Date:04/01/2021

GUJARAT TECHNOLOGICAL UNIVERSITY MCA - SEMESTER- IV• EXAMINATION - WINTER 2020

Subject Code:4649303

Subject Name: Mobile Computing

Time:02:00 PM to 04:00 PM

Instructions:

- 1. Attempt any FOUR questions out of EIGHT questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- **Q.1** (a) Do as directed.
 - 1. What is the purpose of startActivityForResult() method in Android?
 - 2. Which permission is needed to read the private user information provided by the Contacts content provider.
 - 3. What is the use of AAPT tool in Android?
 - 4. Which are the ways by which one can start Service in Android?
 - 5. What is the difference between Activity context and Application context?
 - 6. What is Pending Intent in Android?
 - 7. If you want to share the data from one application to other applications, which object you will use?
 - (b) State TRUE or FALSE with justification.
 - 1. onResume() callback method of an activity is called when activity interaction with user is started.
 - 2. FrameLayout is designed to display a single item at a time on screen.
 - 3. secondLayout.xml is a valid Android resource filename.
 - 4. While developing Android applications, developers can not test their apps on Third-party Emulators.
 - 5. In an implicit intent, the sender specifies the name of component to be started.
 - 6. Action Bar can be associated to Activity only.
 - 7. setThreshold() method sets the minimum number of characters the user must type before the suggestions appear as a drop-down menu, while working with ArrayAdapter?
- (a) Android is based on which operating system? Explain the Android architecture Q.2 07 with diagram.
 - (b) List various advantages of Fragment. Discuss the lifecycle of Fragment with 07 diagram.
- What is the purpose of AndroidMenifest file in Android? Discuss with Q.3 (a) 07 example. 07
 - (b) Differentiate: Activity and Service
- (a) What is the significance of BroadcastReceiver Class in Android? Explain with **Q.4** 07 code using suitable example of it.
 - (b) How many threads are created in AsyncTask in Android? Explain AsyncTask 07 by giving a suitable example.
- Explain with code how to create, write and read the data from the file on Q.5 07 **(a)** internal storage.

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Total Marks: 56

- (b) What is Content Provider? What is the need of content provider? List out different built-in Content providers provided by Android. Explain any one in detail.
- Q.6 (a) What is shared preferences? Explain methods for create, search, read, add, 07 update and delete shared preference?
 - (b) What is SQLiteDatabse? Explain methods for creating, updating, deleting and 07 querying database records.
- Q.7 (a) What is Animation? List out different Animations in Android. Explain Tween 07 animation with example.
 - (b) What is the use of Dialog? List various kinds of dialogs supported by Android. 07 Explain any two with example.
- Q.8 (a) Write the code snippet to:
 - 1. Create a Map based Activity.

- 2. Sending an SMS
- (b) Write Steps for monetizing and publishing an android Application.

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