MORNING ASSESSMENT:

Basic Theory (1–10)

1. What is React.js and who developed it?

React.js is an open-source JavaScript library which is used for building user interfaces. It was developed by Meta in 2013.

2. What is the difference between a React component and a regular JavaScript function?

A react component returns JSX and also has lifecycle hooks

It is mainly used for UI rendering.

A regular JS function performs general logic and it does not return JSX.

3. What is JSX and why is it used in React?

It is a syntax extension for javascript in react.

It makes UI code more readable and integrates the UI with logic.

4. What is the difference between a functional component and a class component in React?

There are two react components :functional and class components in react.

A functional component is written as a function, it uses hooks for state & lifecycle.

And a class component is written as a class, it uses this.state and lifecycle methods.

5. What is the purpose of the return() statement inside a React component?

It usually consists of JSX i.e {}

It defines the UI structure and mainly is used for rendering

6. How do you display dynamic data (e.g., variables) inside JSX?

By using curly braces i.e JSX {} around the variable or expression.

7. What is the difference between props and state in React?

Props: it is passed from parent to child.

And is read.only. It should not be modified.

State is managed inside a component and it can change over time.

I.e it is mutable data within a component.

It uses this.state object. Has React hooks like use state

8. What is the role of useState() in React functional components?

It’s a hook that lets you add and manage(render or update) state variables in functional components.

9. What is the significance of the key attribute in React lists?

It helps React identify which items are rendered or changed.

Re-rendering efficiency is improved.

10. How do you handle events like button clicks in React?

To handle events like button clicks in React we add an event handler function and pass it to the element’s event attribute.

Ex: <button onClick={myFunction}>Click me</button>