NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

B.Tech.

SEM: V - THEORY EXAMINATION (2022 - 2023)

Subject: Mobile Application Development

Time: 3 Hours   Max. Marks: 100

General Instructions:

IMP: Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of three Sections -A, B, & C. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.

2. Maximum marks for each question are indicated on right -hand side of each question.

3. Illustrate your answers with neat sketches wherever necessary.

4. Assume suitable data if necessary.

5. Preferably, write the answers in sequential order.

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION A   20

1. Attempt all parts:-

1-a.   The transmitter-receiver combination in the satellite is known as a _   (CO1)   1

            (a) Relay

            (b) Repeater

            (c) Transponder

            (d) Duplexer

1-b.   MIN stands for   (CO1)   1

            (a) Mobility In Network

            (b) Mobile Identification Number

            (c) Mobile Internet

            (d) All of the above

1-c.   In Android studio, which of the following callback is called when an activity starts   1
            interacting with the user? (CO2)

            (a) onDestroy

            (b) onCreate

(c) onResume

(d) onStop

1-d.   Which of the following is a dialog class in android?   (CO2)   1

   (a) AlertDialog

   (b) DatePicker Dialog

   (c) ProgressDialog

   (d) All of the above

1-e.   The frequency band of Bluetooth radio is around _____   (CO3)   1

   (a) 2.5 GHz

   (b) 2.3 GHz

   (c) 2.1 GHz

   (d) 2.4 GHz

1-f.   Multimedia enhances the entire ___ for the users. (CO3)   1

   (a) Experience

   (b) Engagement

   (c) Excitement

   (d) Entertainment

1-g.   Android framework is described in …........ File. (CO4)   1

   (a) android.java

   (b) android.jar

   (c) android.dex

   (d) android.class

1-h.   In which directory XML Layout files are stored. (CO4)   1

   (a) /assets

   (b) /src

   (c) /res/values

   (d) /res/layout

1-i.   Parameters used in Dialog and Delegate are: (CO5)   1

   (a) action
   delegate

   (b) action
   params

(c) param

delegate

(d) None

1-j.   MapKit Framework is used to   (CO5)   1

(a) Embed maps directly into your app's windows and views

(b) Add annotations and overlays to a map for calling out points of interest

(c) Provide text completion to make it easy for users to search for a destination or point of interest.

(d) All of the above

2. Attempt all parts:-

2.a.	Define the clock speed and clock frequency. (CO1)	2
2.b.	Explain various sensors used in Android phone. (CO2)	2
2.c.	Name the three main frameworks to develop your own back end web app. (CO3)	2
2.d.	Why SQLite database use in android and why not MYSQL? (CO4)	2
2.e.	Explain the importance of MapKit framework. (CO5)	2

SECTION B   30

3. Answer any <u>five</u> of the following:-

3-a.	Discuss on market and business drivers for mobile application development? (CO1)	6
3-b.	Design the Architecture of Android based native Mobile App. (CO1)	6
3-c.	Explain about activities, services, broadcast receivers and content providers. (CO2)	6
3-d.	Difference between Table Layout and Frame Layout with diagram. (CO2)	6
3.e.	Discuss the pros and cons of social media in terms of economical and technical and influential way? (CO3)	6
3.f.	Name and explain the tests that run on an android device or other computer. (CO4)	6
3.g.	Explain the terms in iOS: Live Text, Visual Search, App privacy report, Mail privacy protection, and On-device Siri (CO5)	6

SECTION C   50

4. Answer any <u>one</u> of the following:-

4-a.	Explain a 3-tiered architecture for mobile software architecture. (CO1)	10
4-b.	Define the different types of social media applications in mobile application development? (CO1)	10

5. Answer any <u>one</u> of the following:-

5-a. List all the versions of android. Explain more features of Android version which contains NFC. (CO2) 10

5-b. Discuss about digital signing in android applications. (CO2) 10

6. Answer any <u>one</u> of the following:-

6-a. Create an android app depicting student management system and showing menus, picker, and clickable images in it.   (CO3) 10

6-b. Define Emulators. Discuss the role of emulators in Mobile applications with example. (CO3) 10

7. Answer any <u>one</u> of the following:-

7-a. Discuss testing and debugging of android application with suitable example. (CO4) 10

7-b. List Android Permissions with suitable examples (CO4) 10

8. Answer any <u>one</u> of the following:-

8-a. Explain ACID properties. Does SQLite support the ACID properties. (CO5) 10

8-b. Create an iOS application with UI components and write the procedure. (CO5) 10