

React Interview Workbook

Comprehensive mix of Fundamental & Advanced Questions

■ Level 1: React Fundamentals

1. What is React and how does it differ from traditional DOM manipulation?

Answer/Notes: _____

2. Explain the concept of components in React.

Answer/Notes: _____

3. What are props and how do they differ from state?

Answer/Notes: _____

4. What are React Hooks and why were they introduced?

Answer/Notes: _____

5. How does conditional rendering work in React?

Answer/Notes: _____

6. What are controlled and uncontrolled components?

Answer/Notes: _____

7. What is JSX and why do we need it?

Answer/Notes: _____

8. What are keys in React lists and why are they important?

Answer/Notes: _____

9. What is the purpose of the Virtual DOM?

Answer/Notes: _____

10. Explain the difference between function components and class components.

Answer/Notes: _____

■ ■ Level 2: Intermediate Concepts

11. How does useEffect work and when does it run?

Answer/Notes: _____

12. Explain the purpose of dependency arrays in useEffect.

Answer/Notes: _____

13. What is useRef and what are its practical use cases?

Answer/Notes: _____

14. How does React handle re-renders and state batching?

Answer/Notes: _____

15. Explain prop drilling and how Context API helps prevent it.

Answer/Notes: _____

16. How do you lift state up in React and why is it important?

Answer/Notes: _____

17. What are Higher-Order Components (HOCs)?

Answer/Notes: _____

18. What is memoization in React? Explain useMemo and useCallback.

Answer/Notes: _____

19. How do you handle forms and validation in React?

Answer/Notes: _____

20. How does React Router manage navigation?

Answer/Notes: _____

■ Level 3: Advanced & System Design

21. What is Server-Side Rendering (SSR) and how does it differ from client-side rendering?

Answer/Notes: _____

22. What is hydration in React and when does it occur?

Answer/Notes: _____

23. How does lazy loading improve performance?

Answer/Notes: _____

24. What is Redux and how does it integrate with React?

Answer/Notes: _____

25. Explain how React handles asynchronous updates using React Fiber.

Answer/Notes: _____

26. What is an error boundary and when should you use it?

Answer/Notes: _____

27. Explain the difference between React and React Native.

Answer/Notes: _____

28. How do you optimize a React app for performance?

Answer/Notes: _____

29. How would you design a real-time chat system using React + WebSockets?

Answer/Notes: _____

30. How can you secure API tokens in a React app?

Answer/Notes: _____

■ Final Tips for React Interviews

- Always explain your thought process out loud before coding. - Use `useState` and `useEffect` properly; interviewers love clean hooks logic. - Mention performance optimizations like memoization, lazy loading, and avoiding unnecessary re-renders. - Practice building small reusable components like buttons, modals, and forms. - Be confident explaining how React works under the hood (Virtual DOM, reconciliation, rendering).