

**01. What is the output of the following code?**

```
let x = 10;  
let y = "10";  
console.log(x + y);
```

- a) "1010"
- b) 20
- c) Error
- d) "101010"

**02. How would you declare an empty array in JavaScript?**

- a) let array = {};
- b) let array = [];
- c) let array = new Array();
- d) let array = array();

**03. What does the typeof operator return for null?**

- a) "object"
- b) "null"
- c) "undefined"
- d) "string"

**04. What is the output of the following code?**

```
console.log(true + false);
```

- a) 0
- b) 1
- c) "truefalse"
- d) Error

**05. What is the output of the following code?**

```
let a = 10;  
console.log(a++ + ++a);
```

- a) 21
- b) 20
- c) 22
- d) Error

**06. What does NaN stand for in JavaScript?**

- a) Not a Null
- b) Not a Name
- c) Not a Number
- d) Null or Not

**07. What will be the output of the following code?**

```
console.log(0 == false);
```

- a) true
- b) false
- c) Error
- d) 0

**08. What does Object.keys() return when used on a JavaScript object?**

- a) Array containing the keys of the object
- b) Array containing the values of the object
- c) Object containing the keys of the object
- d) Array containing the properties of the object

**09. What does the new keyword do in JavaScript?**

- a) Creates a new instance of a class
- b) Declares a new variable
- c) Reserves memory for a new object
- d) Creates a copy of an existing object

**10. What is the output of the following code?**

```
const obj = {  
  name: "John",  
  age: 30  
};  
const newObj = {...obj};  
console.log(newObj === obj);
```

- a) true
- b) false
- c) Error
- d) undefined

**11. What is the output of the following code?**

```
function Person(name) {  
  this.name = name; }  
Person.prototype.age = 20;  
const john = new Person("John");  
console.log(john.age);
```

- a) 20
- b) "John"
- c) undefined
- d) Error

**12. What does the super keyword do in a JavaScript class?**

- a) Calls the parent class constructor
- b) Returns the parent class instance
- c) Sets the parent class prototype
- d) Refers to the current class instance

**13. What is the output of the following code?**

```
const x = 10;  
const y = 20;  
console.log(x + y + "10");
```

- a) "3010"
- b) 3010

- c) 30
- d) Error

**14. What does the Promise.all() method do in JavaScript?**

- a) Executes multiple promises sequentially
- b) Executes multiple promises in parallel
- c) Executes the first resolved promise
- d) Executes the first rejected promise

**15. What does the Array.map() method do?**

- a) Modifies the original array
- b) Creates a new array with the results of calling a provided function on every element
- c) Sorts the array
- d) Removes elements from the array

**16. What is the output of the following code?**

```
const array = [1, 2, 3, 4, 5];  
const doubledArray = array.map(x => x * 2);  
console.log(doubledArray);
```

- a) [1, 2, 3, 4, 5]
- b) [2, 4, 6, 8, 10]
- c) [1, 4, 9, 16, 25]
- d) [2, 3, 4, 5, 6]

**17. What is the output of the following code?**

```
const array = [1, 2, 3, 4, 5];  
const evenArray = array.filter(x => x % 2 === 0);  
console.log(evenArray);
```

- a) [1, 2, 3, 4, 5]
- b) [2, 4]
- c) [1, 3, 5]

d) [2, 3, 4, 5]

**18. What does the Array.reduce() method do?**

- a) Creates a new array by applying a function to all elements
- b) Returns the first element that satisfies a condition
- c) Returns the first element of the array
- d) Reduces the array to a single value

**19. What is the output of the following code?**

```
const array = [1, 2, 3, 4, 5];  
const sum = array.reduce((acc, curr) => acc + curr, 0);  
console.log(sum);
```

- a) 0
- b) 15
- c) 10
- d) Error

**20. What is the output of the following code?**

```
const obj = {  
  name: "John",  
  age: 30  
};  
const newObj = Object.freeze(obj);  
newObj.age = 40; c  
onsole.log(newObj.age);
```

- a) 40
- b) 30

- c) undefined
- d) Error

**21. What is the difference between controlled and uncontrolled components in React?**

- a) Controlled components use state, while uncontrolled components do not
- b) Controlled components use props, while uncontrolled components do not
- c) Controlled components are slower than uncontrolled components
- d) Controlled components are easier to style than uncontrolled components

**22. What is the purpose of the key prop in React?**

- a) To specify a unique identifier for a component
- b) To define the initial state of a component
- c) To manage component state
- d) To handle events

**23. What is the purpose of the React.Fragment component?**

- a) To group multiple elements without adding extra nodes to the DOM
- b) To define a new component
- c) To create a shadow DOM
- d) To add styling to a component

**24. What is the output of the following code?**

```
const [count, setCount] = useState(0);

useEffect(() => {
  document.title = `You clicked ${count} times`;
}, [count]);
setCount(1);
```

- a) Error
- b) Changes the document title to "You clicked 1 times"
- c) Changes the document title to "You clicked 0 times"
- d) No change to the document title

**25. What is the purpose of the useContext hook in React?**

- a) To create a new context
- b) To consume a context
- c) To manage component state
- d) To handle events