# Randomly Selected Questions - Set 3

**Question 1 (ID: 1.6.6):** True/False: It is valid HTML to nest an unordered list within an ordered list.

**Question 2 (ID: 1.10.2):** Multiple Choice: What attribute of the `<input>` element specifies the kind of data expected to be entered by the user?  
 - (A) type  
 - (B) name  
 - (C) value  
 - (D) placeholder

**Question 3 (ID: 4.5.9):** Multiple Choice: What is the purpose of setting `:hover` on a submit button?  
  
- (A) It ensures the button changes color when hovered over.  
- (B) It disables the button when hovered.  
- (C) It changes the text color of the button.  
- (D) It resizes the button when clicked.

**Question 4 (ID: 3.11.5):** Multiple Choice: What does the `replace()` method do in JavaScript?  
  
- (A) Removes the specified substring.  
- (B) Finds and replaces a substring in a string.  
- (C) Finds and appends a substring to a string.  
- (D) Duplicates a substring within a string.

**Question 5 (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 6 (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 7 (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 8 (ID: 1.7.1):** True/False: The `<a>` tag is used to define a division or a section in an HTML document.

**Question 9 (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 10 (ID: 1.1.10):** Multiple Choice: What does the '255.255.255.0' number represent in a network setting?  
 - (A) IP address  
 - (B) Network prefix  
 - (C) Subnet mask  
 - (D) Default gateway

**Question 11 (ID: 3.1.5):** Multiple Choice: What happens when a variable is declared with `const` in JavaScript?  
 - (A) The variable's value can change  
 - (B) The variable's value cannot be reassigned  
 - (C) The variable is block-scoped and can be modified  
 - (D) The variable becomes global by default

**Question 12 (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 13 (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 14 (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 15 (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 16 (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 17 (ID: 3.1.6):** Multiple Choice: Which function is used to display output in a browser's console?  
 - (A) alert()  
 - (B) write()  
 - (C) console.log()  
 - (D) print()

**Question 18 (ID: 1.10.5):** True/False: The `<label>` element is optional for `<input>` elements but recommended for accessibility.

**Question 19 (ID: 1.10.1):** True/False: The `<input>` element can only be used for text fields in HTML forms.

**Question 20 (ID: 3.1.1):** Multiple Choice: Who created JavaScript and in what year?  
 - (A) Tim Berners-Lee, 1991  
 - (B) Brendan Eich, 1995  
 - (C) Mark Zuckerberg, 1997  
 - (D) James Gosling, 1995

**Question 21 (ID: 3.7.10):** Multiple Choice: What is the result of trying to log variables y and z outside of their respective functions in this code?  
  
javascript  
Copy code  
var x = 10;  
function scopeTest() {  
 var y = 20;  
 let z = 30;  
 console.log(y);  
 console.log(z);  
}  
scopeTest();  
console.log(x);  
console.log(y);  
console.log(z);  
(A) It logs 10, undefined, and undefined.  
(B) It logs 10, followed by ReferenceError for y and z.  
(C) It logs 10, 20, and 30.  
(D) It throws an error for x, y, and z.

**Question 22 (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 23 (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 24 (ID: 1.5.5):** Multiple Choice: What happens if the 'src' attribute of an <img> tag is missing?  
 - (A) The image displays as a broken icon.  
 - (B) The browser automatically searches for a valid source.  
 - (C) No image space is rendered in the document.  
 - (D) The alt text is displayed in place of the image.

**Question 25 (ID: 4.9.5):** Multiple Choice: What is the output of the following code?  
  
document.querySelector("#name").addEventListener("focus", function() {  
this.style.border = "1px solid green";  
});  
  
- (A) The input box is highlighted in green when focused.  
- (B) The input box disappears when focused.  
- (C) The input box changes to red when focused.  
- (D) The event is canceled when focused.

