

# Question based on Lec 6 – REACT

## Single Answer

1. What does React primarily focus on?
  - a) Backend development
  - b) Creating user interfaces
  - c) Database management
  - d) Server-side rendering
2. Which architecture does React serve as the "View" for?
  - a) REST
  - b) MVC (Model-View-Controller)
  - c) MVVM (Model-View-ViewModel)
  - d) Event-driven architecture
3. What is JSX in React?
  - a) A JavaScript compiler
  - b) A syntax extension for JavaScript that looks like HTML/XML
  - c) A CSS preprocessor
  - d) A virtual DOM library
4. What is the purpose of the Virtual DOM in React?
  - a) To replace the actual DOM completely
  - b) To optimize DOM manipulation by updating only changed elements
  - c) To store application data persistently
  - d) To handle server-side rendering
5. In React, what are props used for?
  - a) Managing component state internally
  - b) Passing data from parent to child components
  - c) Handling user inputs directly
  - d) Storing global variables
6. Which React lifecycle method is called immediately after a component is mounted?
  - a) componentDidMount()
  - b) componentWillUnmount()
  - c) componentDidMount()
  - d) shouldComponentUpdate()
7. Which of the following Hooks is used to manage state in functional components?
  - a) useEffect
  - b) useState
  - c) useContext
  - d) useReducer
8. What does "lifting state up" mean in React?
  - a) Moving state from child components to parent components for shared access

- b) Removing state entirely from components
  - c) Storing state globally across all components
  - d) Using external libraries to manage state
9. What is Babel in web development?
- a) A bundling tool for JavaScript files
  - b) A JavaScript compiler that transforms modern JS into older versions for compatibility
  - c) A CSS preprocessor for styling web pages
  - d) A database management system
10. Which bundling tool is known for being zero-config and easy to use?
- a) Webpack
  - b) Parcel
  - c) Vite
  - d) Babel

### Multiple Answer

11. Which are key features of React? (Select two correct answers.)
- a) One-way data flow
  - b) Two-way data binding
  - c) Virtual DOM
  - d) Built-in database management
12. Which tools are commonly used for bundling web applications? (Select three correct answers.)
- a) Webpack
  - b) Parcel
  - c) Babel
  - d) Vite
13. Which React Hooks are commonly used in functional components? (Select three correct answers.)
- a) useState
  - b) useEffect
  - c) useContext
  - d) useSnapshot
14. What are advantages of using JSX in React? (Select two correct answers.)
- a) Prevents cross-site scripting attacks by converting expressions to strings
  - b) Allows writing HTML/XML-like syntax within JavaScript code
  - c) Improves performance by reducing DOM manipulation overhead
  - d) Provides built-in support for database queries
15. Which features differentiate Webpack from Parcel and Vite? (Select two correct answers.)
- a) Highly configurable but complex setup
  - b) Minimal configuration required
  - c) Large plugin ecosystem
  - d) Faster build time for small projects

### Fill in the Blanks

16. [REACT](#) is an architectural style for building user interfaces that emphasizes reusable and nestable components.
17. The [virtual](#) DOM optimizes performance by updating only changed elements instead of re-rendering the entire page.
18. In JSX, event handlers are specified as attributes prefixed with \_\_\_\_\_ followed by camelCase event names.
19. The [useEffect](#) Hook allows you to perform side effects like fetching data or updating the DOM after rendering.
20. Bundling tools like Webpack, Parcel, and Vite reduce [HTTP Request](#) \_\_\_\_\_ by combining multiple files into one.