# Randomly Selected Questions - Set 5

**Question 1 (ID: 1.8.2):** Multiple Choice: What is the primary purpose of a container element like `<div>`?  
 - (A) To create hyperlinks  
 - (B) To structure the document and group content  
 - (C) To display content as inline  
 - (D) To underline text

**Question 2 (ID: 4.2.2):** Multiple Choice: What is the output of the following code?  
  
let re = /ab/;  
let words = ["ban", "babble", "make", "flab"];  
words.forEach(function(word) {  
 if (re.test(word)) {  
 console.log(word + " matches!");  
 }  
});  
  
- (A) ban matches!, babble matches!  
- (B) babble matches!, flab matches!  
- (C) make matches!  
- (D) No output

**Question 3 (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 4 (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 5 (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 6 (ID: 3.2.6):** Multiple Choice: What is the result of the following expression?  
2 \*\* 3  
- (A) 6  
- (B) 8  
- (C) 9  
- (D) 12

**Question 7 (ID: 3.1.4):** Multi-Select: Which of the following are valid JavaScript variable declarations? (Select all that apply)  
 - (A) let score;  
 - (B) int count;  
 - (C) const PI = 3.14;  
 - (D) var name = "Alice";

**Question 8 (ID: 4.5.7):** Multiple Choice: What is the effect of adding `background-color: lightblue;` to an input's `:focus` state?  
  
- (A) The input field turns blue when clicked.  
- (B) The input field turns light blue when it gains focus.  
- (C) The input field loses focus after being clicked.  
- (D) The input text changes to light blue.

**Question 9 (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 10 (ID: 3.3.6):** Multi-Select: Which of the following are valid ways to compare equality in JavaScript? (Select all that apply)  
- (A) `x == y`  
- (B) `x === y`  
- (C) `x != y`  
- (D) `x <> y`

**Question 11 (ID: 1.2.1):** True/False: The <body> tag can contain any number of <head> tags to structure the document metadata repeatedly.

**Question 12 (ID: 3.11.10):** Multiple Choice: What is the benefit of using template literals in JavaScript?  
  
- (A) They allow embedding expressions into strings.  
- (B) They prevent the use of variables in strings.  
- (C) They convert strings to numbers automatically.  
- (D) They remove special characters from strings.

**Question 13 (ID: 1.10.1):** True/False: The `<input>` element can only be used for text fields in HTML forms.

**Question 14 (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 15 (ID: 1.6.6):** True/False: It is valid HTML to nest an unordered list within an ordered list.

**Question 16 (ID: 3.4.3):** Multi-Select: Which of the following values are considered truthy in JavaScript? (Select all that apply)  
- (A) "Hello"  
- (B) null  
- (C) 1  
- (D) 0

**Question 17 (ID: 1.9.3):** True/False: The `<caption>` tag must appear after the table rows.

**Question 18 (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 19 (ID: 4.4.8):** Multi-Select: Which of the following input types allow the user to select multiple options in a form? (Select all that apply)  
  
- (A) `checkbox`  
- (B) `radio`  
- (C) `select` with the `multiple` attribute  
- (D) `textarea`

**Question 20 (ID: 3.8.3):** Multi-Select: Which of the following methods can be used to remove elements from an array? (Select all that apply)  
  
(A) pop()  
(B) shift()  
(C) splice()  
(D) push()

**Question 21 (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 22 (ID: 2.5.10):** Multiple Choice: Which CSS property is used to hide elements without affecting the layout?  
 - (A) visibility: hidden;  
 - (B) display: none;  
 - (C) opacity: 0;  
 - (D) margin: 0;

**Question 23 (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 24 (ID: 3.9.4):** Multiple Choice: What does the following code output?  
  
javascript  
Copy code  
let book = {  
 title: "Outliers",  
 published: 2011,  
 author: { firstName: "Malcolm", lastName: "Gladwell" }  
};  
console.log(book.author.lastName);  
(A) Malcolm  
(B) Gladwell  
(C) Outliers  
(D) undefined

**Question 25 (ID: 3.4.2):** Multiple Choice: What is the output of the following code?  
let x = 10; console.log(x ? "Truthy" : "Falsy");  
- (A) "Truthy"  
- (B) "Falsy"  
- (C) undefined  
- (D) NaN

**Question 26 (ID: 4.10.2):** Multiple Choice: What happens when you use the `setProperty()` method in JavaScript?  
  
- (A) It changes the value of an element's CSS property.  
- (B) It removes an element's CSS property.  
- (C) It adds a new CSS property to the element.  
- (D) It replaces the element with a new one.

**Question 27 (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 28 (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 29 (ID: 4.4.7):** Multiple Choice: What happens if no radio button in a group is selected when the form is submitted?  
  
- (A) The browser sends a null value.  
- (B) The browser sends an empty string.  
- (C) The browser does not send the name or value of the radio button group.  
- (D) The browser sends the first radio button's value by default.

**Question 30 (ID: 4.5.6):** Multiple Choice: What is the result of the following HTML code?  
  
<input type="submit" value="Register" style="background-color: #09f; color: white; padding: 10px; border-radius: 4px;">  
  
- (A) A blue, rounded submit button with white text  
- (B) A gray submit button with rounded corners  
- (C) A blue submit button with black text  
- (D) A gray button with no text

**Question 31 (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 32 (ID: 1.3.7):** True/False: The <br> tag requires a closing tag.

