

The Over Kill

◆ React Core (Basics)

1. What is React and why is it popular?
2. What is JSX and why do we use it?
3. Difference between functional components and class components.
4. What are props in React?
5. Difference between props and state.
6. What is the virtual DOM and how does React use it?
7. What are React fragments and why are they used?
8. What is the difference between single-page applications (SPA) and multi-page applications (MPA)?

◆ Hooks (High Priority for Freshers)

9. What are React hooks?
10. Explain useState, useEffect, and useRef.
11. What is useContext and when to use it?
12. Difference between useMemo and useCallback?
13. What is useReducer and when would you use it instead of useState?
14. What are rules of hooks?
15. What is the difference between useEffect and useLayoutEffect?
16. Explain custom hooks.

◆ Component Communication & Patterns

17. What is prop drilling and how can you avoid it?
18. Difference between controlled and uncontrolled components (with hooks).
19. What are keys in React and why are they important?

◆ Routing (React Router Basics)

- 20. What is React Router?
- 21. Difference between Link and NavLink.
- 22. How do you implement protected routes?
- 23. Explain route parameters (useParams).
- 24. What are nested routes?

◆ Performance Optimization

- 25. How does React handle performance optimization?
- 26. When should you use React.memo?
- 27. How do you optimize re-renders in React?
- 28. How can you improve performance when rendering a large list of items?

◆ State Management

- 29. What is Redux and when should you use it?
- 30. Explain Redux architecture (actions, reducers, store).
- 31. What is the difference between Redux and Context API?
- 32. Difference between global state and local state.

◆ API Handling (Practical Must-Knows)

- 33. How do you handle API calls in React?
- 34. Difference between fetch and axios.
- 35. How do you show loading state when calling an API?
- 36. How do you handle errors in API calls?

◆ Project & Practical Questions

37. How does React differ from plain JavaScript DOM manipulation?
38. How would you implement authentication in React?
39. How do you manage forms in React?
40. How do you deploy a React app?