React Interview Questions - Basic & Advanced

Q: What is React?

A: React is a JavaScript library developed by Facebook for building user interfaces, especially single-page applications.

Q: What is JSX?

A: JSX is a syntax extension for JavaScript that allows writing HTML-like code inside JavaScript.

Q: What are Components in React?

A: Components are independent, reusable pieces of UI. Types: Functional (preferred) and Class components.

Q: What is the difference between state and props?

A: Props are passed from parent, immutable. State is internal, managed via useState or setState.

Q: What is the Virtual DOM?

A: A lightweight in-memory representation of the actual DOM. React updates only the parts that changed.

Q: What is useState?

A: A React hook to add local state in functional components.

Q: What is useEffect used for?

A: For performing side effects like data fetching and subscriptions.

Q: Controlled vs Uncontrolled components?

A: Controlled: React manages input state. Uncontrolled: DOM manages input state via refs.

Q: Why are keys important in lists?

A: They help React identify which items changed, improving performance.

Q: How do you pass data between components?

A: Parent to child: props; Child to parent: callback functions.

Q: What is the Context API?

A: A way to share global state across components without prop drilling.

Q: What are React Fragments?

A: Used to return multiple elements without extra DOM nodes.

Q: What is React Router?

A: A library to manage routing in React apps.

Q: Difference between useCallback and useMemo?

A: useCallback memoizes a function, useMemo memoizes a computed value.

Q: What is a higher-order component (HOC)?

A: A function that takes a component and returns a new component with additional props or behavior.