**Question 33 (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 34 (ID: 3.10.1):** Multiple Choice: What does the following code output?  
  
let stateCapitals = {  
 AR: "Little Rock",  
 CO: "Denver",  
 NM: "Santa Fe"  
};  
console.log(stateCapitals["CO"]);  
  
- (A) Little Rock  
- (B) Denver  
- (C) Santa Fe  
- (D) undefined

**Question 35 (ID: 3.9.9):** Multiple Choice: What is an accessor property in JavaScript?  
  
(A) A property that has both getter and setter functions  
(B) A property that is accessible only inside the object  
(C) A property that is inherited from another object  
(D) A property that is read-only

**Question 36 (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 37 (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 38 (ID: 3.8.7):** Multiple Choice: What will be the output of the following code?  
  
javascript  
Copy code  
let nums = [5, 2, 9, 3];  
nums[0] = nums[1] + nums[2];  
console.log(nums[0]);  
(A) 7  
(B) 5  
(C) 11  
(D) undefined

**Question 39 (ID: 2.3.9):** Multiple Choice: How does CSS handle the transparency of colors specified with the `hsla()` function?  
 - (A) The 'a' in `hsla()` stands for absolute, which prevents any transparency  
 - (B) The alpha channel controls the transparency; 1 is fully opaque, 0 is fully transparent  
 - (C) Transparency is not supported in `hsla()`, only in `rgba()`  
 - (D) Transparency effects are reversed in `hsla()` compared to `rgba()`

**Question 40 (ID: 4.3.3):** Multiple Choice: What happens when a form with the `GET` method is submitted?  
  
- (A) The form data is added to the URL as query parameters.  
- (B) The form data is hidden and sent in the request body.  
- (C) The form data is saved in local storage.  
- (D) The form submission is cancelled if the data is invalid.

**Question 41 (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 42 (ID: 1.3.1):** True/False: The <p> tag is used to create line breaks in HTML documents.

**Question 43 (ID: 2.1.6):** Multiple Choice: Which CSS property controls the text size?  
 - (A) text-size  
 - (B) font-style  
 - (C) font-weight  
 - (D) font-size

**Question 44 (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 45 (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 46 (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 47 (ID: 4.3.1):** Multiple Choice: What is the purpose of the `action` attribute in a `<form>` element?  
  
- (A) It specifies the URL where the form data should be sent.  
- (B) It specifies the method of submitting the form (GET or POST).  
- (C) It validates the form input before submission.  
- (D) It styles the form element.

**Question 48 (ID: 3.1.9):** Multi-Select: Which of the following are common ways to obtain user input in JavaScript? (Select all that apply)  
- (A) console.log()  
- (B) prompt()  
- (C) alert()  
- (D) input()

**Question 49 (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 50 (ID: 3.6.5):** Multiple Choice: What is the value of `result` in the following code?  
  
function multiply(x, y) {  
 return x \* y;  
}  
let result = multiply(4, 5);  
console.log(result);  
  
- (A) 20  
- (B) 9  
- (C) NaN  
- (D) undefined

# Answers

**Answer to Question 1:** (B) To structure the document and group content

**Answer to Question 2:** (B) babble matches!, flab matches!

**Answer to Question 3:** (C) Subnet mask

**Answer to Question 4:** True

**Answer to Question 5:** (A) It ensures the button changes color when hovered over.

**Answer to Question 6:** (B) 8

**Answer to Question 7:** (A) let score;, (C) const PI = 3.14;, (D) var name = "Alice";

**Answer to Question 8:** (B) The input field turns light blue when it gains focus.

**Answer to Question 9:** (B) They are unique to a single element on a page, (C) They have higher specificity than class selectors

**Answer to Question 10:** (A) `x == y`, (B) `x === y`, (C) `x != y`

**Answer to Question 11:** False

**Answer to Question 12:** (A) They allow embedding expressions into strings.

**Answer to Question 13:** False

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

**Answer to Question 15:** True

**Answer to Question 16:** (A) "Hello", (C) 1

**Answer to Question 17:** False

**Answer to Question 18:** (C) console.log()

**Answer to Question 19:** (A) `checkbox`, (C) `select` with the `multiple` attribute

**Answer to Question 20:** (A) pop(), (B) shift(), (C) splice()

**Answer to Question 21:** (C) `insertBefore()`

**Answer to Question 22:** (A) visibility: hidden;

**Answer to Question 23:** (B) Checkboxes allow multiple selections, while radio buttons only allow one selection per group.

**Answer to Question 24:** (B) Gladwell

**Answer to Question 25:** (A) "Truthy"

**Answer to Question 26:** (A) It changes the value of an element's CSS property.

**Answer to Question 27:** (C) Use a hash (`#`) followed by the section's identifier in the `href` attribute

**Answer to Question 28:** (A) The image displays as a broken icon.

**Answer to Question 29:** (C) The browser does not send the name or value of the radio button group.

**Answer to Question 30:** (A) A blue, rounded submit button with white text

**Answer to Question 31:** (C) dave@yahoo.com

**Answer to Question 32:** False

**Answer to Question 33:** (B) IPv4

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

**Answer to Question 35:** (A) A property that has both getter and setter functions

**Answer to Question 36:** (A) text, (B) password, (C) file

**Answer to Question 37:** (D) Simply place it at the end of the `<tbody>` section.

**Answer to Question 38:** (C) 11

**Answer to Question 39:** (B) The alpha channel controls the transparency; 1 is fully opaque, 0 is fully transparent

**Answer to Question 40:** (A) The form data is added to the URL as query parameters.

**Answer to Question 41:** False

**Answer to Question 42:** False

**Answer to Question 43:** (D) font-size

**Answer to Question 44:** (A) It prevents further propagation of the current event in the capturing or bubbling phase.

**Answer to Question 45:** False

**Answer to Question 46:** (A) It specifies how the form data should be encoded when submitted.

**Answer to Question 47:** (A) It specifies the URL where the form data should be sent.

**Answer to Question 48:** (B) prompt(), (C) alert()

**Answer to Question 49:** (B) `colspan`

**Answer to Question 50:** (A) 20