SYCS - SEM IV   **COURSE:**

ADF

QUESTION BANK

UNIT - 01

1. What are different advantages of android operating system.
2. Describe various features of android.
3. Write a note on Android architecture.
4. What is Dalvik Virtual Machine?
5. List various versions of Android.
6. Define terms: activity,intents, fragment.
7. Write a note on activity lifecycle.
8. Write a note on fragment lifecycle.
9. Discuss following views with minimum 5 components:
   a. TextView
   b. Button
   c. ImageButton
   d. ImageView
   e. EditText
   f. CheckBox
   g. ToggleButton
   h. RadioButton/RadioGroup
   i. ProgressBar
   j. Spinnerview
   k. TimePicker
   l. DatePicker
   m. ListView

UNIT -02

1. Define various user inputs with associated Event listeners.
2. Write a note on following menu type with respect to following type:

(Purpose,How it is created,How events are handled)

  a. OptionMenu
  b. PopupMenu
  c. ContextMenu

3. Consider you have a menu consisting of 3 items named as Red , Green , and Blue . Write a method to provide menu item click listener to change the background color respectively. [Write an XML code for menu and the appropriate methods in Java].

4. What do you mean by Material Design in Android . Also explain how it is implemented for a particular activity.

5. Define resources (Resource folder of an Activity). Explain following resource folders with Code Snippet.

   /res , /colors , /layouts , /menu , /values , /xml , /drawables , /mipmap

6. What is the need of an alternative resource . Explain along with common resource qualifiers .

7. How to perform back navigation in Android . Explain along with suitable coding.

8. Write a note on AsyncTask .

   (Definition , - flow , - generic types of AsyncTask , - Methods of AsyncTask)

9. Write a note on BroadcastReceiver .

   (Definition , - Steps , - Code snippets along with events)

10. Write a note on Adaptive resources.

11. Explain lifecycle of service in Android.

12. Write a note on notification with respect to the following :
  a. To create a notification builder .
  b. To set context text .
  c. To set icon and title .
  d. Attaching action , issuing a notification .

13. Write a note on Alarm manager along with example .

14. In order to implement two factor authentication, an organization needs to develop an Android application which will accept mobile no. from user

on a click of submit button . Display a message with the help of Snackbar that "OTP is sent on your number" [Write only JAVA code] .

15. State the difference between Toast and Snackbar .

UNIT -03

1. What is firebase? List various features of firebase.
2. Security is important for android devices, What are best practices to implement
3. security in android applications?
4. Write a note on ContentProvider.
5. State and explain various features of SQLite Database.
6. What are ACID properties of transactions?
7. State the concept of performance with respect to Memory, CPU, GPU and N/W monitor.
8. What are shared preferences? Explain various modes used with shared preferences.
9. What is SQLite? Discuss various features of SQLite.
10. Write a program using SQLite to insert 5 records into database. [only ava code is needed]