**1.Mention one difference between Props and State.**

State is mutable while Props are immutable. This means that the state is internal and managed by the component while props are external and managed by anything that renders the component.

| **Props** | **State** |
| --- | --- |
| Props are used to pass data handlers to its children components | State is used to store the data of the components that has to be rendered to the view |
| Props are immutable -once set, props cannot be changed | State holds the data and can change over time |
| Props can be used in both functional and class components | State can only be used in class components |
| Props are set by the parent component for the children components | State is generally updated by event handlers |

**2.Can you differentiate between createElement and cloneElement?**

CreateElement creates a new element and returns it, while CloneElement clones an existing element and returns a new element.

# **3.What are React Hooks?**

React Hooks open up a completely new approach to constructing functional components, enabling us to include capabilities like stateful logic that are only available for class components.

React mostly makes use of its built−in hooks, useState and useEffect Hooks, to do this.

or

Hooks are used to give functional components an access to use the states and are used to manage side-effects in React.

**4.Explain Props in ReactJS**.

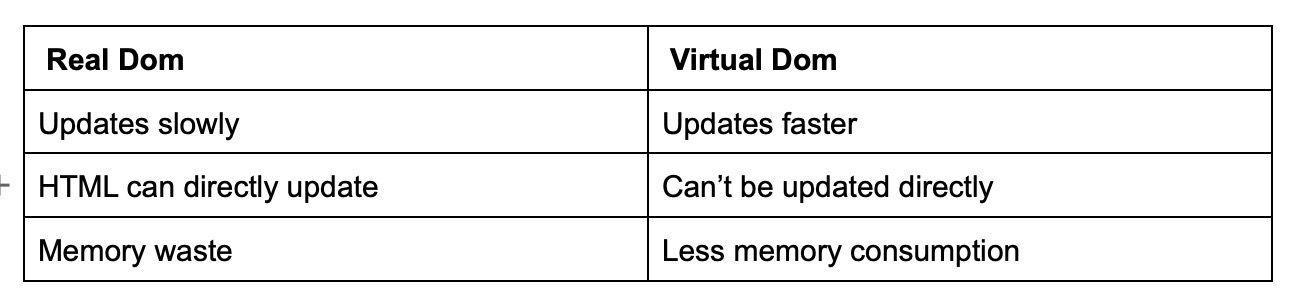
Props in React mean properties. They act as a communication channel from parent to child.

**5. What is the purpose of render() in React.**

Each React component must have a render() mandatorily. It returns a single React element which is the representation of the native DOM component. If more than one HTML element needs to be rendered, then they must be grouped together inside one enclosing tag such as <form>, <group>,<div> etc. This function must be kept pure i.e., it must return the same result each time it is invoked.

**6.Can you outline the differences between Real DOM and Virtual DOM?**

Real DOM and Virtual DOM differ in following ways:



**7.Why are keys used in React.js Lists?**

Keys are used in React.js Lists because:

* Key helps in identifying what objects have been altered, moved, or deleted from lists
* With the help of keys, it is easier to determine which objects must be re-rendered instead of all components being re-rendered all the time.

**8.What is JSX?**

JSX is the syntax extension for Javascript in React.js. With the help of JSX, it is easy to define how the user interface should look. Additionally, with JSX, the file containing the Javascript code can be used to write the HTML structures as well.

**9.What are the main advantages of React.js?**

The main advantages of React.js are:

* It enhances the performance of the application
* It can be used from the client-side as well as the server-side
* The readability of code is higher in React.js because of JSX
* It offers easy integration with frameworks such as Angular, Meteor, etc.
* It is easy to write UI test cases with React.js

**10. What are the predefined prop types present in React?**

There are five main predefined prop types in React. They are as follows:

1. PropTypes.bool
2. PropTypes.func
3. PropTypes.node
4. PropTypes.number
5. PropTypes.string

**MCQ Questions and Answer**

1. JSX allows us to write \_\_\_\_\_.

1. jQuery in React
2. Angular Code in React
3. MySQL in React
4. HTML in React

Answer: D) HTML in React

2. JSX stands for \_\_\_\_\_.

1. JSON
2. JSON XML
3. JavaScript XML
4. JavaScript and AngularJS

Answer: C) JavaScript XML

3. Which ReactJS function renders HTML to the web page?

1. render()
2. ReactDOM.render()
3. renders()
4. ReactDOM.renders()

Answer: B) ReactDOM.render()

4. React is a \_\_\_\_.

1. Web development Framework
2. JavaScript Library
3. jQuery
4. Web Server

Answer: B) JavaScript Library

**5. React is also known as \_\_\_\_\_.**

1. ReactJS
2. js
3. Both A. and B.
4. None of these

Answer: C) Both A. and B.

