

**1.What is the component lifecycle in React?**

- a) The process of creating and destroying components
- b) The stages a component goes through from initialization to unmounting
- c) The methods and events used to handle component rendering
- d) The lifecycle of data fetching and state management in React

Answer: b) The stages a component goes through from initialization to unmounting

**2.Which method is called when a component is being created and initialised?**

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

Answer: c) componentWillMount

**3.Which method is called after a component has been updated and re-rendered?**

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

Answer: b) componentDidUpdate

**4.Which method is called just before a component is removed from the DOM?**

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

Answer: d) componentWillUnmount

**5.In which phase of the component lifecycle can you fetch data from an API?**

- a) Mounting phase b) Updating phase
- c) Unmounting phase d) All phases allow data fetching

Answer: a) Mounting phase

**6.What is the purpose of the render() method in React components?**

- a) To handle component initialization b) To update component state
- c) To define the JSX markup of the component d) To remove the component from the DOM

Answer: c) To define the JSX markup of the component

**7.Which method is called every time a component receives new props?**

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

Answer: d) componentWillReceiveProps

**8.What is the recommended method to perform side effects in React components?**

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

Answer: a) componentDidMount

**9.Which method is called before the component is rendered for the first time?**

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

Answer: c) componentWillMount

**10. How can you prevent a component from re-rendering unnecessarily?**

a) By using PureComponent instead of Component b) By using shouldComponentUpdate method

c) By using memoization techniques d) All of the above

Answer: d) All of the above

**11. Which method is used to check if a component should update or not?**

a) componentDidMount b) componentDidUpdate c) shouldComponentUpdate d) componentWillUpdate

Answer: c) shouldComponentUpdate

**12. Which method is called after the component has been inserted into the DOM?**

a) componentDidMount b) componentDidUpdate  
c) componentWillMount d) componentWillReceiveProps

Answer: a) componentDidMount

**13. In which phase of the component lifecycle can you safely update the component's state?**

a) Mounting phase b) Updating phase  
c) Unmounting phase d) All phases allow state updates

Answer: b) Updating phase

**14. Which method is called when the component is about to be removed from the DOM?**

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

Answer: d) componentWillUnmount

**15. Which method is called after the component has been unmounted from the DOM?**

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

Answer: d) componentWillUnmount

**16. Which method is used to handle errors that occur during rendering?**

a) componentDidCatch b) componentDidRender  
c) componentDidUnmount d) componentDidUpdate

Answer: a) componentDidCatch

**17. Which method is called before the component is updated and re-rendered?**

a) componentDidMount b) componentDidUpdate  
c) componentWillMount d) componentWillReceiveProps

Answer: d) componentWillReceiveProps

**18. How can you force a component to re-render?**

a) By calling the setState method b) By calling the render method  
c) By calling the forceUpdate method d) By calling the componentDidMount method

Answer: c) By calling the forceUpdate method

**19. Which method is called after the component has been updated and re-rendered in response to new props or state changes?**

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

Answer: b) componentDidUpdate

**20. Which method is called before the component is mounted into the DOM?**

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

Answer: c) componentWillMount