**MODULE: 7 (React – Applying Redux)**

Q 1.What is Redux?

Ans. Redux is an open-source JavaScript library for managing application state. Redux patterns and tools make it easy to understand when, where, why, and how your application's state is being updated, as well as how your application logic will react to those changes.

Q 2. What is Redux Thunk used for?

Ans. Redux Thunk handles asynchronous behaviour in Redux action creators, such as fetching data from an API or performing other side effects, by allowing action creators to return functions rather than simple action objects. This makes it easy to manage asynchronous actions in Redux apps while avoiding unnecessary complexity.

Q 3. What is Pure Component? When to use Pure Component over Component?

Ans. When a Pure Component receives new props or states, it does a shallow comparison of the new and old. If there are no changes, the component does not re-render. This behavior improves speed optimization, particularly in instances when a component's render technique is expensive and parent components cause frequent re-renders.

**When to use Pure Component over Component:**

* If you have components that are rendering frequently and you want to avoid unnecessary re-renders, Pure Components can be beneficial
* If your component's props and state are basic values or shallow data structures (arrays), and you want to optimize re-rendering using shallow comparisons, Pure Components are best.

Q 4. What is the second argument that can optionally be passed tosetState and what is its purpose?

Ans. In React, the second argument to setState can be a callback function. This callback method is called after the setState action is complete and the component is re-rendered. This callback function aims to execute code that depends on the changed state or to do extra operations once the state has been updated and the component has been re-rendered.