

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA INTEGRATED– SEMESTER VII- EXAMINATION –WINTER-2023**

**Subject Code:4470611****Date: 06/12/2023****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.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

- Q.1 (a)** Do as Directed. **07**
1. Global application that defines your application's capabilities and permission.
  2. Write the Permission of Write file to SD Card
  3. Write the Permission of To access phone state Information
  4. List image formats supported in Android.
  5. What is notification?
  6. ACCESS\_FINE and ACCESS\_COARSE Which permissions are required to get a location in android? .[True/False]
  7. send intent()is the life cycle of broadcast receivers in android? .[True/False]
- (b)** Explain android architecture. **07**
- Q.2 (a)** 1. List down the android versions with version no, code name & API Level. **04**  
 2. Explain following terms. (a) AVD (b) Linkify link (c) Context. **03**
- (b)** Explain Activity Life-Cycle in android by giving a suitable example. **07**
- OR**
- (b)** Explain life cycle of android activity. **07**
- Q.3 (a)** Explain different between Spinner and List View with example. **07**
- (b)** What is AndroidManifest.xml file? What kind of information is stored in it? Explain structure of it. **07**
- OR**
- Q.3 (a)** What is SQLite Database? Explain methods for creating, updating, deleting and querying database records. **07**
- (b)** (i) Create a Map based Activity. **03**  
 (ii) Write short note on embedded devices. **04**
- Q.4 (a)** List built-in layouts. Explain any two layouts in detail with example. **07**
- (b)** What are the types of broadcast media? Explain in brief. **07**
- OR**
- Q.4 (a)** What is Animation? List out different Animations in android. Explain Tween animation in brief. **07**
- (b)** Create a Simple Web View android application. **07**
- Q.5 (a)** Write code snippet for following. **07**
1. Sending an SMS
  2. Dial a number
- (b)** Explain sending and Receiving SMS programmatically with example. **07**
- OR**
- Q.5 (a)** What is adapter class? Write the use adapter class with code. **07**
- (b)** Explain components of Android Application. **07**