**6. What is React.js?**  
a) Open-source JavaScript back-end library  
b) JavaScript front-end library to create a database  
c) Free and open-source JavaScript front-end library  
d) None of the mentioned

Answer: c

**7. Which of the following acts as the input of a class-based component?**  
a) Class  
b) Props  
c) Factory  
d) None of the mentioned

Answer: b

**8. React.js is written in which of the following language?**  
a) C  
b) C++  
c) JavaScript  
d) Java

Answer: c

**9. How many elements can a valid react component return?**  
a) React doesn’t return element  
b) 1 Element  
c) More than 1 element  
d) None of the mentioned

Answer: b

**10. In which of the following directory React Components are saved?**  
a) Inside js/components/  
b) Inside components/js/  
c) Inside vendor/js/components/  
d) Inside vendor/components/

Answer: a

**11. Which of the following command is used to Install create-react-app?**  
a) npm install create-react-app  
b) npm install -f create-react-app  
c) npm install -g create-react-app  
d) install -g create-react-app

Answer: c  
Explanation: The “npm install -g create-react-app” command is used to install the create-react-app.

**12. In which condition is the React.js Lifecycle method static getDerivedSateFromProps(props, state) is called?**  
a) When the state of the component is updated  
b) When a component is created for the first time  
c) Both of the mentioned  
d) None of the mentioned

Answer: c

**13. Which of the following is method is not a part of ReactDOM?**  
a) ReactDOM.hydrate()  
b) ReactDOM.destroy()  
c) ReactDOM.createPortal()  
d) All of the mentioned

Answer: b  
Explanation: ReactDOM.destroy() method is not a part of ReactDOM. ReactDOM provides the developers with an API containing the methods such as render(), findDOMNode(), unmountComponentAtNode(), hydrate(), and createPortal().

**14. Which of the following is correct about prop in react?**a) Can be changed inside another component  
b) Can be changed inside the component  
c) Cannot be changed in the component  
d) All of the mentioned

Answer: c

**15. Which of the following is used to pass data to a component from outside in React?**  
a) props  
b) render with arguments  
c) setState  
d) PropTypes

Answer: a

**16. Which command is used to create the new react app?**

1. npx create-react-app my-app

b. npx create-react-app -g my-app

c) npx create-new-react-app my-app

Answer - a. npx create-react-app my-app

**17 .**[**Everything in React is a \_\_\_\_\_\_\_\_\_\_\_\_\_**](about:blank)

A) Module

B) Component

C) Package

D) Class

Correct Answer : Option (B) :   Component

**18 .**[**In which directory React Components are saved?**](about:blank)

A) Inside js/components/

B) Inside vendor/components/

C) Inside vendor/components/

D) Inside vendor/

Answer: Option (A) :   Inside js/components/

**19.Props are \_\_\_\_\_\_\_\_\_\_ into other components**

A) Injected

B) Methods

C) Both A and B

D) All of these

Answer: Option (B):   Methods

**20.What are the limitations of ReactJS?**

A) React is only for view layer of the app so we still need the help of other technologies to get a complete tooling set for development

B) React is using inline templating and JSX. This can seem awkward to some developers

C) The library of react is too large

D) All of these

Correct Answer : Option (D) :   All of these

**21. What is Babel?**

a)Compiler

b) Interpreter

c) Both A & B

None of these

Correct Answer - a. Compiler

**22. Why react is mainly used for?**

a)Database

b)User Interface

c) MVC

d)None of the above

Correct Answer - b). User Interface

**23. In ES6 – What is the correct syntax of class inheritance?**

1. class class1 extends class2{...}

B. class class1 extends | class2{...}

C. class class1 | extends class2{...}

D. class class1 | extends | class2{...}

Answer: A) class class1 extends class2{...}

**24. Which method is used to generate lists?**

1. map()

B. generate()

C. new()

D. maps()

Answer: A) map()

**25. How many types of the components in ReactJS?**

1. 1

B. 2

C. 3

D. 4

Answer: B) 2

**26. Which are the valid components in ReactJS?**

1. Variable components

B. Function components

C. Class components

D. Both A. and B.

E. Both B. and C.

Answer: E) Both B. and C.

