✍️ Full Stack Developer (MERN) – Written Exam

Total Marks: 15
 Time: 30 minutes
Name:
Mobile No:

🧩 Section A: Conceptual Questions (Each 2 marks × 3 = 6 marks)

1. **Explain how JWT-based authentication works in a MERN stack application. Why is it more secure than storing tokens in localStorage?**
 (2 marks)

   Answer:

2. **Differentiate between SSR (Server-Side Rendering) and CSR (Client-Side Rendering). In what cases would you prefer Next.js over React?**
 (2 marks)

   Answer:

3. **What is the purpose of `useMemo` and `useCallback` in React? Give a scenario where using them is important.**
   (2 marks)
   Answer:

⚙️ **Section B: Code Output or Debug (Each 1.5 marks × 2 = 3 marks)**

4. **What will be the output of the following Node.js code snippet? Explain your answer briefly.**

```
console.log("Start");
setTimeout(() => {
  console.log("Inside Timeout");
}, 0);
console.log("End");
```

(1.5 marks)

Answer:

5. **Find and fix the issue in the following React code:**

```
useEffect(() => {
  async function fetchData() {
    const res = await axios.get('/api/data');
    setData(res.data);
  }
}, []);
```

(1.5 marks)
Answer:

🛠️ **Section C: Real-life Scenario / Logic Building (6 marks)**

6. **You are building an e-commerce application. Users can add items to the cart. Create the MongoDB schema for a `Cart` model where each user can have multiple products, with quantity and price, and calculate total cart value dynamically.**

Bonus: Describe how you would store session-wise carts for unregistered users.

(6 marks)

Answer: