Subject: - Mobile Application Development (22617)

SYLLABUS

Chapter No.	Name of chapter	Marks With Option
1	Android and its tools	04
2	Installation and configuration of Android	06
3	UI components and Layout	08
4	Designing User Interface with View	12
5	Activity and Multimedia with database	20
6	Security and Application development	20
7		
8		
9		
10		
	Total Marks: -	**70**

BOARD THEORY PAPER PATTERN FOR MAD (22617)

Q.1		**Attempt any FIVE** **5*2=10**
	a)	Android and its tools
	b)	Installation and configuration of Android
	c)	UI components and Layout
	d)	Designing User Interface with View
	e)	Designing User Interface with View
	f)	Activity and Multimedia with database
	g)	Security and Application development
Q.2		**Attempt any THREE** **3*4=12**
	a)	Android and its tools
	b)	UI components and Layout
	c)	Designing User Interface with View
	d)	Activity and Multimedia with database
Q.3		**Attempt any THREE** **3*4=12**

	a)	Android and its tools
	b)	Designing User Interface with View
	c)	Designing User Interface with View
	d)	Activity and Multimedia with database
	e)	Security and Application development
Q.4		**Attempt any TWO 2*6=12**
	a)	Installation and configuration of Android
	b)	UI components and Layout
	c)	Designing User Interface with View
Q.5		**Attempt any TWO 2*6=12**
	a)	UI components and Layout
	b)	Designing User Interface with View
	c)	Activity and Multimedia with database
Q.6		**Attempt any TWO 2*6=12**
	a)	Designing User Interface with View
	b)	Activity and Multimedia with database
	c)	Security and Application development

CLASS TEST - I

PAPER PATTERN

COURSE: - Mobile Application Development (22617)

PROGRAMME: -Information technology

Syllabus: -

Unit No.	Name of the Unit	Course Outcome (CO)
1	**Android and its tools**	**CO-617.01**
2	**Installation and configuration of Android**	**CO-617.02**
3	**UI components and Layout**	**CO-617.03**

		Course Outcome (CO)
Q.1	**Attempt any FOUR** **4*2=8Marks**	
a)	Android and its tools	CO-617.1
b)	Android and its tools	CO-617.1
c)	Installation and configuration of Android	CO-617.2
d)	Installation and configuration of Android	CO-617.2
e)	UI components and Layout	CO-617.3
f)	UI components and Layout	CO-617.3
Q.2	**Attempt any THREE** **3*4=12 Marks**	
a)	Android and its tools	CO-617.1
b)	Installation and configuration of Android	CO-617.2
c)	UI components and Layout	CO-617.3

CLASS TEST - II

PAPER PATTERN

COURSE: -Mobile and application development (22617)

PROGRAMME: -Information technology

Unit No.	Name of the Unit	Course Outcome (CO)
4	**Designing User Interface with View**	**CO-617.04**
5	**Activity and Multimedia with database**	**CO-617.05**
6	**Security and Application development**	**CO-617.06**

		Course Outcome (CO)
Q.1	**Attempt any FOUR** **4*2=8Marks**	
a)	Designing User Interface with View	(CO-617.4)
b)	Designing User Interface with View	(CO-617.4)
c)	Activity and Multimedia with database	(CO-617.5)
d)	Activity and Multimedia with database	(CO-617.5)
e)	Security and Application development	(CO-617.6)
f)	Security and Application development	(CO-617.6)
Q.2	**Attempt any THREE** **3*4=12 Marks**	
a)	Designing User Interface with View	(CO-617.4)
b)	Activity and Multimedia with database	(CO-617.5)
c)	Security and Application development	(CO-617.6)

COURSE OUTCOME
(CO)

COURSE: -Mobile and application development (22617)

PROGRAMME: -Information technology

CO.NO.	Course Outcome
CO-617.01	Interpret features of Android operating system.
CO-617.02	Configure Android environment and development tools.
CO-617.03	Develop rich user Interfaces by using layouts and control.
CO-617.04	Use User Interface components for Android application development.
CO-617.05	Create Android application using database
CO-617.06	Publish Android application.

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1. Android and its tools

Position in Question Paper   **Total Marks-08**

  Q.1. a) 2-Marks.
  Q.2. a) 4-Marks.
  Q.3. a) 4-Marks.

Descriptive Question

1. Describe android and important of OHA.
2. What are the Software and hardware requirements for Android.
3. What is the need of android OS?
4. Draw and Explain Android Architecture.
5. Explain any eight features of android.
6. Describe Android eco system.
7. Compare android and ios.
8. What is android?
9. What are the advantages of Android?
10. Explain about the exceptions of Android?
11. Describe the APK format
12. What is .apk extension?
13. What is .dex extension?
14. Explain the Architecture of Android ?
15. What is an activity?
16. How to Remove Desktop icons and Widgets?