**Question 26 (ID: 4.1.5):** Multiple Choice: What is the output of the following code?  
  
let georgeBirthday = new Date(1732, 1, 22);  
console.log(georgeBirthday);  
  
- (A) Jan 22, 1732  
- (B) Feb 22, 1732  
- (C) Mar 22, 1732  
- (D) Undefined

**Question 27 (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 28 (ID: 1.4.10):** Multiple Choice: Which statement about HTML comments is true?  
 - (A) Comments can be placed anywhere in the HTML, including within tags.  
 - (B) Comments reduce the overall performance of the webpage.  
 - (C) Comments can execute HTML code when the page loads.  
 - (D) Comments are often used to include executable code on the page.

**Question 29 (ID: 1.6.9):** Multiple Choice: What is the default list item marker for an unordered list?  
 - (A) Numbers  
 - (B) Dashes  
 - (C) Bullets  
 - (D) Squares

**Question 30 (ID: 3.2.2):** Multiple Choice: What is the result of the following expression in JavaScript?  
let x = 5 % 2;  
- (A) 0  
- (B) 1  
- (C) 2  
- (D) 5

**Question 31 (ID: 4.4.2):** Multiple Choice: What happens when a checkbox is not selected in a form submission?  
  
- (A) The browser sends a null value.  
- (B) The browser does not send the checkbox value at all.  
- (C) The browser sends a value of "false".  
- (D) The browser sends the default value "off".

**Question 32 (ID: 3.9.5):** Multiple Choice: What will happen if you try to delete a property from an object?  
  
(A) The property is permanently removed.  
(B) The property value is set to null.  
(C) The object becomes undefined.  
(D) It throws an error.

**Question 33 (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 34 (ID: 1.9.8):** Multiple Choice: How do you define a table row that should appear at the bottom of a table, but is not a footer?  
 - (A) Use the `<tfoot>` tag.  
 - (B) Use the `<lastrow>` tag.  
 - (C) Use the `<bottom>` tag.  
 - (D) Simply place it at the end of the `<tbody>` section.

**Question 35 (ID: 4.4.9):** Multiple Choice: What does the `value` attribute in a checkbox represent?  
  
- (A) The text shown next to the checkbox.  
- (B) The value sent to the server if the checkbox is selected.  
- (C) The default state of the checkbox.  
- (D) The color of the checkbox.

**Question 36 (ID: 3.1.2):** Multiple Choice: What is ECMAScript?  
 - (A) Another name for Java  
 - (B) A standardized version of JavaScript  
 - (C) A JavaScript framework for server-side development  
 - (D) A deprecated web programming language

**Question 37 (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 38 (ID: 1.2.4):** Multiple Choice: What is the function of the <nav> element?  
 - (A) To define a container for navigation links  
 - (B) To create a network of connected data  
 - (C) To mark the non-scrollable sections of a webpage  
 - (D) To navigate through the JavaScript functions in the code

**Question 39 (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 40 (ID: 3.9.10):** Multiple Choice: What does the following code output?  
  
javascript  
Copy code  
let game = {  
 firstOpponent: "Serena Williams",  
 firstOpponentScore: 2,  
 secondOpponent: "Garbine Muguruza",  
 secondOpponentScore: 0,  
 get winner() {  
 return this.firstOpponentScore > this.secondOpponentScore ? this.firstOpponent : this.secondOpponent;  
 }  
};  
console.log(game.winner);  
(A) Serena Williams  
(B) Garbine Muguruza  
(C) undefined  
(D) Error

**Question 41 (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 42 (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 43 (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 44 (ID: 4.1.8):** Multiple Choice: What happens if you pass only the year to the `Date` constructor?  
  
- (A) It creates a date on January 1st of that year.  
- (B) It creates a date on December 31st of that year.  
- (C) It throws an error.  
- (D) It defaults to the current date.

**Question 45 (ID: 2.5.4):** Multiple Choice: How is the 'border' property of a box typically defined in CSS?  
 - (A) Using the border-color property only  
 - (B) Through separate properties for width, style, and color  
 - (C) As a shorthand that combines padding, border, and margin settings  
 - (D) It is not a standalone property but a subset of the padding property

**Question 46 (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 47 (ID: 1.7.8):** True/False: Using `target="\_blank"` in an `<a>` tag ensures that the linked document will open in a new tab, but not a new window.

