1.What is React?

React is a front-end library of javascript which is used to make single page web applications.It is a popular library of javascript.It also an open source library of javascript.It was created by facebook.

2.What are the major features of React?

There are several major features of React.such as

1.It uses virtualDom instead of RealDom because VirtualDom manipulation are less expensive.

2.Uses server-side rendering.

3.Follows Unidirectional data-flow or data binding.

4.It uses reusable UI components to develop view.

3.What is JSX?

JSX means JavaScript XML which allows us to write Html in React.

4.What is state in React?

State holds the information of the components which is an object and it may change over the lifetime .We should try to make our state as simple as possible .state is similar to props but It has some differences that It ii private and fully controlled by the component.

5.What is the difference between Element and Component?

An element is a plain object which describes what want to appear on the screen in terms of the Dom nodes .It is stateless and faster than component .Elements are immutable .We can't use React hook with Elements.

On the other hand ,Component can be declared in different ways such as, It can be declared as a class with a render method or it can be defined as a function .It is mutable and we can use React hook with component.

6.What are the Props in React?

Props is an Object which is passed to the child component from the parent component. Using Props we can pass data from parent to child and we can also change state.

7.How to pass a parameter to an event handler or Callback?

Using an arrow function and wrap around an event handler and pass parameter.

```
<button onClick={() => this.handleClick(id)} />
```

8.What is "Key" prop and what is the benefit of using it in arrays of elements?

We should use key prop when creating arrays of elements because it helps to React to identify the items which have changed , are added or are removed.

9.What is the use of refs?

Using the refs, we can access directly to the Dom element. It returns a reference to the elements.

10.What is Virtual Dom?

In React, The Virtual Dom is used to represent the RealDom in memory.Whenever some data is changed, entire UI re-render to the virtualDom.It helps to updated the realDom.

11.What is React Fiber?

In React v16,React Fiber is the new reconciliation or reimplementation of core algorithm. The main goal of React Fiber is to increase its suitability for areas like animation, layout, and gestures.

12.What are controlled components?

In React ,The components are controlled which controls the input elements with the component's state and takes the value through props and makes changes through callback like OnClick etc.

13.What is conext?

In React, The context is which helps to pass data to the components without using props.

14.What is children prop?

Children is a prop that helps us to pass components as a data to other components. Component tree put between component's opening and closing tag will be passed to that component as children prop.

15.What is Reconciliation?

In React, Whenever the state is changed, The entire UI re-render to the VirtualDom .Then It compares the VirtualDom to the previously rendered one, If they get some changes, According to the changes Realdom is Updated, and the total process is called reconciliation.