

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VI(NEW) EXAMINATION – WINTER 2022****Subject Code:3161612****Date:15-12-2022****Subject Name:Mobile Application Development****Time:02:30 PM TO 05:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	<b>MARKS</b>
<b>Q.1</b> (a) What are the advantages of android operating system?	<b>03</b>
(b) List and Explain components of android SDK.	<b>04</b>
(c) Explain the android architecture in detail.	<b>07</b>
<b>Q.2</b> (a) Explain Android Virtual Devices (AVD).	<b>03</b>
(b) Explain Date and Time picker with its methods.	<b>04</b>
(c) Write both XML code and android program to display a circular progress bar.	<b>07</b>
<b>OR</b>	
(c) Develop the registration form that includes the following data in the GUI.	<b>07</b>

Enter Name

Enter Username

Enter Password

Repeat Password

<b>Q.3</b> (a) Explain AndroidManifest.xml file.	<b>03</b>
(b) Explain Linear Layout with attributes.	<b>04</b>
(c) Develop a simple calculator using table layout.	<b>07</b>
<b>OR</b>	
<b>Q.3</b> (a) Explain drawable resources in android	<b>03</b>
(b) Explain Grid Layout with attributes.	<b>04</b>
(c) What is Listview? Write a java class to add any 10 items within Listview.	<b>07</b>
<b>Q.4</b> (a) Explain context menu and system menu.	<b>03</b>
(b) Explain Implicit Intent in four points.	<b>04</b>
(c) Write a program to capture an image using camera and display it.	<b>07</b>
<b>OR</b>	
<b>Q.4</b> (a) Explain Option Menu.	<b>03</b>
(b) Define Dialog in android. Explain Alert Dialog with example.	<b>04</b>

- (c) Develop a program to send an email. **07**
- Q.5** (a) Explain Geocoding and Reverse Geocoding. **03**  
(b) Explain Broadcast receiver in details. **04**  
(c) Develop an application to store student details like roll no, name, branch, marks, percentage and retrieve student information using roll no. in SQLite databases. **07**
- OR**
- Q.5** (a) Enlist the steps to publish the Android application. **03**  
(b) Explain SQLiteOpenHelper class. **04**  
(c) Write a program to locate user's current location. (Write ONLY .java and manifest file) **07**

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