**Question 48 (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 49 (ID: 4.7.2):** Multiple Choice: Which of the following is created when an HTML attribute is added to an element?  
  
- (A) A text node  
- (B) A comment node  
- (C) An attribute node  
- (D) An element node

**Question 50 (ID: 1.2.8):** Multiple Choice: What does the 'charset' attribute in a <meta> tag specify?  
 - (A) The character encoding for the HTML document  
 - (B) The set of characters allowed in the document's comments  
 - (C) The website's character count limits  
 - (D) The character encoding for URLs within the document

# Answers

**Answer to Question 1:** True

**Answer to Question 2:** (A) type

**Answer to Question 3:** (A) It ensures the button changes color when hovered over.

**Answer to Question 4:** (B) Finds and replaces a substring in a string.

**Answer to Question 5:** (A) "101: Math", "102: English", "103: History"

**Answer to Question 6:** (A) `setProperty()`, (C) `removeProperty()`

**Answer to Question 7:** (A) string, (B) boolean, (C) number

**Answer to Question 8:** False

**Answer to Question 9:** (C) 12

**Answer to Question 10:** (C) Subnet mask

**Answer to Question 11:** (B) The variable's value cannot be reassigned

**Answer to Question 12:** (A) `substring()`, (B) `substr()`, (C) `slice()`

**Answer to Question 13:** (B) Matches all vowels in a string.

**Answer to Question 14:** (B) The cursor changes to a hand icon when hovering over the button.

**Answer to Question 15:** False

**Answer to Question 16:** (A) Element node, (B) Attribute node, (C) Text node, (D) Document node

**Answer to Question 17:** (C) console.log()

**Answer to Question 18:** True

**Answer to Question 19:** False

**Answer to Question 20:** (B) Brendan Eich, 1995

**Answer to Question 21:** (B) It logs `10`, followed by ReferenceError for `y` and `z`.

**Answer to Question 22:** (B) Fixed elements are positioned relative to the viewport, while absolute elements are positioned relative to their nearest positioned ancestor.

**Answer to Question 23:** (A) It skips the rest of the loop body for the current iteration and jumps to the next iteration.

**Answer to Question 24:** (A) The image displays as a broken icon.

**Answer to Question 25:** (A) The input box is highlighted in green when focused.

**Answer to Question 26:** (B) Feb 22, 1732

**Answer to Question 27:** (B) The next case's block is executed, even if it does not match

**Answer to Question 28:** (A) Comments can be placed anywhere in the HTML, including within tags.

**Answer to Question 29:** (C) Bullets

**Answer to Question 30:** (B) 1

**Answer to Question 31:** (B) The browser does not send the checkbox value at all.

**Answer to Question 32:** (A) The property is permanently removed.

**Answer to Question 33:** (B) background

**Answer to Question 34:** (D) Simply place it at the end of the `<tbody>` section.

**Answer to Question 35:** (B) The value sent to the server if the checkbox is selected.

**Answer to Question 36:** (B) A standardized version of JavaScript

**Answer to Question 37:** (A) 1, 2, 3, Done!

**Answer to Question 38:** (A) To define a container for navigation links

**Answer to Question 39:** (A) To provide a summary or total row at the bottom of the table sections

**Answer to Question 40:** (A) Serena Williams

**Answer to Question 41:** (C) 4

**Answer to Question 42:** (A) It is a representation of the HTML structure in the browser.

**Answer to Question 43:** (C) mailto:

**Answer to Question 44:** (A) It creates a date on January 1st of that year.

**Answer to Question 45:** (B) Through separate properties for width, style, and color

**Answer to Question 46:** (C) `static`

**Answer to Question 47:** False

**Answer to Question 48:** (B) The current time in the local time zone

**Answer to Question 49:** (C) An attribute node

**Answer to Question 50:** (A) The character encoding for the HTML document