

JavaScript

1. Is javascript case-sensitive? – Yes 1
2. Difference between “var” and “let” Keywords? 2
 - Var was there from the beginning but the let was introduced in ES2015/ES6.
 - Let has block scope and “Var” has function scope
3. What are global variables? How are these variables declared and what are the problems associated with them? 2
 - In contrast, global variables are the variables that are defined outside of functions. These variables have a global scope, so they can be used by any function without passing them to the function as parameters.
4. What is the use of void(0) ? 1
 - The **void(0)** is used to call another method without refreshing the page during the calling time parameter “zero” will be passed.
5. What is Callback in JavaScript? 2
 - A callback is a function that is to be executed after another function has finished executing, hence the name ‘call back’. In JavaScript, functions are objects. Because of this, functions can take functions as arguments, and can be returned by other functions.
6. What is the difference between Attributes and Property? 1
 - Attributes- provide more details on an element like id, type, value etc.
 - Property- is the value assigned to the property like type=”text”, value=’Name’ etc.
7. What is the difference between innerHTML & innerText? 1
 - innerHTML – It will process an HTML tag if found in a string
 - innerText – It will not process an HTML tag if found in a string
8. What will the code below output to the console and why? 2

```
(function(){ var a = b = 3; })();

console.log("a defined? " + (typeof a !== 'undefined')); // false
console.log("b defined? " + (typeof b !== 'undefined')); // true
```
9. What will the code below output to the console and why? 2

```
var myObject = {
  foo: "bar",
  func: function() {
    var self = this;
    console.log("outer func: this.foo = " + this.foo); //bar
    console.log("outer func: self.foo = " + self.foo); // bar
  }
}
```

```

        console.log("inner func: this.foo = " + this.foo); // undefined bcz no longer
        console.log("inner func: self.foo = " + self.foo); //bar
    }());
}
};
myObject.func();

```

10. How do you add an element at the beginning of an array? How do you add one at the end?

3

- var myArray = ['a', 'b', 'c', 'd'];
- myArray.push('end');
- myArray.unshift('start');
- console.log(myArray); // ["start", "a", "b", "c", "d", "end"]
- myArray = ['start', ...myArray, 'end']; // With ES6, one can use the spread operator:

11. In what order will the numbers 1-4 be logged to the console when the code below is executed? Why?

3

```

(function() {
    console.log(1);
    setTimeout(function(){console.log(2)}, 1000);
    setTimeout(function(){console.log(3)}, 0);
    console.log(4);
})();

```

12. What is closure and how do you use it (with example) ?

5

- The closure is created when a child functions to keep the environment of the parent's scope even after the parent's function has already executed. The Closure is a locally declared variable related to a function. The closure will provide better control over the code when using them. // Explanation of closure

```

function foo() {
    var b = 1;
    function inner() {
        return b;
    }
    return inner;
}
var get_func_inner = foo();

console.log(get_func_inner); //[Function: inner]
console.log(get_func_inner()); //1

```

13. What is the output of the following code ? (Private Variable)

1

```

function test(){
    var name = "javascript";
}

```

```
console.log(name); // uncaught reference error. name is not defined.
```

14. Make a function named isInt in which one takes a number as a parameter. Checks if the number is an integer ? Output should be boolean true or false. 3

```
function isInt(num){  
    return num % 2 === 0  
}  
console.log(isInt(4)); // true
```

15. Make a function named findVowels in which one takes a string as a parameter. Find the vowels from the given string "Mission". 5

```
function findVowels(str) {  
    let count = 0;  
    const vowels = [ 'a', 'e', 'i', 'o', 'u' ];  
    for(let char of str.toLowerCase()){  
        if(vowels.includes(char))  
            count++;  
    }  
    return count;  
}  
console.log(findVowels('Mission')); // 3
```

CSS

1. What are different ways to write css for a webpage? 1
2. What is the difference between inline, inline-block & block level elements? 1
3. What is the difference between display:none & visibility: hidden? 1
4. Explain positioning in css & their types? 2
5. What is box model? Explain with an example? 2
6. Explain child selector in css along with syntax? 1
7. Explain grouping selector in css along with syntax? 1
8. Difference between adjacent siblings selector & general siblings selector? 1
9. What is transition in css3? Explain with syntax? 2
10. What is animation in css3? Explain with syntax? 2
11. What is flexbox? 1
12. What are the classes available in bootstrap to make a page responsive? 1