

1. MULTIPLE CHOICE

20 sec • 1 pt

In the following Javascript code, what is the value of the variable flag?

```
let a = 5;
let b = "5";
let flag = (a === b); // 3 "=" in "==="
```

True

False

10

"55"

2. FILL IN THE BLANK

20 sec • 1 pt

Complete the following HTML code to define the **onclick** event for the button, so that the **onBtn()** function will be invoked when we click on this button.

```
<button          >Click me</button>
```

```
onclick="onBtn()"
```

3. MULTIPLE CHOICE

20 sec • 1 pt

What is the value of the variable **c** in the following Javascript code if we enter 5 in the prompt window?

```
let a = prompt("Enter an integer: ");
let b = 5;
let c = a + b;
console.log(c);
```

10

55

5

15

4. FILL IN THE BLANK

30 sec • 1 pt

Please write a JavaScript statement to create a new dog object (**my_dog**) with the **breed** set to "German Shepherd" and **age** set to 5, using the provided **Dog constructor function**.

```
// dog constructor
function Dog(breed, age){
this.breed = breed;
this.age = age;}
```

```
let my_dog = new Dog("German Shepherd",5);
```

Alternatives

```
let my_dog = new Dog("German
Shepherd",5);
```

```
const my_dog = new Dog("German
' Shepherd",5);
```

```
var my_dog = new Dog("German
' Shepherd",5);
```

5. FILL IN THE BLANK

20 sec • 1 pt

Please write a statement to show the value of variable **a** in the console of a web browser. (the code for debugging)

```
console.log(a);
```

6. FILL IN THE BLANK

20 sec • 1 pt

Complete the following HTML code to provide an external Javascript link named **quiz2.js** (Assue the HTML code and Javascript code are stored in the same folder).

```
<head>
  <title>JavaScript Demo</title>
  <script type="text/javascript"           ></script>
</head>
```

```
src="quiz2.js"
```

7. MULTIPLE CHOICE

20 sec • 1 pt

What is the correct JavaScript syntax to change the content of the HTML element below?

```
<p id="demo">This is a demonstration.</p>
```

```
document.getElement("p").innerHTML = "Hello World!";
```

```
document.getElementById("demo").innerHTML = "Hello World!";
```

```
#demo.innerHTML = "Hello World!";
```

```
document.getElementByName("p").innerHTML = "Hello World!";
```

8. MULTIPLE CHOICE

20 sec • 1 pt

Inside which HTML element do we put the JavaScript?

```
<javascript>
```

```
<js>
```

```
<scripting>
```

```
<script>
```

9. MULTIPLE CHOICE

20 sec • 1 pt

Where is the correct place to insert a JavaScript?

The <head> section

Both the <head> section and the <body> section are correct

The <body> section

10. MULTIPLE CHOICE

20 sec • 1 pt

How do you create a function in JavaScript?

```
function myFunction()
```

```
function = myFunction()
```

```
function:myFunction()
```

11. MULTIPLE CHOICE

20 sec • 1 pt

How can you add a comment in a JavaScript?

```
//This is a comment
```

```
<!--This is a comment-->
```

```
'This is a comment
```

12. MULTIPLE CHOICE

20 sec • 1 pt

How do you declare a JavaScript variable?

```
v carName;
```

```
int carName
```

```
variable carName;
```

```
let carName;
```

13. MULTIPLE CHOICE

20 sec • 1 pt

What is the correct way to write a JavaScript array?

```
let colors = (1:"red", 2:"green", 3:"blue");
```

```
let colors = 1 = ("red"), 2 = ("green"), 3 = ("blue");
```

```
let colors = ["red", "green", "blue"];
```

```
let colors = "red", "green", "blue";
```

14. MULTIPLE CHOICE

20 sec • 1 pt

How to insert a comment that has more than one line?

```
//This comment has  
more than one line//
```

```
<!--This comment has  
more than one line-->
```

```
/*This comment has  
more than one line*/
```

15. MULTIPLE CHOICE

20 sec • 1 pt

The **Document Object Model (DOM)** is structured as a hierarchy that most closely resembles which of the following?

