blank"

**Answer to Question 23:** True

**Answer to Question 24:** (C) `do-while` loop, (D) Infinite loop

**Answer to Question 25:** (B) It sets the checkbox to be selected by default.

**Answer to Question 26:** (A) "Adult"

**Answer to Question 27:** (C) Using <br> tags at the end of each line

**Answer to Question 28:** (A) `flex-grow`

**Answer to Question 29:** False

**Answer to Question 30:** (D) Both (A) and (C)

**Answer to Question 31:** (A) To execute one block of code if a condition is true and another if it is false

**Answer to Question 32:** (A) for (let key in object), (C) Object.keys(object).forEach(), (D) for (let value of Object.values(object))

**Answer to Question 33:** (A) To define the painting area of the background

**Answer to Question 34:** True

**Answer to Question 35:** (A) div > \*

**Answer to Question 36:** (C) It centers the element within its containing element if width is specified.

**Answer to Question 37:** (A) It skips the rest of the loop body for the current iteration and jumps to the next iteration.

**Answer to Question 38:** (A) `checked`, (B) `value`, (C) `name`

**Answer to Question 39:** (C) The `while` loop checks the condition before running the loop body, while the `do-while` loop checks the condition after.

**Answer to Question 40:** False

**Answer to Question 41:** (B) `row`

**Answer to Question 42:** False

**Answer to Question 43:** False

**Answer to Question 44:** (B) The previous element node that shares the same parent.

**Answer to Question 45:** (A) Element node, (B) Attribute node, (C) Text node, (D) Document node

**Answer to Question 46:** (B) Fixed elements are positioned relative to the viewport, while absolute elements are positioned relative to their nearest positioned ancestor.

**Answer to Question 47:** (A) To specify a range of characters to match., (B) To negate a set of characters., (D) To match exactly one of the characters in the set.

**Answer to Question 48:** (A) Using the "start" attribute with the desired number

**Answer to Question 49:** (A) It checks that the input is a 5-digit number and is required.

**Answer to Question 50:** (B) A concept that encompasses padding, border, and margin of HTML elements