**27 .**[**Which of the following API is a MUST for every ReactJS component?**](https://www.freetimelearning.com/online-quiz/react-js-quiz-que-ans.php?Which-of-the-following-API-is-a-MUST-for-every-ReactJS-component?&id=10)

A)getInitialState

B)render

C)renderComponent

D)None of the Above

Correct Answer : Option (C) :   renderComponent

**28. Identify the smallest building block of React.JS**

a) Props

b) Elements

c) Components

d) None of the above

Ans. C

**29. What is React.JS mainly used for building?**

a) Database

b) Connectivity

c) User interface

d) Design interface

Ans. C

**30. Which of the following function is used to change the state of react component?**

a) this.setState()

b) this.state()

c) this.setChangeState()

d) None of the above

Ans. A

**31. Among the following which acts as the input of class-based component?**

a) Factory

b) Render

c) Class

d) props

Ans. D

**32. Among the following which is used to create a class inheritance?**

a) Inherits b) Extends

c) Create d) this

Ans. B

**33. Choose the correct data flow sequence of flux concept.**

a) Action > Dispatcher > Store > view

b) Action > Dispatcher > view > Store

c) Action > store > view > Dispatcher

d) Dispatcher > Action > Store > View

Ans. B

**34. Total ways to identify variables in ES6 is?**

a) 1

b) 2

c) 3

d) 4

Ans. C

**35. Which of the following are two ways to handle data in react?**

a) services and components

b) State and props

c) state and services

d) state and component

Ans. B

**36. Among the corner which is a must-have for every React.JS component?**

a) renderComponent

b) SetinitialComponent

c) Render

d) All of the above

Ans. A

**37. ES6 stands for \_\_\_\_\_\_**

a) ECMA 6

b) ECMAJavaSript 6

c) ECMAScript 6

d) EjavaScript 6

Ans. C

**38. Choose the method with refers to the parent class in ReactJS?**

a) this()

b) super()

c) iniherits()

d) self()

Ans. B

**39. JSX stands for \_\_\_\_\_**

a) Javascript XML b) JSON XML

c) JSON d) Javascript and AngularJS

Ans. A

**40. The function which is called to render HTML to a web page in react?**

a) ReactDOM\_render() b) render()

c) render\_DOM() d) DOM\_HTML

Ans. B

**41. Choose the functionality of setState?**

a) Access the previous state before the setState operation

b) invoke code after the setState operation is done

c) replace this data completely instead of the default merge actionnone of the above

d) none of the above

Ans. B

**42. Choose the method which is not a part of ReactDOM?**

a) ReactDOM.createPortal()

b) ReactDOM.hydrate()

c) ReactDOM.destroy()

d) ReactDOM.findDOMNode()

