COMSATS University Islamabad, Attock Campus

Department of Computer Science

Mobile Application Development

Midterm Exam

Program: BSCS-6   Time: 90 Minutes   Total Marks: 25

Question 1: (CLO-1)   (2+2)

a- Object Destructing is an important concept in JavaScript. Explain the concept of object destructuring.

b- Explain the concept of "learn once, write anywhere" in the context of React Native?

Question 2: (CLO-2)   (5, 4)

a- Complete the code below using spread operator and reduce method.

```
function multiply(/* TODO: Add rest parameter syntax */) {
  if (/* TODO: Check if there are no arguments */) {
    return 0;
  }
  return /* TODO: Multiply all the arguments together */;
}

const result1 = multiply(2, 3, 4);
console.log(result1); // Output: 24

const result2 = multiply(10, 5);
console.log(result2); // Output: 50

const result3 = multiply(7);
console.log(result3); // Output: 7

const result4 = multiply();
console.log(result4); // Output: 0
```

b- Complete the code below using **startswith** and **endswith** methods of strings.

```javascript
function isFullName(fullName, firstName, lastName) {
  return /* TODO: Check if fullName starts with firstName and ends with lastName */;
}

const result1 = isFullName('John Doe', 'John', 'Doe');
console.log(result1); // Output: true

const result2 = isFullName('John Smith', 'John', 'Doe');
console.log(result2); // Output: false

const result3 = isFullName('John Smith Doe', 'John', 'Doe');
console.log(result3); // Output: true
```

c-

Question 4:   (CLO-3)   (2, 6,4)

a- How does Flexbox in React Native differ from Flexbox in CSS?
b- Write a React Native component called **List** that receives an array of items as a prop. The component should store the items in its '**state**' and render them in a list view. Each item should be displayed as a separate **Text** element. (Build the list using 'Text' and 'View' Components).
c- Extend the List component to allow the user to filter the list Items.
   Add a Text Input where user can enter the term to filter the results from list.