A ladder

A tree

A maze

A pyramid

16. MULTIPLE CHOICE

20 sec • 1 pt

In the **Document Object Model (DOM)**, each node represents what?

A link

A section

A view

An HTML element

17. MULTIPLE CHOICE

20 sec • 1 pt

Which of the following is the correct way to **select multiple elements by their IDs** using `querySelectorAll()`?

`document.querySelectorAll("#id1, #id2");`

`document.querySelectorAll("#id1 #id2");`

`document.querySelectorAll(".id1, .id2");`

`document.querySelectorAll("id1, id2");`

18. MULTIPLE CHOICE

20 sec • 1 pt

What type of object does `document.querySelectorAll("#id1, #id2")` return?

An **array**

A **NodeList**

A **single HTML element**

null

19. OPEN ENDED

1 min • 1 pt

Coding Question:

Write a JavaScript program that does the following:

Selects a button element with the ID "myButton".

Uses `addEventListener()` to attach a **click event** to the button that changes the webpage's background color to a red color.

Also attach a **double-click event** to the same button that resets the background color to white.

Provide the full JavaScript code for this functionality.

Expected Behavior:

When the button is clicked once, the webpage's background color should change to red.

When the button is double-clicked, the webpage's background color should reset to white.

Evaluate responses using AI: **OFF**

View Answer explanation

JavaScript:

// Select the button

const button = document.getElementById("myButton");

// Event listener for single click - change background color

button.addEventListener("click", function() { document.body.style.backgroundColor = "red"});

// Event listener for double click - reset background color

button.addEventListener("dblclick", function() { document.body.style.backgroundColor = "white"; });

HTML:

<button id="myButton">Click Me</button>

20. MULTIPLE CHOICE

20 sec • 1 pt

Which JavaScript method is used to **select the first matching HTML element** based on a CSS selector?

getElementById()

querySelector()

querySelectorAll()

getElementsByClassName()

21. MULTIPLE CHOICE

20 sec • 1 pt

Which of the following correctly iterates over the fruits array using **forEach()**?

let fruits = ["Apple", "Banana", "Cherry"];

fruits.forEach((fruit) => console.log(fruit));

fruits.forEach(fruit, index => console.log(fruit));

forEach(fruit in fruits) { console.log(fruit); }

fruits.loopEach(fruit => console.log(fruit));

22. MULTIPLE CHOICE

20 sec • 1 pt

What JavaScript code produces the following output?

Index 0: Apple

Index 1: Banana

Index 2: Mango

```
let fruits = ["Apple", "Banana", "Mango"];
fruits.forEach((fruit) => {
  console.log(`Index ${fruit}: ${index}`);
});
```

```
let fruits = ["Apple", "Banana", "Mango"];
fruits.forEach((index, fruit) => {
  console.log(`Index ${index}: ${fruit}`);
});
```

```
let fruits = ["Apple", "Banana", "Mango"];
fruits.forEach((fruit, index) => {
  console.log(`Index ${index}: ${fruit}`);
});
```

```
let fruits = ["Apple", "Banana", "Mango"];
fruits.map((fruit, index) => {
  console.log(`Index ${index}: ${fruit}`);
});
```

23. MULTIPLE CHOICE

20 sec • 1 pt

What happens when the following code is executed?

```
let cars = ["BMW", "Volvo", "Saab"];
cars.unshift("Nissan");
console.log(cars);
```

```
["BMW", "Volvo", "Saab", "Nissan"]
```

```
["Nissan", "BMW", "Volvo", "Saab"]
```

```
["BMW", "Volvo", "Saab"]
```

```
["Nissan"]
```