Ans. C

**43. Choose the correct statement in the context of uncontrolled components in React.JS?**

a) source of truth can be anything

b) source of truth is a component state

c) source of truth is DOM

d) none of the above

Ans. C

**44. In which directory is react component saved?**

a) vendor/js/components/

b) components/js

c) js/components

d) vendor/components

Ans. C

**45. Wht is the functionality of a “webpack” command?**

a) Runs react local development server

b) transfer files all the JavaScript down into one file

c) a module blunder

d) none of the above

Ans. A

**46. In react, the key should be?**

a) Unique among his siblings only b) unique in the DOM

c) Does not requires to be unique d) all of the above

Ans. A

**47. Which company developed React.JS?**

a) Apple b) Facebook

c) Google d) Twitter

Ans. B

**48. Choose the component which should be overridden to stop the component from updating?**

a) componentDidUpdate

b) componentDidMount

c) willComponentUpdate

d) shouldComponentUpdate

Ans. D

**49. Which of the following is used to access a function fetch() from h1element in JSX?**

a) <h1>${fetch()}</h1>

b) <h1>{fetch}</h1>

c) <h1>${fetch}</h1>

d) <h1>{fetch()}</h1>

Ans. D

**50. When setState() is call inside render() method, which of the following events takes place?**

a) duplicate key error

b) repetitive output happeness on the screen

c) nothing happens

d) stackoverflow error

Ans. D

**51. What happens if you render an input element with disabled = {false}?**

a) it will be rendered as enabled

b) it will be rendered as disabled

c) it will not be rendered at all

d) none of the above

Ans. A

**52. When is useReducer used over useState in React component?**

a) When we want to replace redux

b) when we want to break our production app

c) when we want to improve performance

d) none of the above

Ans. A

**53. How can you access form input values in React.js?**

a) By using the document.getElementById() method

b) By using the event.target.value property

c) By using the useState hook and setting the initial value

d) By using the useRef hook and the current property

**Answer:**

b) By using the event.target.value property

**54. Choose the library which is most often associated with react?**

a) Sinon

b) Chai

c) Jest

d) Mocha

Ans. C

**55. What is used to handle code-splitting?**

a) React.Lazy

b) React.memo

c) React.fallback

d) React.split

Ans. A

**56. Why is useLayoutEffect used?**

a) To complete the update

b) to optimize for all devices

c) To change the layout of the screen

d) When you need the browser to paint before the effectors

Ans. D

**57. Which of the following terms commonly described react applications?**

a) imperative

b) Integrated

c) Declarative

d) closed

Ans. C

**58. Why is ref used?**

a) to bind the function

b) to call a function

c) to directly access the DOM node

d) to refer to another JS file

Ans. C

**59. Which of the following is the correct name of React.js?**

a) React b) React.js

c) ReactJS

d) All of the above

Ans. D

**60. Which of the following are the advantage of React.js?**

a) React.js can increase the application’s performance with Virtual DOM

b) React.js is easy to integrate with other frameworks such as Angular, BackboneJS since it is only a view

library.

c) React.js can render both on client and server side.

d) All of the above

Ans. D

**61. Which of the following isnot a disadvantage of React.Js?**

a) React.Js has only a view layer. We have put your code for Ajax requests, events and so on.

b) The library of React.js is pretty large.

c) The JSX in React.js makes code easy to read and write

d) The learning curve can be steep in React.js

Ans. C

62. A class is a type of function, but instead of using the keyword function to initiate it, which keyword do

we use?

a) Constructor

b) Class

c) Object

d) DataObject

Ans. B

**63. Does Readt.js create a VIRTUAL DOM in the memory?**

a) TRUE

b) FALSE

c) Can be true for false

d) Cannot say

Ans. A

**64. Which of the following lifecycle events React components have at the highest level?**

a) Destruction

b) Initialization

c) State/Property Updates

d) All of the above

Ans. D

**65. How can you set a default value for an uncontrolled form field?**

a) By using the value property

b) By using the defaultValue property

c) By using the default property

d) It is assigned automatically

Ans. B

**66. We can update the state in React.js by calling to setState() method. These calls are:**

a) Synchronous in nature

b) Asynchronous in nature

c) Are asynchronous but can be made synchronous when required

d) None of the above

Ans. B

**67. What changes would appear in the component as soon as the state of the React component is changed?**

a) It will do nothing; you have to call render method to render the component again

b) It will re-render the component

c) It can be created again from scratch

d) None of the above

Ans. B

**68. What is the use of the create-react-app command in the React.js application?**

a) it is used to update a React app

b) It is used to create a new React app

c) It is used to install dependencies

d) None of the above

Ans. B

**69. What is true for the keys given to a list of elements in React?**

a) Unique in the DOM

b) Unique among the silings only

c) Do not require to be unique

d) None of the above

Ans. B  
**70. What is the purpose of the useParams hook in React Router?**

a) To handle form validation in React.js

b) To retrieve query parameters from the URL

c) To extract URL parameters from a route

d) To manage the state of route transitions

**Answer:**c) To extract URL parameters from a route

**71. Does React.js create a VIRTUAL DOM in the memory?**

1. True
2. False
3. Cannot say
4. None of above

**Answer: True**

**72. Which of the following is used to pass data to a component from outside in React.js?**

1. Render with arguments
2. PropTypes
3. SetState
4. Props

**Answer: Props**

**73. What are the two ways to handle data in React?**

1. Services & Components
2. State & Component
3. State & Props
4. State & Services

**Answer: State & Props**

**74.  Which of the following is the correct name of React.js?**

1. React.js
2. React
3. ReactJS
4. All of the above

**Answer: All of the above**

**75. What does ES6 stand for?**

1. ECMAJavaScript 6
2. ECMA 6
3. ECMAScript 6
4. EJavaScript 6

**Answer: ECMAScript 6**

**76. What is the use of “web pack” command in React.js?**

1. It is a module bundler
2. The “webpack” command is used to transpile all the JavaScript down into one file
3. It runs React local development server
4. None of the above

**Answer: It is a module bundler**