MODULE1: INTRODUCTION

- 1. Define Android? Explain Android Architecture with neat diagram?
- 2. List and Explain the challenges of Android app development?
- 3. Explain the Android app development process with neat diagram?
- 4. Explain the Android app build process?
- 5. Explain with a neat diagram model-view-presenter pattern?
- 6. List and Explain different layout view group?
- 7. List the Android App Components? Explain Activity Component?
- 8. Define Intent? Explain different types of Intent?
- 9. Demonstrate with code snippet how to pass data between activities with Intent using Intent Extra?
- 10. Demonstrate with code snippet how to pass data between activities with Intent using Intent Data?
- 11. Demonstrate with code snippet how to get data back from activity (StartActivityForResult)?
- 12. Explain Activity Navigation?
- 13. Define Activity Life Cycle? Explain with neat diagram Activity Life Cycle?
- 14. Demonstrate the usage of Implicit Intent with Code Snippet?
- 15. Explain the process of Debugging?

- 16. Define Testing? Explain types of tests?
- 17. Write a test case for adding two numbers using JUnit 4?
- 18. Explain the features of The Android Support Library.

MODULE 2: THE ANDROID STUDIO DEBUGGER

- 1. Define Input Control? Explain different types of Button and its states?
- 2. Explain button-listener design pattern with neat diagram?
- 3. List and Explain callback methods defined in the event listener interfaces to handle?
- 4. List the different input controls for making choices? Demonstrate with a code snippet the usage of RadioButton?
- 5. Demonstrate with a code snippet the usage of Checkbox?
- 6. Demonstrate with a code snippet the usage of Switches?
- 7. Define Spinner? Demonstrate with a code snippet the usage of Spinner?
- 8. Define Dialog? Demonstrate with a code snippet the usage of Alert Dialog?
- 9. Define Pickers? Demonstrate with a code snippet the usage of Date Picker?
- 10. Define Menu? Explain different types of menus?
- 11. Define Touch Gesture? Explain how to detect common gestures?
- 12. Define App bar? Explain four different functional areas of App bar?
- 13. Demonstrate with code snippet to create options menu?
- 14. List and Explain app:showAsAction attribute values?
- 15. Define Contextual menu and Explain different types of Contextual menu?
- 16. Demonstrate with code snippet the usage of Floating context menu?

- 17. Define Pop-up menu? Explain a process Creating a pop-up menu with neat diagram?
- 18. Explain different types of Hierarchical navigation patterns?
- 19. Define Recycler View? Demonstrate with a code snippet the usage of Recycler View?
- 20. Discuss Hierarchical navigation patterns.
- 21. Write the steps to implement a contextual action bar for an application.
- 22. Explain Navigation drawer and the steps to create them in any application.

MODULE 3: WORKING IN THE BACKGROUND

- 1. Explain Android Thread Rules?
- 2. Demonstrate with a code snippet the usage of AsyncTask with connecting to Internet and downloading image?
- 3. Explain the need of Async Task and its call back methods?
- 4. Explain AsyncTask parameters with example?
- 5. Explain the Limitation of AsyncTask?
- 6. Define Loader? Explain the different call back method of LoaderManager class?
- 7. Explain the purpose of BroadCast Intent?
- 8. Explain the different types of BroadCast Intent?
- 9. Define BroadCast Receiver? Demonstrate the usage of BroadCast Receiver to respond to the broadcasted messages?
- 10. Explain the two ways of registering the Brodcast receiver?
- 11. Define Services? Explain types of Services?
- 12. With a neat diagram explain the life cycle of Services?
- 13. Differentiate between started service and bound service?
- 14. Write the steps to create broadcast receivers. Explain the static and dynamic registration of broadcast receivers with examples.

- 14. Define Notification? Explain the steps involved in creating and setting notification?
- 15. Explain the various optional components used with notification?
- 16. Define Alarams? Explain the characteristics of Alarams?
- 17. Explain the types of Alarams?
- 18. With a neat diagram explain the states of Wireless Radio?
- 19. Explain Prefeching with example?
- 20. Define Job Scheduler? Explain the different components of ob Scheduler?