**React.js**

1. **What is the virtual DOM?**

**It is the virtual of a UI with the help of library as React JS**

1. **What is the primary difference between the ES6 and ES5 standards?**

**ES5 SPPORTS PRIMITIVE DATA TYPE THAT ARE STRINGS NUMBERS AND BOOLEAN**

**ES6 IT USE NEW PRIMITIVR DATA TYPE “SYSMBOL” FOR SUPPORTING UNIQUE VALUE**

1. **How do you update the state of a component?**

**WE USE setState() and pass in an object**

1. **What is PureComponent?**

**It don’t not re- renders when value of state and props have some update**

1. **What is React.cloneElement?**

**It is an element which is surrounded with pre and post fix like{‘or”}**

1. **What is the difference between mapStateToProps() and mapDispatchToProps() ? Give an example.**

**mapState is function it use to give store data**

**mapDispatchToProps is to give the action creators as props to components**

1. **How to add multiple middlewares to Redux?**

|  |
| --- |
|  |
| **8.       What is wrong with this example, and how would you go -** |
|  |
| class App extends React.Component { |
| constructor(props) { |
| super(props); |
| this.state = { |
| name: this.props.name || 'Anonymous' |
| } |
| }  render() { |
| return ( |
| <p>Hello {this.state.name}</p> |
| ); |
| } |
| } getDerivedStateFromProps |
|  |
| **9.       Can you explain the differences between all those ways. What happens when you click each of the buttons?** |
|  |
| class App extends React.Component { |
|  |
| constructor() { |
| super(); |
| this.name = 'MyComponent'; |
|  |
| this.handleClick2 = this.handleClick1.bind(this); |
| } |
|  |
| handleClick1() { |
| alert(this.name); |
| } |
|  |
| handleClick3 = () => alert(this.name);render() { |
| return ( |
| <div> |
| <button onClick={this.handleClick1()}>click 1</button> |
| <button onClick={this.handleClick1}>click 2</button> |
| <button onClick={this.handleClick2}>click 3</button> |
| <button onClick={this.handleClick3}>click 4</button> |
| </div> |
| ); |
| } |
| }  ()=>this.handleClick2 |
|  |
|  |
|  |
| **10.   What's the issue with this component. Why? How would you go about fixing it?** |
|  |
| class App extends React.Component {state = { search: '' }handleChange = event => {/\*\* |
| \* This is a simple implementation of a "debounce" function, |
| \* which will queue an expression to be called in 250ms and |
| \* cancel any pending queued expressions. This way we can |
| \* delay the call 250ms after the user has stoped typing. |
| \*/ |
| clearTimeout(this.timeout); |
| this.timeout = setTimeout(() => { |
| this.setState({ |
| search: event.target.value |
| }) |
| }, 250); |
| }render() { |
| return ( |
| <div> |
| <input type="text" onChange={this.handleChange} /> |
| {this.state.search ? <p>Search for: {this.state.search}</p> : null} |
| </div> |
| ) |
| } |
| } |
|  |
|  |

**11.   Why is props passed to the super() function in React?**

**Super allows you to use this in the constructor**

**12.   What are the benefits of HOC?**

**Higher order components is used to reusing component logic.**

**13.   Why do we need a Router to React?**

**To enable the navigation among views of various components in react application**

**14.   Give an example of class component and functional component.**

**Const Dog =()=>{**

**Return <h2>HELLO</H2>**

**}**

**15.   Explain the purpose of “render()” in React. Give an example.**

**TO DISPLAY THE HTML CODE INSIDE THE SPECIFIC HTML ELEMENTS**

**Render(){**

**content**

**}**

**Node.js**

1. **What's the Event Loop?**

**An event loop is that pulls stuff out of the queue and places it onto the function execution stack.**

1. **What are the advantages of using promises instead of callbacks?**

**They can handle multiple asynchronous operation easily and provide better error handling than callbacks**

1. **How do you create a simple server in Node.js that returns Hello World?**

**Npm init**

**Npm install express**

**App.js**

**Const express = require(“express”);**

**Const app =express();**

**App.get(“/”,(req,res)=>{**

**Res.send(“<h1> Hello World</h1>”);**

**App.listen(3000,()=>{**

**Console.log(“port no is 300”);});**

**4.      Which of the following statements is valid to import a module in file?**

a.       var fs = require("fs");

b.      var fs = import("fs");

c.       package fs;

d.      import fs;

import fs;

**5.      How to make node modules available externally?**

a.       module.expose

b.      module.spread

c.       module.export

c

**6.      Which of the following are Node.js stream types?**

a.       Duplex

b.      Readable

c.       Writable

d.      All of the above

d

**7.      What is the default scope of Node.js application?**

a.       Global

b.      Local

c.       Public

d.      Private

b

**8.      Which module is used to serve static files in Node.js?**

a.       static

b.      node-static

c.       http

d.      node-http

c

**9.      REPL stands for.**

a.       Research Eval Program Learn

b.      Read Eval Print Loop

c.       Read Earn Point Learn

d.      Read Eval Point Loop

b

**10.  Which of the following code print the platform of operating system?**

a.       console.log('platform : ' + os.platform);

b.      console.log('platform : ' + os.platform());

c.       console.log('platform : ' + os.getPlatform());

d.      None of the above.

c

**MongoDB**

1 What makes MongoDB the best?

It is the best data base its very easy and productive

2 How to do transactions/locking in MongoDB?

User 1 -> read request start

User 2 -> read request start

User 1 -> read request success(booking available)

User 2 -> read request success(booking available)

3 When and to what extent does data get extended to multi-slice?

4 Compare MongoDB with Couchbase and CouchbaseDB.

5 When do we use a namespace in MongoDB?

6 If you remove an object attribute, is it deleted from the database?

7 How can we move an old file into the moveChunk directory?

8 Explain the situation when an index does not fit into RAM.

9 How does MongoDB provide consistency?

10 Why is MongoDB not chosen for a 32-bit system?

11 How does Journaling work in MongoDB?

12 How can you isolate the cursors from intervening with the write operations?

13 Define MongoDB.

14 Explain the replica set.

15 What are the key features of MongoDB?

16 What is CRUD?

17 What is Sharding?

18 What is Aggregation in MongoDB?

19 Define Namespace in MongoDB.

**MySQL**

1 How do you create a table using MySQL? Please write syntax.

2 How do you Insert Data Into MySQL? Please write syntax.

3 How do you remove a column from a database?

4 How to add columns in MySQL?

5 How to create an Index in MySQL?

6 How to Delete Data From a MySQL Table?

7 How do you create and execute views in MySQL?

8 What are the Numeric Data Types in MySQL?

9 What are the Temporal Data Types in MySQL?

10 How do you create and execute views in MySQL?