

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2024

Subject Code:3170726

Date:11-12-2024

Subject Name: Mobile Application Development

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. Simple and non-programmable scientific calculators are allowed.

	MARKS
Q.1 (a) What is the purpose of a DFD in software engineering?	03
(b) Explain the significance of Software Development Life Cycle.	04
(c) Explain android architecture in detail with figure.	07
Q.2 (a) How does Android architecture differ from other mobile operating systems?	03
(b) Explain the lifecycle differences between an Android activity and a fragment.	04
(c) Implement a custom layout for displaying user profiles in an Android application.	07
OR	
(c) What is Activity? Draw and explain Activity lifecycle in detail.	07
Q.3 (a) Explain basic building blocks/components of Android Application.	03
(b) Define RecyclerView, Content Provider and Card View.	04
(c) Develop a menu system for a restaurant application using Android menus.	07
OR	
Q.3 (a) What is an Intent? Explain types of Intent.	03
(b) Explain Access web data with JSON.	04
(c) Write code to display Toast Message on click of close Button.	07
Q.4 (a) Describe the task of Notification Manager in Android.	03
(b) Explain Material design.	04
(c) Define services in Android operating system. Explain service Lifecycle with neat diagram.	07
OR	
Q.4 (a) Explain the difference between bitmap and vector graphics in Android development	03
(b) What is Geocoding and Reverse Geocoding? Explain it with Example.	04
(c) Describe the process of performing CRUD operations on Firebase Realtime Database in an Android application.	07
Q.5 (a) List sensors in Android and explain any one in detail.	03
(b) Briefly explain AsyncTask loader.	04
(c) Write a code to get current location & display it in text view.	07
OR	
Q.5 (a) Describe the difference between Frame Animation and Tween Animation in Android.	03
(b) Write steps to publishing android applications on play store.	04
(c) How does text-to-speech functionality enhance user accessibility in Android applications, and what are the key considerations when implementing this feature?	07
