

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2024****Subject Code:3170726****Date:30-05-2024****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.

**MARKS**

<b>Q.1</b>	(a) Explain Dalvik Virtual Machine (DVM) in detail.	<b>03</b>
	(b) Define the components of Android Application.	<b>04</b>
	(c) List out layouts in Android Application. Explain three in brief.	<b>07</b>
<b>Q.2</b>	(a) Define spinner in Android.	<b>03</b>
	(b) Write code to display toast message on button click.	<b>04</b>
	(c) Explain RecyclerView and Card View in android with example.	<b>07</b>
	<b>OR</b>	
	(c) List out UI Components in Android Application. Explain three in brief.	<b>07</b>
<b>Q.3</b>	(a) Define View and View Group in Android.	<b>03</b>
	(b) Differentiate Relative Layout and Frame Layout.	<b>04</b>
	(c) Write the steps for CRUD operation to use Firebase database in android application	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Explain Web View and its attributes.	<b>03</b>
	(b) Define Menu and its types in Android.	<b>04</b>
	(c) Write code to insert student details (sid, sname, sbranch, smobile, saddress) in SQLite database.	<b>07</b>
<b>Q.4</b>	(a) Describe shared preference with example.	<b>03</b>
	(b) Explain Run time permission in Android with example. Write runtime permission to access functionalities like Contact, Camera and Bluetooth.	<b>04</b>
	(c) Explain Animation and its types in Android. Explain one in brief.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Define NOSQL database and how it is differ from relational database.	<b>03</b>
	(b) Differentiate Internal Storage and External Storage.	<b>04</b>
	(c) Write program to get user current location and display in Text View.	<b>07</b>
<b>Q.5</b>	(a) Explain Background Services.	<b>03</b>
	(b) Write steps to publish Android Application on Play store.	<b>04</b>
	(c) Write code to take picture with camera and store into Gallery.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Define Broadcast Receiver and Notification service in Android.	<b>03</b>
	(b) Explain Dalvik debug tool and ADB in Android.	<b>04</b>
	(c) Explain Accelerometer Sensor & Gyroscope in Android.	<b>07</b>

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