

Registration Number: SP19-BCS-045	Name: M. Waqar Saeed
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COMSATS University Islamabad, Islamabad Campus
Mid Term Examination, Fall 2021

Department of Computer Science

Course Code – Title: Mobile Application Development
Instructor: Mr. Zaheer ul Hussain Sani
Mr. Junaid Ali

Dated: Nov 15, 2021
Time Allowed: 1.5 hour
Marks: 25

Instructions

- Students are required to display the students ID cards.
- Stay focussed and brief. Avoid giving unnecessary details.

----- Following Questions are Mapped on CLO-1 -----

Question 1: Answer following questions:

(5 Marks)

- Which types of JavaScript are pass by reference?
- How do we store a floating-point value in a JavaScript variable? Give Example
- What is the role of props in the constructor? Can we change the value of props?
- In ES6 classes, what is the use of 'getter'? Show with an example
- What is the benefit of using default parameters in JavaScript Functions?

Question 2: What is the output of the following programs? In case of Error, specify. Provide 1-2 line explanation of the output. Marks will not be given without explanation.

(5 Marks)

5 a) <pre>function S1(a, b, ...args) { return args.length } function S1(a, b) { return arguments.length } console.log(S1(3, 5, 3, 4, 2))</pre>	b) <pre>const factorial = function fac(n) { return n < 2 ? 1 : n * fac(n - 1) } console.log(fac(3))</pre> 6
c) <pre>const mat = ['Hydrogen', 'Helium', 'Lithium', 'Beryllium'] var arr = mat.map(m => m.length) console.log(arr.filter(a => a < 8))</pre>	d) <pre>var obj = { order: 'Dell PC', qty: 2 } const process = (data) => { data.order = 'HP' data.qty -= 1 } process(obj) HP console.log(obj)</pre>
e) <pre>var arr = [5, 'Ten', 15] arr[4] = 25 console.log(arr.length)</pre> 5	f) <pre>var arr = [5, 'Ten', 15] arr.length = 10 arr.push(30) arr.forEach(e => console.log(e))</pre> 5, Ten, 15, 30, 30

<p>10/2/3</p> <p>g) <code>var arr = Array(10).fill(null)</code> <code>arr = arr.map(</code> <code> e => e == undefined ? 0 : -1</code> <code>)</code> <code>console.log(arr)</code></p>	<p>1,111 12,222 13</p> <p>h) <code>var arr = [1, 2, 3, 111, 222]</code> <code>arr.sort()</code> <code>console.log(arr)</code></p>
<p>i) <code>const fun = (a, b) => {a * b}</code> <code>console.log(fun(5, 5))</code> <i>undefined</i></p>	<p>j) <code>var x = [1, 2]</code> <code>var y = x</code> <code>x[0] = 0</code> <code>console.log(y)</code> 012</p>

----- Following Questions are Mapped on CLO-2 -----

Question 3: Write a React Native counter app. No need to write the import statements. The styling of the program should be accurate. An alert should be generated, if the counter goes less than zero.

[Styling: 2 Marks, Alert Check: 1 Mark, Logic: 2 Marks]
= (5 Marks)

