**Question Set - 1**

Name :

Email :

Phone Number :

Question-1 :

What are React lifecycle methods? List and briefly explain the different lifecycle methods used in React components.

Question – 2 :

You are required to create a simple counter application using React and the useState hook for state management.

Requirements:

• The component should display the current count.

• Provide three buttons:

◦ Increment: increases the count by 1

◦ Decrement: decreases the count by 1

◦ Reset: resets the count to 0

• Use React functional components and manage the state using useState.

Question – 3 :

What is the clouser function in javascript ? Explain with one example.

Question – 4 :

How do you optimize the react appllication for performance ?

Question – 5 :

What is fs module in node js ? Explain it’s purpose and give an example of reading and writing file using it.

Question – 6 :

How do you make a navigation bar stick to the top of the page when scrolling? Which CSS property do you use?

Question – 7 :

What is the MongoDB Aggregation Pipeline ? Explain a simple example to filter and group data.

Question – 8 :

Write a query to sort all documents in students collection by age in descending order.

Question – 9 :

Given two non-empty strings **string1** and **string2** of lowercase letters, determine if they are anagrams — i.e., if they contain the same characters with the same frequencies.

Write a function to check if two given strings are anagram of each other. If it is an anagram then return true otherwise return false.

Example :

Input1 : string1 = “listen”, string2 = “silent”

Output : true

Input2 : string1 = “hello” , string2 = “world”

Output: false

Question – 10 :

Write a function to rotate the elements of an array to the right by k positions.

(Rotating an array to the right by *k* positions means each element moves *k* steps to the right. The elements that go past the end wrap around to the beginning.)

Example:

Input : arr = [1,2,3,4,5] k=2

Output: arr = [4,5,1,2,3]