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**Question Paper Code: 47804**

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2022

Seventh Semester

Information Technology

14UIT704 – MOBILE APPLICATION DEVELOPMENT

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- Which one is not a nick name of a version of Android?  
(a) Cupcake                      (b) Gingerbread                      (c) Honeycomb                      (d) Muffin
- An Android application may be tested by installing and running it in \_\_\_\_\_  
(a) Android Virtual Device emulator                      (b) Physical device  
(c) Both A or B                      (d) Both A and B
- \_\_\_\_\_ a term used to describe how mobile devices interpret industry specifications differently, causing different mobile devices to display content inconsistently  
(a) Device Fragmentation                      (b) Device Segmentation  
(c) Device Subsidization.                      (d) Device Orientation
- What runs in the background and doesn't have any User interface Components  
(a) Intents                      (b) Content Providers                      (c) Services                      (d) Applications
- What is contained within the Layout at xml file?  
(a) The code which is compiled to run the app  
(b) The strings used in the app  
(c) The permissions required by the app  
(d) Orientations and layouts that specify what the display looks like

6. Which of the following are not a component of an APK file?
  - (a) Dalvik executable
  - (b) Native Libraries
  - (c) Resources
  - (d) All of these are components of the APK
7. When the activity is not in focus, but still visible on the screen it is in?
  - (a) Running State
  - (b) Paused State
  - (c) Stopped State
  - (d) Destroyed State
8. Which of the following is not a state in the lifecycle of a service?
  - (a) Starting
  - (b) Running
  - (c) Destroyed
  - (d) Paused
9. Which is not included in the Android application framework?
  - (a) WindowManager
  - (b) NotificationManager
  - (c) DialerManager
  - (d) PackageManager
10. Which of the following is a NOT valid form of notification invoked by the NotificationManager?
  - (a) A Flashing LED
  - (b) A persistent icon in the status bar
  - (c) A sound played
  - (d) A SMS sent

PART - B (5 x 2 = 10 Marks)

11. What is android?
12. What is the use of intent?
13. What is Activity Lifecycle?
14. How do create a new thread?
15. List the methods suitable for User Interface testing.

PART - C (5 x 16 = 80 Marks)

16. (a) Draw the architecture of Android software stack. Elaborate on the various elements functionalities present in the stack. (16)
- Or
- (b) (i) Write the various elements in the main window of Android Studio? Explain. (6)
  - (ii) An Android application may be tested by installing and running it either on a physical device or in an Android Virtual Device (AVD). How will you create an Android Virtual Device (AVD) in Android Studio? (10)

17. (a) Elaborate the Android user interface structure with an overview of the different elements that can be brought together to make up a user interface (16)

Or

- (b) Apply the Table layout concepts in View Group that displays child View elements in rows and columns using XML. (16)

18. (a) Write a overview of intents in the form of explicit intents and implicit intents together with an introduction to intent filters. (16)

Or

- (b) Explain the importance of saving and restoring the state of a user interface at particular points in the lifetime of an activity. (16)

19. (a) Implement Broadcast receivers by the Android Broadcast Receiver subclass and overriding the onReceive() method with an example (16)

Or

- (b) Develop android applications that allows to invoke the standard Android video recording interface. (16)

20. (a) (i) Create a SQLite on an Android Virtual Device (AVD). (8)

- (ii) Create a Java Classes for Android SQLite. (8)

Or

- (b) Apply White box testing and Black box testing concepts with suitable example (16)