MCQ Question

(Total number of Question=Marks*3=4*3=12)

Note: Correct answer is marked with **bold.**

1. What is the name of the program that converts Java byte code into Dalvik byte code?
   a) Android Interpretive Compiler (AIC)
   b) Dalvik Converter
   c) **Dex compiler**
   d) Mobile Interpretive Compiler (MIC)

2. Android is based on Linux for the following reason.
   a) Security
   b) Portability
   c) Networking
   d) **All of these**

3. Which among the following are part of "Application" layer of Android Architecture
   a) Contacts
   b) Browser
   c) Phone
   d) **All of these**

4. Which company developed android?
   a) Apple
   b) Google
   c) **Android Inc**
   d) Nokia

5. What was the first phone released that ran the Android OS?
   a) Google gPhone
   b) **T-Mobile G1**
   c) Motorola Droid
   d) HTC Hero

6. Which one is NOT related to fragment class?
   a) DialogFragment
   b) ListFragment
   c) PreferenceFragment
   d) **CursorFragment**

7. A _____ makes a specific set of the application data available to other applications
   a) **Content provider**
   b) Broadcast receivers
   c) Intent
   d) None of these

8. Which among these are NOT a part of Android's native libraries?
   a) Webkit
   b) **Dalvik**
   c) OpenGL
   d) SQLite

9. During an Activity life-cycle, what is the first callback method invoked by the system?
   a) onStop()
   b) onStart()
   c) **onCreate()**
   d) onRestore()

10. What Activity method you use to retrieve a reference to an Android view by using the id attribute of a resource XML?

   a) findViewByReference(int id);   c) retrieveResourceById(int id)

   b) **findViewById(int id)**   d) findViewById(String id)

11. What was Google's main business motivation for supporting Android?

   a) To level the playing field for mobile devices

   b) To directly compete with the iPhone

   c) To corner the mobile device application market for licensing purposes

   d) **To allow them to advertise more**

12. The requests from Content Provider class is handled by method

   a) onCreate   c) onClick

   b) onSelect   d) **ContentResolver**

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2. Installation and configuration of Android

Position in Question Paper   **Total Marks-12**

Q.1. b) 2-Marks.
Q.2. c) 4-Marks.
Q.5. b) 6-Marks.

Descriptive Question

1. Explain android SDK and Java JDK.
2. Compare JVM and DVM.
3. Describe various installation steps of android studio and its environment.
4. Explain Dalvik Virtual machine.
5. Role of Emulator in Android application developments.
6. List various tools or IDE used for android application developments.
7. Describe various components required for android.
8. Describe a real time scenario where android can be used?
9. How to select more than one option from list in android xml file?
10. What language does Android support for application development?
11. Describe Android Application Architecture?
12. What is the Android Open Source Project?
13. Why did we open the Android source code?
14. What is the Guardian app for Android?
15. What features does it have?
16. What is Mono for Android?
17. What is included in Mono for Android?
18. Where is the UI Designer?
19. How is Mono for Android licensed?
20. What is the API profile exposed by Mono for Android?

MCQ Question

(Total number of Question=Marks*3=6*3=18)

Note: Correct answer is marked with **bold.**

1. What year was the Open Handset Alliance announced?
   a) 2005   **c) 2007**
   b) 2006   d) 2008

2. Which among these are NOT a part of Android's native libraries?
   a) Webkit   c) OpenGL
   b) Dalvik   d) SQLite

3. What does the src folder contain?
   a) Image and icon files   c) The application manifest file
   b) XML resource files   **d) Java source code files**

4. Android releases since 1.5 have been given nicknames derived from how?
   a) Adjective and strange animal
   b) Food
   c) Something that starts w/ 'A' -> Something that starts w/ 'B'…
   d) American states

5. What are the indirect Direct subclasses of Services?
   a) RecognitionService   c) SpellCheckerService
   b) RemoteViewsService   **d) InputMethodService**

6. The android library that provides access to UI pre-built elements such as buttons, lists, views etc. is
   a) android.text   c) android.view
   b) android.os   **d) android.webkit**

7. Which one is not a nickname of a version of Andriod?
   a) cupcake   c) Honeycomb
   b) Gingerbread   **d) Muffin**

8. When contentProvider would be activated
   a) Using Intent   **c) Using ContentResolver**
   b) Using SQLite   d) None

9. Difference between android api and google api?
   a) The Google API includes Google Maps and other Google-specific libraries. The Android one only includes core Android libraries

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b) The google API one only includes core android libraries. The Android includes Google Maps and other Google-specific libraries

c) None of the above

d) All of the above

10. When developing for the Android OS, Java bytecode is compiled into what?

a) Java source code   **c) Dalvik byte code**

b) Dalvik application code   d) C source code

11. An activity can be thought of as corresponding to what?

a) A Java project   c) A method call

b) A Java class   d) An object field

12. DVM is developed by

a) Linus Torvald   **c) Dan Bornstein**

b) Dennis Ritchie   d) None of these

13. Android applications signed at the time _____.

a) before installed   **c) Both A and B**

b) After installed   d) None of these

14. In android application Which file holds to use the internet_____.

a) create file   c) system file

b) Manifest file   d) None of these

15. Specifies the layout of android screen use_____file.

a) R   **c) layout**

b) manifest   d) None of these

16. _____ contains the R.java file.

a) src   c) Both A and B

b) gen   d) NOne of these

17. In memory, Activity doesn't exist That is____state.

a) initial   **c) starting**

b) running   d) All of these

18. Src folder contain____files

a) Java source code   c) manifest

b) XML   d) None of these

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3. UI components and Layout

Position in Question Paper   Total Marks-22

Q.1. a) 2-Marks.

