

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER - VII EXAMINATION –WINTER-2021

Subject Code: 4470611**Date: 30/11/2021****Subject Name: Mobile Programming****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a) Do as directed :** **07**
1. What is Service?
 2. Define Ordered Broadcast.
 3. How many threads are there in AsyncTask in android?
 4. Explain Toast with example.
 5. What operating system is used as the base of the Android stack?
 6. What functionality can be accomplished by using the TelephoneNumberUtil class?
 7. You can shut down an activity by calling its _____ method.
- (b) State whether the following statements are true or false with reason.** **07**
1. The Activity context is tied to the lifecycle of the application, while the application context is tied to the lifecycle of an Activity.
 2. PreferenceFragment is NOT related to fragment class.
 3. The Action Bar is enabled by default in any Activity that uses the default theme and whose application has a minimum SDK version of 11.
 4. In order to create and return the required view for Fragment, we need to override the onCreateView() method of Fragment life cycle.
 5. While resolving resources, android runtime first loads alternative resources if available.
 6. Once installed on a device, each Android application lives in its security sandbox.
 7. onPause() is one of the state in the lifecycle of a service.
- Q.2 (a) List important building blocks of an android application. Discuss the life cycle of an activity with diagram.** **07**
- (b) In how many ways one can parse xml file in an android application? Explain how the xml is parsed using the XMLPullParser.** **07**
- OR**
- (b) Why AndroidManifest.xml file is considered as a backbone of an android project? Discuss with its structure.** **07**
- Q.3 (a) List the different ways to save data permanently in android applications. Also write code to explain how to create, read, update and delete Shared Preferences.** **07**
- (b) What is the purpose of Content Provider? Enumerate different built-in content providers and also explain any one of them with example.** **07**
- OR**
- Q.3 (a) Why SQLiteDatabase is the best database choice for mobile application development? Explain with suitable example how to insert, update and delete database records using SQLiteOpenHelper class.** **07**
- (b) What is the use of Dialogs? List various built-in dialogs available in android. Also Explain key methods required for managing the Dialog life cycle.** **07**

- Q.4 (a)** Enumerate the usages of Explicit and Implicit Intents. Also explain the various native android actions that can be performed using Intent. **07**
- (b)** Write the code: **07**
1. Finding all sensors and pressure sensor of the host environment
 2. Create a Map based Activity.

OR

- Q.4 (a)** Why Animation is important for android application? List various animations supported in android. Also explain tweened animation with examples. **07**
- (b)** Can we have our own market to publish an android application? Explain the steps for publishing and monetizing android app on Google Play Store. **07**

- Q.5 (a)** How many types of menu are available in android? Explain how to create context menu with suitable example. **07**
- (b)** Explain the following in brief : **07**
1. Logcat
 2. DDMS

OR

- Q.5 (a)** What is the difference between View and ViewGroup class? Enumerate different built-in layouts in android. Also explain any one in details. **07**
- (b)** What is needed by the application to send an SMS? Write code for sending and receiving SMS in your application. **07**
