

**1.What is a component in React?**

- a) A function that returns JSX b) A JavaScript class
- c) An HTML element d) A database query

Answer: a) A function that returns JSX

**2.How do you define a functional component in React?**

- a) Using the class syntax b) Using the function keyword
- c) Using the extends keyword d) Functional components cannot be defined in React

Answer: b) Using the function keyword

**3.How do you define a class component in React?**

- a) Using the extends keyword b) Using the class keyword
- c) Using the function keyword d) Class components cannot be defined in React

Answer: b) Using the class keyword

**4.What is the purpose of props in React components?**

- a) To pass data from a parent component to a child component
- b) To define the state of a component
- c) To handle events in a component
- d) Props are not used in React components

Answer: a) To pass data from a parent component to a child component

**5.How do you pass props to a component in JSX?**

- a) By using the props attribute b) By using the state attribute
- c) By using the spread operator d) By using the render method

Answer: a) By using the props attribute

**6.How do you access props in a functional component?**

- a) By using the this keyword b) By using the props object
- c) By using the state object d) Functional components cannot access props

Answer: b) By using the props object

**7.How do you access props in a class component?**

- a) By using the this.props object b) By using the props attribute
- c) By using the state object d) Class components cannot access props

Answer: a) By using the this.props object

**8.What is the purpose of the render() method in a class component?**

- a) To define the component's initial state b) To render JSX and HTML content
- c) To handle events in the component d) The render() method is not required in class components

Answer: b) To render JSX and HTML content

**9.How do you define and manage state in a functional component?**

- a) By using the useState() hook b) By declaring a state object
- c) By using the setState() method d) Functional components cannot manage state

Answer: a) By using the useState() hook

**10.How do you define and manage state in a class component?**

- a) By using the constructor() method and the setState() method
- b) By using the useState() hook
- c) By declaring a state object
- d) Class components cannot manage state

Answer: a) By using the constructor() method and the setState() method

**11.How do you update the state in React?**

- a) By directly modifying the state object
- b) By using the setState() method
- c) By using the this.state() method
- d) State cannot be updated in React

Answer: b) By using the setState() method

**12.What is the purpose of the lifecycle methods in a class component?**

- a) To manage component state
- b) To handle events in the component
- c) To fetch data from an API
- d) To perform actions at specific points in the component's lifecycle

Answer: d) To perform actions at specific points in the component's lifecycle

**13.Which lifecycle method is called immediately after a component is rendered for the first time?**

- a) componentDidMount
- b) componentDidUpdate
- c) componentWillMount
- d) componentWillUnmount

Answer: a) componentDidMount

**14.Which lifecycle method is called when the props or state of a component are updated?**

- a) componentDidMount
- b) componentDidUpdate
- c) componentWillMount
- d) componentWillUnmount

Answer: b) componentDidUpdate

**15.How do you handle events in React components?**

- a) By using inline event handlers within JSX
- b) By using event listeners attached to DOM elements
- c) By using the React event system with synthetic events
- d) By using the Redux event middleware

Answer: c) By using the React event system with synthetic events

**16.How do you conditionally render content in React?**

- a) By using if-else statements within JSX
- b) By using the switch statement within JSX
- c) By using the ternary operator within JSX
- d) Conditional rendering is not supported in React

Answer: c) By using the ternary operator within JSX

**17.What is the purpose of the key prop in a list of components?**

- a) To uniquely identify each component in the list
- b) To define the order of components in the list
- c) To specify the CSS styling for each component in the list
- d) The key prop is not required in a list of components

Answer: a) To uniquely identify each component in the list

**18.How do you handle forms in React?**

- a) By using the form attribute b) By using the onSubmit event handler
- c) By using the state object d) React doesn't support form handling

Answer: b) By using the onSubmit event handler

**19.What is the purpose of React fragments?**

- a) To group multiple components together
- b) To render multiple elements without adding an extra DOM node
- c) To handle component errors and exceptions
- d) React fragments are not used in React components

Answer: b) To render multiple elements without adding an extra DOM node

**20.How do you organize components in a React application?**

- a) By placing all components in a single file b) By creating separate folders for each component
- c) By using the component hierarchy d) Component organization is not required in React

Answer: c) By using the component hierarchy