24. FILL IN THE BLANK

20 sec • 1 pt

Fill in the blank to correctly **sort an array of objects** by a **numeric property** (e.g., age) in **ascending order**:

```
let people = [ { name: "Charlie", age: 35 }, { name: "Alice", age: 25 }, { name: "Bob", age: 30 } ];
people.sort((a, b) => _____);
```

a.age-b.age

[View Answer explanation](#)

a.age-b.age

25. MULTIPLE CHOICE

20 sec • 1 pt

Which of the following correctly **sorts an array of objects alphabetically by name in descending order (Z → A)**?

```
people.sort((a, b)
=> a.name.localeCompare(b.name));
```

```
people.sort((a, b)
=> b.name.localeCompare(a.name));
```

```
people.sort((a, b) => a.name - b.name);
```

```
people.sort((a, b) => b.name - a.name);
```

26. FILL IN THE BLANK

20 sec • 1 pt

Fill in the blank to correctly **sort a copy of the array without modifying the original array**:

```
let numbers = [100, 20, 3];
let sortedNumbers = numbers._____.sort((a, b) => a - b);
```

slice

27. OPEN ENDED

1 min • 1 pt

Coding Question:

Write a JavaScript program that **dynamically generates and displays a list** inside a <div> element with the ID "listContainer". Your program should:

Create an array called animals containing "Dog", "Cat", "Elephant", and "Tiger".

Use a loop to generate an unordered list () where each animal is a list item ().

Insert the generated list inside the <div> element with the ID "listContainer".

Evaluate responses using AI: **OFF**

View Answer explanation

JavaScript:

```
// Step 1: Define an array of animals let
animals = ["Dog", "Cat", "Elephant", "Tiger"];
// Step 2: Initialize an empty string to store the HTML for the list
let listHTML = "<ul>";
// Step 3: Loop through the array and add each item as a list element
for (let i = 0; i < animals.length; i++) { listHTML += "<li>" + animals[i] + "</li>"; }
// Step 4: Close the unordered list tag
listHTML += "</ul>";
// Step 5: Insert the dynamically created list inside the div with ID "listContainer"
document.getElementById("listContainer").innerHTML = listHTML;
HTML:
<div id="listContainer"></div>
```

28. MULTIPLE CHOICE

20 sec • 1 pt

What will be the output of the following JavaScript code?

```
for (let i = 0; i < 5; i++) {
  if (i === 2) { continue; }
  console.log(i); }
```

0 1 2 3 4

0 1 3 4

0 1

2 3 4

29. FILL IN THE BLANK

20 sec • 1 pt

Fill in the blank to correctly **exit the loop** when i is equal to 3:

```
for (let i = 0; i < 10; i++) {
  if (i === 3) { ____; }
  console.log("The number is " + i); }
```

break

30. OPEN ENDED

1 min • 1 pt

Coding Question:

Create a JavaScript function named **changeTextColor()**. Your function should:

1. **Get the selected color** from a dropdown list with the ID "textColorSelect".
2. **Use a switch statement** to check the selected color.
3. **Change the text color** of a paragraph element with the ID "textMessage".
4. **Display a message** inside "textMessage" that confirms the selected color (e.g., "You selected Blue!").

HTML code:

```
<select id="textColorSelect">
  <option value="default">Select a Color</option>
  <option value="red">Red</option>
  <option value="blue">Blue</option>
  <option value="green">Green</option>
</select>
<p id="textMessage">Select a color to change this text color.</p>
<button onclick="changeTextColor()">Change Text Color</button>
```

Evaluate responses using AI: **OFF**

View Answer explanation

```
function changeTextColor() {  
  let selectedColor = document.getElementById("textColorSelect").value;  
  let textMessage = document.getElementById("textMessage");  
  switch (selectedColor) {  
    case "red":  
      textMessage.style.color = "red";  
      textMessage.innerHTML = "You selected Red! ";  
      break;  
    case "blue":  
      textMessage.style.color = "blue";  
      textMessage.innerHTML = "You selected Blue! ";  
      break;  
    case "green":  
      textMessage.style.color = "green";  
      textMessage.innerHTML = "You selected Green! ";  
      break;  
    default:  
      textMessage.innerHTML = "Invalid color selected! ";  
      textMessage.style.color = "black";  
      break;  
  }  
}
```