JavaScript Questions

Student Name:		
Trainer Name:		

Variables

- 1. What is the difference between var, let, and const?
- 2. Declare a variable age with the value 20 using let.
- 3. Can we change the value of a const variable? Why or why not?
- 4. What will be the output?

```
var x = 5;
var x = 10;
console.log(x);
```

5. Write code to swap values of two variables a = 5 and b = 10.

Loops

- 6. Write a for loop to print numbers from 1 to 5.
- 7. What is the difference between a while loop and a do...while loop?
- 8. Write the output of this code:

```
for (let i = 1; i < 10; i += 3) {
  console.log(i);
}</pre>
```

- 9. What is the use of for...in loop? Give an example.
- 10. What is the difference between for...in and for...of?

Functions

- 11. Define a simple function greet() that prints 'Hello World'.
- 12. What is the difference between a function declaration and a function expression?

- 13. What does an arrow function look like? Give one example.
- 14. What is an IIFE (Immediately Invoked Function Expression)? Write one.
- 15. What keyword do we use to return a value from a function?

Objects & OOP

- 16. Create an object student with properties: name, age, city.
- 17. What is object destructuring? Give a small example.
- 18. Define a Person class with a constructor that takes name and age.
- 19. What keyword is used to create an object from a class?
- 20. What is inheritance in JavaScript classes? Write a small example.

DOM

- 21. What does document.getElementById('id') do?
- 22. Write code to change the innerText of a element with class 'msg'.
- 23. What is the difference between innerText and innerHTML?
- 24. What does document.title return?
- 25. What does appendChild() do? Write one example.

Events

- 26. Write an example of a mouse event (onclick or dblclick).
- 27. What is the difference between onclick="..." and addEventListener("click", ...)?
- 28. Write an example of a keyboard event (keydown or keyup).
- 29. What does the submit event do in forms?
- 30. Write an example where a button click changes the background color of the page.