

# QUESTION BANK

*Mobile application Development (IT -4018 )*

## Unit 1 (6 marks questions)

1. Draw and explain Activity lifecycle of android application in detail.
2. What is Fragment? Draw and explain the lifecycle of a fragment.
3. Explain Intent and filter in details.
4. Explain life cycle of an activity.
5. Discuss Android Development Tools (ADT).
6. Discuss about fragments with an example
7. Discuss working of intents with an example.
8. State the significance of Android manifest file.
9. How to link activities and fragments? Discuss.
10. Explain Android architecture with proper diagram.
11. Enlist and define the components of Android application.
12. Define intent. Explain different types of intent.
13. List all attributes to develop a simple button.
14. Discuss services in Android operating system.
15. Discuss about the anatomy of Android application
16. Explain basic building blocks/components of Android Application.
17. Write a code to send data from one activity to another activity using implicit intent.
18. Describe the role and benefits of using fragments in Android app development. Explain the life cycle of fragments.

## Unit 2 (6 marks questions)

1. What is Layout? What are the advantages of setting a Layout?
2. List out various layouts available in Android. Explain any two in detail.
3. List any four UI components of android application. Explain any three in brief.

4. Enlist all the components of a screen and explain any two out of them.
5. Explain adaptation to screen orientation.
6. Describe progress bar and toggle button with necessary code snippet.
7. State the difference between onPause() and onSaveInstanceState(). Discuss its usage with appropriate example.
8. Explain detection of changes in screen orientation.
9. Explain differences between Table Layout and Frame Layout.
10. Discuss about controlling orientation of the activity.
11. Discuss about Views and their View Groups.
12. Explain Absolute and Relative Layouts.
13. How to add action items to the action bar? Explain with example.
14. Describe the ListView with an example.
15. Explain RadioGroup and RadioButton with an example.
16. List various layouts available in Android. Explain any two out of that.
17. What are the advantages of setting a Layout? Explain Table layout with attributes.
18. Explain the following views with attributes.

Text view, Edit Text, Radio Button, Button, Check Box, Image view

### Unit 3 (3 marks questions)

1. Explain different types of menus with example.
2. Write code for registration form using android UI components. Consider username, Email ID, Password, Confirm Password, Mobile Number, and gender. On click of register button, all details should show on another activity with a welcome message.
3. Write code to display Toast Message on Button click. Explain with two appropriate examples.
4. How to use ImageView to display pictures? Discuss with example.
5. How to display digital clock in Android? Discuss with code snippet.
6. Explain videoView with an example.
7. How to display analog clock in Android? Discuss with code snippet.
8. Explain GridView with an example.
9. Explain display of options menu.

10. Discuss Context menu with example.
11. State the purpose of ImageSwitcher. Explain ImageSwitcher with suitable example.
12. Discuss usage of checkable menu.
13. Explain Web View with appropriate example.
14. Explain any one menu supported in Android with suitable example.
15. Demonstrate how to create options menu with java code snippet.
16. What is the purpose of an ImageView widget? Provide a brief explanation of how you would use an ImageView to display an image in your Android app, including the necessary XML layout attributes.
17. What is the purpose of an options menu, and how would you handle click events for menu items in an options menu?
18. Explain the concept of a popup menu in Android app development. How would you create and display a popup menu when the user interacts with a specific UI element, such as a button or ImageView in your Android app?

#### Unit 4 (6 marks questions)

1. Write a code to insert Employee details (eid, ename, eaddress, edesignation, salary, etype) in SQLite database.
2. Write steps for insert and delete operation to use Firebase database in android application.
3. Explain Persisting data to files with example.
4. Explain working of pre-creating the database.
5. Explain saving data to internal storage.
6. Explain how to register a content provider in AndroidManifest.xml file.
7. Explain shared preferences with an example.
8. Describe content provider along with its working.
9. Explain about saving data to external storage.
10. Write a JAVA code to retrieve & modify preferences values.
11. List and explain various methods of Content Provider.
12. Create a simple registration form using Edit Text, Radio Button, and store the user value in shared Preference.
13. Discuss data saving using the shared preferences object.

14. Differentiate between internal storage and external storage.
15. Discuss about accessing, retrieving & modifying preferences
16. Write a code to insert and update product information (pid, pname, pcategory, pprice) in SQLite database.
17. Explain Internal vs. External storage in Android.
18. Explain the concept of user preferences in Android app development. How would you save and load user preferences.

### Unit 5 (6 marks questions)

1. How to use location in Android application using map? Explain with example.
2. How to handle location data services? Explain in brief.
3. Explain how to send an email from android application.
4. Explain different ways of sending SMS messages in Android application.
5. Write a JAVA code to receive feedback after sending messages.
6. Explain life cycle of Android services.
7. Describe alert services in Android using an example.
8. Explain reverse geocoding with an example.
9. Explain how to send email in android using intent.
10. Write a program to locate user's current location. (Write ONLY .java and manifest file)
11. Describe monitoring a location with an example.
12. Explain geocoding in detail.
13. Explain alarm services in Android.
14. Difference between geocoding and reverse geocoding.
15. Write JAVA code to display maps in Android application.
16. Describe the lifecycle of an Android service, including the various states a service can be in and the transitions between these states.
17. Explain the concept of Android services and the needs they fulfill in Android app development.
18. Describe the use of notification services in Android. How can you create notifications in your app?

## Unit 6 (3 marks questions)

1. Describe the process of capturing multimedia content on an Android device.
2. List and explain the categories of web services available in the Android platform.
3. Explain the functioning of web services in Android and provide a code example to illustrate the process.
4. What is parsing? Explain JSON parsing with example.
5. Explain multimedia recording with example.
6. Explain androidX library with example.
7. How to use HTTP protocol in Android?
8. Explain JSON exception in Android.
9. State advantages of Android web services.
10. Enlist and explain Android web services.
11. Explain JSON object.
12. State advantages of AndroidX library.
13. How Android Web Services work? Discuss with code snippet.
14. Explain JSON parsing.
15. Explain the characteristics of Web Services in Android.
16. Enlist advantages of JSON over Xml.
17. Explain different components of Android web services.
18. Write a java code for downloading Text Content