Started on	Thursday, 6 November 2025, 11:48 AM
State	Finished
Completed on	Thursday, 6 November 2025, 11:52 AM
Time taken	4 mins 35 secs
Marks	9.00/10.00
Grade	**90.00** out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Which of the following statements about React's useEffect hook is true?

a. It blocks rendering until the effect finishes

b. It runs before rendering is completed

c. It always runs after every render

d. It can be controlled to run only when specific dependencies change ✔

Your answer is correct.

The correct answer is:
It can be controlled to run only when specific dependencies change

Question 2

Correct

Mark 1.00 out of 1.00

What will happen if you mutate a state object directly in React instead of using setState or a state updater function?

a. The UI won't update even though the value changes ✔

b. React throws an error at runtime

c. The component re-renders immediately

d. The component's state resets to initial

Your answer is correct.

The correct answer is:
The UI won't update even though the value changes

Question 3

Correct

Mark 1.00 out of 1.00

What is the main reason to use React.memo()?

- a. To prevent a component from re-rendering when its props haven't changed ✔
- b. To memoize API responses
- c. To make a component render faster always
- d. To cache DOM elements

Your answer is correct.

The correct answer is:
To prevent a component from re-rendering when its props haven't changed

Question 4

Correct

Mark 1.00 out of 1.00

What is the main reason to use React.memo()?

- a. useCallback returns a memoized function, and useMemo returns a memoized value ✔
- b. Both are identical in behavior
- c. useCallback returns a memoized value, and useMemo returns a memoized function
- d. Both always recompute values after re-render

Your answer is correct.

The correct answer is:
useCallback returns a memoized function, and useMemo returns a memoized value

Question 5

Correct

Mark 1.00 out of 1.00

Which statement best describes React Fiber?

- a. It is an API for state management
- b. It is React's new rendering engine for incremental rendering ✔
- c. It is a new syntax for defining components
- d. It is a debugging tool for virtual DOM inspection

Your answer is correct.

The correct answer is:
It is React's new rendering engine for incremental rendering

Question 6

Correct

Mark 1.00 out of 1.00

When using the Context API, what is the primary risk of deeply nested providers?

a. It disables hooks inside children

b. It leads to unnecessary re-renders when context values change ✔

c. It increases memory consumption

d. It breaks the virtual DOM

Your answer is correct.

The correct answer is:
It leads to unnecessary re-renders when context values change

Question 7

Correct

Mark 1.00 out of 1.00

What does the key prop help React identify?

a. Which props belong to which component

b. The order of state updates

c. Which event listeners to attach

d. Which DOM nodes have changed, been added, or removed ✔

Your answer is correct.

The correct answer is: Which DOM nodes have changed, been added, or removed

Question 8

Correct

Mark 1.00 out of 1.00

What does the key prop help React identify?

a. Logs 1 and stops

b. Logs 0 once

c. Infinite re-render loop ✔

d. Error: Invalid hook call

Your answer is correct.

The correct answer is: Infinite re-render loop

Question 9

Incorrect

Mark 0.00 out of 1.00

What will React.StrictMode do during development?

a. Double-invoke certain lifecycle methods and effects to detect side effects ✖

b. Convert class components to functional components automatically

c. Optimize production bundle size

d. Logs 0 once

Your answer is incorrect.

The correct answer is: Optimize production bundle size

Question 10

Correct

Mark 1.00 out of 1.00

After clicking 'Change' in the following code, what will happen?

```
function App() {
    const [data, setData] = useState({ name: 'John' });
    const changeName = () => {
        data.name = 'Jane';
        setData(data);
    };
    return ( {data.name} Change );
}
```

a. The UI does not update ✔

b. React throws an error

c. The name updates to 'Jane' immediately

d. The app crashes

Your answer is correct.

The correct answer is:
The UI does not update