**1. Explain React components:**  
React components are reusable, self-contained blocks that define how a part of the UI looks and behaves.  
They accept inputs (called **props**) and return JSX to render elements on the screen.

**2. Identify the differences between components and JavaScript functions:**  
JavaScript functions perform logic or return values, while React components return UI (JSX) and may manage state/lifecycle.  
React components can be functional or class-based and are used to build the UI hierarchy.

**3. Identify the types of components:**  
There are two main types:

* **Class components**: ES6 classes with lifecycle methods
* **Function components**: JavaScript functions that return JSX and use Hooks for state/lifecycle

**4. Explain class component:**  
A **class component** is a React component defined using a JavaScript ES6 class.  
It extends React.Component, includes a render() method, and can use lifecycle methods and state.

**5. Explain function component:**  
A **function component** is a simpler way to write components using JavaScript functions.  
They return JSX and can use React Hooks like useState and useEffect for state and side-effects.

**6. Define component constructor:**  
The constructor is a special method in class components used to initialize state and bind methods.  
It’s called when the component is created and is typically used like:

js

Copy code

constructor(props) {

super(props);

this.state = { count: 0 };

}

**7. Define render() function:**  
The render() function is required in class components and returns JSX (UI structure).  
It’s automatically called by React to display or update the component in the DOM.