Question Bank : ADF

Unit 1:

1. Explain the major components of Android stack with a neat diagram of Android architecture
2. Explain the challenges of Android App development
3. With a neat diagram, explain the steps followed in developing the app
4. Write a note on Android studio window panes
5. Explain model-view-presenter (MVP) Architecture pattern
6. Illustrate the view group and view Hierarchy of android app development and explain views with respect to component tree.
7. List and explain the different attributes used with TextView
8. Explain the steps to implement an activity in an app
9. Describe the key fields of an explicit intent
10. List and explain the different activity states and draw a neat sketch to show the activity transitions between different states
11. Brief the two basic forms of testing supported by Android studio
12. Write a note on the features of Android Support Library

Unit 2:

1. Write an XML code snippet to create a raised button
2. What is a Menu? Explain the different types of Menus
3. Explain the components of an app bar
4. Describe the steps to create a pop up menu
5. Explain Hierarchical navigation patterns with an example
6. Define navigation drawer. Explain the steps to create a navigation drawer in your app
7. Describe the Recycler view components and draw a diagram to show the relationship between them
8. Explain the principles of Material Design

Unit 3:

1. What is an AsyncTask? Explain the steps followed to execute an AsyncTask along with diagram of the calling order
2. Explain the steps to make a network call / to connect to internet in detail with example
3. What is a notification? Give an example for creating and setting notification components
4. Write a short note on notification priority describing the constants
5. List the types of Alarms and explain
6. With a neat diagram indicate the comparison between the started and bound service lifecycles
7. What is a Job scheduler? Explain the components of Job scheduler
8. Explain the types of broadcast intents
9. What is a loader and how do you start a loader? Give an example
10. List the LoaderManager Callbacks and write their purpose. Explain any one of the LoaderManager Callbacks with Java code

Unit 4:

1. What is shared preference? Explain Creating, Saving, Restoring and Clearing the shared preference

2. Describe the design guidelines for the Settings UI
3. Discuss the differences between Internal and External storage
4. Write a code to check read and write permission of external storage
5. Discuss the conditions for automatic backup of Android 6.0 and higher
6. How to check whether external storage is mounted?
7. What is a transaction? Describe the properties of a transaction
8. Discuss the steps to implement a SQLite database
9. Explain the App Architecture with a Content Provider
10. Describe the method to build URIs to access Content provider's data
11. Discuss the general format of MIME type and its parts

Unit 5:

1. Classify the permissions for Android and discuss the way users grant and revoke permissions
2. Discuss the recommendations to maximize the app performance
3. Design the steps to connect Android app to Firebase project
4. Explain the method to use Firebase test lab
5. Discuss the various monetization models to make money from the apps built
6. Explain the steps to incorporate ads into the apps
7. Discuss the ways to minimize the size of app's APK
8. Mention the high level tasks for publishing the app to the Google play store
9. Write a note on launcher icon of an app

1 Marks:

Fill in the blanks:

1. IDE stands for _____
2. API stands for _____
3. XML stands for _____
4. URI stands for _____
5. JSON stands for _____.
6. _____ is the kernel used in Android System.
7. _____ is the first android version
8. _____ is the function used to terminate Activities
9. _____ callback is only called when the loader is being destroyed.
10. _____ no of orientation is supported in Android
11. _____ intents don't start activities.
12. _____ is the latest android version
13. _____ broadcast intents are sent out by applications.
14. _____class provides methods for initializing AdMob ads in the app
15. _____ class is used to create Alarms.
16. _____ class gives the status of network interface of given type
17. _____ class manages all the loaders.
18. _____ class includes the URI schemes and other important constants of Content Provider.
19. _____ method is called to obtain a new HttpURLConnection.

20. _____ method is used to destroy the Activities
21. _____ method is used to move the cursor to the next row.
22. _____ method returns the number of rows in the cursor.
23. _____ method is used to close the network connection.
24. For critical and urgent notifications, _____ priority constants are used
25. doInBackground(Params...) is invoked in _____ thread
26. Android is based on _____ kernel
27. Android is based on _____ language

28. Loaders use the _____class to manage one or more loaders.

29. In _____ energy state, radio uses 50% less battery.
30. To write to the external storage, _____ permission is requested in manifest file
31. The SQLiteDatabase always presents the results as a _____

True or False:

1. onProgressUpdate() is used once the background computation is executed
2. restartLoader() uses the same arguments as initLoader()
3. Broadcast intents are targeted at specific recipients
4. A service doesn't provide UI
5. Internal storage is always available
6. doInBackground(Params...) is invoked in the main thread
7. onProgressUpdate(Progress...) runs on the UI thread
8. For secure data transfer, use HTTP instead of HTTPS
9. Broadcast intents are not used to start activities
10. External Storage is always available
11. Android was developed by Apple.Inc
12. Android is based on Windows kernel
13. Android is based on Java language
14. Android does not support video calling feature
15. An Android SDK is required to develop the application for Android
16. MIME type can be a text/HTML

17. onCreateLoader() is called to instantiate and return a new loader for the given ID
18. Firebase is a set of tools available only for Android app developers

19. Android is hack proof

20. SQLite software library is self contained
21. A transaction must leave all data in a consistent state
22. rawQuery () does not return a Cursor
23. In settings UI, the important settings are placed at the top
24. ConnectivityManager class is used to create Alarms
25. Changes to device configuration does not cause any problems to running AsyncTask.
26. The system never deletes temporary files even if it runs low on memory

27. WRITE_EXTERNAL_STORAGE permission implicitly includes permission to read
28. contract class separates public from private app information
29. The scheme is always content:// for content URIs
30. Authority for Content Providers never ends with .provider