**1: What is a Single-Page Application (SPA)?**  
A Single-Page Application is a web app that loads a single HTML page and dynamically updates content without reloading the page.

**Q2: What are the benefits of SPAs?**  
SPAs offer faster navigation, smooth user experience, efficient caching, and reusable components.

**Q3: What is React?**  
React is a JavaScript library for building user interfaces using reusable components and efficient rendering.

**Q4: How does React work?**  
React uses a virtual DOM to detect changes, then updates only the modified parts in the real DOM. It supports JSX and hooks for state and logic management.

**Q5: What are the key differences between SPA and MPA?**

| **Feature** | **SPA** | **MPA** |
| --- | --- | --- |
| Reloads | No full reloads | Reloads on each navigation |
| Speed | Fast after initial load | Slower due to full reloads |
| SEO | Needs server-side rendering (SSR) | Easier to optimize for SEO |
| UX | Smooth, app-like | Traditional website experience |

**Q6: What are the pros and cons of SPAs?**  
**Pros**: Fast and fluid user experience, component reuse, good for PWAs  
**Cons**: SEO challenges, high initial load time, complex browser history handling

**Q7: What is the Virtual DOM?**  
The virtual DOM is a lightweight copy of the real DOM used by React to detect and efficiently update changes in the UI.

**Q8: What are the main features of React?**  
React includes component-based structure, virtual DOM, declarative syntax, JSX, unidirectional data flow, hooks, and support for mobile via React Native.