



COMSATS University, Islamabad.

Department of Computer Sciences
Terminal Examination Fall-2021

Subject: Mobile Application Development

Semester: BS(CS & SE)

Dated: January, 2022

Instructor: Mr. Zaheer Sani, Mr. Junaid Ali Khan

Marks: 50
Time: 3 Hours

Instructions:

- Attempt all questions on answer sheet.
- Return question paper with answer sheet. Q2 and Q3 are mapped to CLO 3 and CLO 4 respectively.

CLO 2

(1*10 = 10 marks)

Question 01: Choose the best answer.

- Which one is not the prop in TouchableOpacity?
 - disabled
 - textSize
 - style
 - onPress
 - activeOpacity
- Android uses _____ and iOS uses _____ at backend for persistent storage
 - SQLite, Serialized Dictionary
 - XAML, JSON
 - MySQL, MongoDB
 - none of above
- To customize the header (such as title, text-alignment, text-color, background-color etc) of all screens, we need to customize through _____ prop of Navigator.
 - Navigation
 - screenOptions
 - options
 - headerProps
- To move from screen 'A' to screen 'B' and send JS object named 'data', we will use?
 - navigation.navigate('B', { params: data })
 - navigation.navigate('B', data)
 - navigation.navigate('B', data)
 - navigation.navigate('A', 'B').data()
- To customize default button icon and action in the header of a screen, we need to _____ ?
 - ScreenOptions
 - Navigation
 - Drawer
 - headerLeft

6. What is the result of this code?

```
const removeItem = (itemKey) => {
  setList(list => getList.filter(item => item.key !== itemKey));
}
```

- Find the item with itemKey and remove it from the list
 - Remove items from the List
 - Replace all items in the list
- Following is NOT React Native Component
 - EditText
 - Text
 - View
 - TextInput
 - Following are required when developing CLI Apps on local machine.
 - Expo Client App
 - expo-cli tool
 - Nodejs
 - Snack
 - In React Native, _____ is used to comment JSX code.
 - /* */
 - //
 - /** */
 - None
 - In React Native, which is the right way to pass numeric value as a prop in a component?
 - propname = "15"
 - propname = 15
 - propname = {15}
 - propname : {15}

Reg. No: _____

Class & section: _____

Question 02: Provide the short answers for the following questions. Irrelevant details will be resulted in negative marks.

(2*10 = 20 marks)

- i. What are the names of required props in FlatList?
- ii. Define 'TouchableHighlight' and 'TouchableWithoutFeedback' component?
- iii. The function 'createNativeStackNavigator' returns an object containing 2 properties. Write the names of these 2 properties?
- iv. Write the names of required props of Stack Screen component and their working (1-2 lines).
- v. What are the types of navigations defined in React Navigation.
- vi. What is the use of 'toggleDrawer' method in Drawer navigator?
- vii. What is the difference between push and navigate methods in navigation?
- viii. What is the difference between AsyncStorage and Secure Store?
- ix. What is the role of 'InitialParams' prop inside Screen component?
- x. Write a short code on usage of 'useEffect'.

Question 03: Develop a Mobile Application.

(20 Marks)

Design the below screens with following requirements. No need to write import statements.

- 1- Design of (Screen 1) 'Login' and (Screen 2) 'Registration' [4]
- 2- The image shown in center is the 'Icons' component, having prop name 'login-firebase' [2]
- 3- Registration credentials should be stored in "AsyncStorage" [3]
- 4- After registration, when navigating to Login screen, pass the necessary parameters to previous screen via function and set values to the E-mail and Password fields [2]
- 5- On successful login, the credentials should be verified from 'AsyncStorage' and shows alert on success/error [2]
- 6- There should be no back button on 2nd screen (Registration) [1]
- 7- Password field should not be plain text in both screens [1]
- 8- Navigation code [3]
- 9- Color scheme should be same as follows. Rest components should be in default colors [2]
- a. Icon on both screens should be yellow
- b. Button on both screens should be blue with white text

