"D-Coder Web Wizards: The Ultimate Web Development Challenge" 🚀🔥

📌 **Welcome to the D-Coder Web Wizards Challenge!** 🚀🔥

This is an **advanced-level web development screening test** designed to evaluate your skills in **HTML, CSS, JavaScript, React, and more!**

🔷 **Test Format:**

✅ **MCQs** – Test your core knowledge

✅ **Fill in the Blanks** – Sharpen your basics

✅ **True/False** – Identify common misconceptions

✅ **Coding Challenges** – Prove your problem-solving skills

✅ **Input-Output Scenarios** – Decode web behaviors

📢 **Rules & Guidelines:**

- **Mandatory for all members**

- If you miss **3 tests**, you will be removed from the group

- Be honest—no external help!

🕐 **Test Date: Sunday, March 30, 2025**

⏳ **Timing:** 8:00 PM to 8:30 PM

🔥 **Do you have what it takes to be a Web Wizard? Let's find out!** 💻✨

* Indicates required question

1. Email *

    _____

2. CU ID *

    _____

3. Name *

    _____

4. Year *

    Mark only one oval.

    ◯ 1st Year

    ◯ 2nd Year

    ◯ 3rd Year

    ◯ 4th Year

5. Section *

    Mark only one oval.

    ◯ A

    ◯ B

    ◯ C

    ◯ D

6. Phone Number *

    _____

Section 1: Fill in the Blanks (5 Questions)

(All questions are Fill in the blanks Questions)

7. 1. The _____ property in CSS is used to create a flex container. *   1 point

_____

8. 2. _____ is a JavaScript method that returns a new array after filtering *   1 point
elements based on a condition.

_____

9. 3. In React, _____ hook is used for handling side effects. *   1 point

_____

10. 4. The HTTP status code _____ indicates unauthorized access. *   1 point

_____

11. 5. _____ is the process of bundling JavaScript modules into a single *   1 point
file.

_____

Section 2: Multiple Choice Questions (10 Questions)

(All questions are Multiple Choice Questions)

12.   6. Which of the following is used to define variables in CSS? *   1 point

Mark only one oval.

○ a) var(--variable-name)

○ b) let variable-name

○ c) $variable-name

○ d) define-variable()

13.   7. What is the purpose of the async keyword in JavaScript?   *   1 point

Mark only one oval.

○ a) To define an asynchronous function

○ b) To create a synchronous function

○ c) To make a function run automatically

○ d) To execute a function in parallel

14.   8. Which of these is NOT a valid HTTP request method? *   1 point

Mark only one oval.

○ a) GET

○ b) POST

○ c) FETCH

○ d) DELETE

15.   9. Which JavaScript framework uses the Virtual DOM? *   1 point

Mark only one oval.

○ a) Angular

○ b) Vue.js

○ c) React

○ d) Svelte

16.   10. What is the primary purpose of WebSockets? *   1 point

Mark only one oval.

○ a) To store data in the browser

○ b) To enable real-time communication

○ c) To make API requests faster

○ d) To handle authentication

17.   11. Which CSS property makes an element stay fixed while scrolling? *   1 point

Mark only one oval.

○ a) relative

○ b) fixed

○ c) absolute

○ d) static

18.   12. Which of the following is NOT a JavaScript data type? *   1 point

Mark only one oval.

- ⬭ a) Boolean
- ⬭ b) Undefined
- ⬭ c) Float
- ⬭ d) Symbol

19.   13. Which HTTP method is used to update an existing resource? *   1 point

Mark only one oval.

- ⬭ a) POST
- ⬭ b) PUT
- ⬭ c) DELETE
- ⬭ d) GET

20.   14. Which of these is a correct way to define a function in JavaScript? *   1 point

Mark only one oval.

- ⬭ a) function myFunc() {}
- ⬭ b) let myFunc = function() {}
- ⬭ c) const myFunc = () => {}
- ⬭ d) All of the above

21.   15. Which of the following is NOT a valid CSS selector? *   1 point

Mark only one oval.

( ) a) #id-selector

( ) b) .class-selector

( ) c) @media-selector

( ) d) [attribute-selector]

Section 3: Coding Questions (10 Questions)

(All questions are Multiple Choice Questions,

Fill in the blanks and True/False)

22.   16. **What will be the output of the following JavaScript code?** *   1 point

console.log(typeof null);

Mark only one oval.

( ) A) "null"

( ) B) "object"

( ) C) "undefined"

( ) D) "number"

23.   17. In HTML, the <input> element with the type "_____" is used for   * 1 point
passwords.

_____

24.   18. **What will be the output of the following Python code?** *   1 point
      print("5" * 3)

      Mark only one oval.

      ◯ Ok

      ◯ B) 555

      ◯ C) TypeError

      ◯ D) None

25.   19. In JavaScript, we use the _____ keyword to declare a constant   * 1 point
      variable.

      _____

26.   20. Which of the following will remove an element from an array in   * 1 point
      JavaScript?

      Mark only one oval.

      ◯ A) array.remove(2)

      ◯ B) array.pop(2)

      ◯ C) array.splice(2, 1)

      ◯ D) array.delete(2)

27.   21. The _____ tag is used in HTML to define an unordered list. *   1 point

      _____

28.   22. In JavaScript, _____ is used to round a number to the nearest   * 1 point
      integer.

      _____

29.   23. The localStorage in JavaScript stores data that gets deleted when the   *   1 point
browser is closed.

Mark only one oval.

   ◯ True

   ◯ False

30.   24. In React, a component can have multiple useState hooks.   *   1 point

Mark only one oval.

   ◯ True

   ◯ False

31.   25. The <meta> tag in HTML is used to create links to external stylesheets.   *   1 point

Mark only one oval.

   ◯ True

   ◯ False

Section 4: Input-Output Questions (5 Questions)

(All questions are Multiple Choice Questions)

32.   **26. What will be the output of the following JavaScript code?** *   1 point

```
let x = 5 + "5";
console.log(typeof x);
```

Mark only one oval.

◯ A) number

◯ B) string

◯ C) NaN

◯ D) undefined

33.   **27. What will be the output of this Python snippet?** *   1 point

```
def test(a, b=[]):
    b.append(a)
    return b
print(test(1))
print(test(2))
```

Mark only one oval.

◯ A) [1], [2]

◯ B) [1], [1, 2]

◯ C) [1, 2], [1, 2]

◯ D) SyntaxError

34.   28. **If the following HTML and CSS code is executed, what will be the**   *   1 point
color of the text?

html
```
<p class="text">Hello, World!</p>
```

css
```
.text {
  color: red !important;
  color: blue;
}
```

Mark only one oval.

- A) Red
- B) Blue
- C) Black
- D) Undefined

35.   29. **What will be the output of the following React code?** *   1 point

```
function App() {
  const [count, setCount] = React.useState(0);
  function increment() {
    setCount(count + 1);
    setCount(count + 1);
  }
  return <button onClick={increment}>{count}</button>;
}
```

Mark only one oval.

- A) Increases by 1 on click
- B) Increases by 2 on click
- C) Remains 0
- D) Throws an error

36. 30. **Given the URL**   *   1 point

https://example.com/?name=John&age=25

How can you extract the value of the name parameter in JavaScript.

Mark only one oval.

◯ A) new URLSearchParams(window.location.search).get("name")

◯ B) window.location.search.split("=")[1].split("&")[0]

◯ C) new URL(window.location.href).name

◯ D) document.URL.name

Google Forms