Q.2. c) 4-Marks.

Q.3. c) 4-Marks.

Q.4 a) 6-Marks.

Q.5. b) 6-Marks.

Descriptive Question

1. Explain following files
    1. Main Activity File   2. Mainfest File
    3.String File   4.layour file
2. Develop an android application using absolute layout.
3. Develop an android application using linear layout.
4. Develop an android application using table layout.
5. Develop an android application using frame layout.
6. Develop an android application using relative layout.
7. Explain various layout of Android.
8. Explain Android Directory Structure.
9. Explain Screen components.
10. Explain components of Android UI design.
11. Are the Android releases available in a ROM?
12. When will it be available in a ROM?
13. What Is the Google Android SDK?
14. What is the Android Architecture?
15. Describe the Android Framework.
16. What is AAPT?
17. What is the importance of having an emulator within the Android environment?
18. What is the use of an activityCreator?
19. Describe Activities.
20. What are Intents?
21. Differentiate Activities from Services.

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MCQ Question

(Total number of Question=Marks*3=8*3=24)

Note: Correct answer is marked with **bold.**

1. user interface use for_____
   a) xml
   b) java
   c) c++
   d) Both A and B

2. Which class store additional information?
   a) Bundle
   b) Data store
   c) Extra
   d) None of these

3. In Status data a _____use in the android system.
   a) content provider
   b) intents
   c) network
   d) None of these

4. _____method is used to close an activity
   a) Finish
   b) Stop
   c) Close
   d) None of these

5. To use the Android menu system what method you should override?
   a) on Create Menu()
   b) on Create Options Menu()
   c) Both A & B
   d) on Menu Created()

6. Which is not an Android component of the following?
   a) Layout
   b) Service
   c) Activity
   d) Both A & C

7. _____is the first callback method invoked by the system during an Activity life-cycle?
   a) on Start()
   b) on Stop()
   c) Both A & B
   d) on Create()

8. What does the line of code achieve of the following? Intent intent = new Intent(FirstActivity.this,SecondActivity.class);
   a) **Starts an activity**.
   b) Creates a hidden Intent
   c) Creates an implicit Intent
   d) Create an explicit Intent

9. Which is NOT a valid usage for Intents of the following?
   a) Activate and Activity
   b) Activate a Service
   c) Both A & B
   d) Activate an SQLite DB Connection

10. Which is not a valid Android resource file name of the following?
   a) my_layout.xml
   b) mylayout.xml

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    c) myLayout.xml   d) Both B & C

11. _____of the following is not defined as a process state?

    a) Visible   c) Both A & B

    b) Non-visible   d) Foreground

12. Which folder that contains the R.java file of the following?

    a) res   c) Both B & D

    b) src   D. **gen**

13. Which is a correct statement about an XML layout file of the following?

    a) A file that is used to draw the content of an Activity

    b) A layout PNG image file

    c) Both A & B

    d) A file that contains all application permission information

14. The src folder contains _____ of the following?

    a) Image and icon files   c) Both A & B

    b) XML resource files   **d) Java source code files**

15. _____is the parent class of all Activity widgets?

    a) View   c) Layout

    b) ViewGroup   d) Both A & C

16. _____ is the name of the class used by Intent to store additional information?

    a) Parcelable   c) Both A & B

    b) Extra   **d) Bundle**

17. _____is not included in the Android application framework?

    a) Notification Manager   c) Both A & B

    b) Window Manager   **d) Dialer Manager**

18. Which Eclipse plugin is required to develop Android application?

    a) Android Software Development   c) Both A & B

      Kit   **d) Android Development Tools**

    b) J2EE

19. _____ of these files contains text values that you can use in your application?

    a) AndroidManifest.xml   c) res/layout/Main.xml

    b) res/Text.xml   **d) res/values/strings.xml**

20. The Android project folder "res/" contain_____?

    a) Resource files   c) Both A & B

    b) Java Activity classes   d) Java source code

21. Which is a Java call-back method invoked when a view is clicked of the following?

    a) Detector   b) OnTapListener

    c) Both A & B   **d) OnClickListener**

22. Which is not an Activity lifecycle call-back method of the following?

    a) onStart   **c) onBackPressed**

    b) onCreate   d) onPause

23. Select a component which is NOT part of Android architecture.

    a) Android framework   c) Linux kernel

    b) Libraries   **d) Android document**

24. What is AAPT?

    a) Android Asset Processing Tool.

    b) Android Asset Providing Tool.

    c) Android Asset Packaging Tool.

    d) Android Asset Packaging Technique

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4. Designing User Interface with View

Position in Question Paper   **Total Marks-20**

   Q.1. a) 2-Marks.
   Q.2. d) 4-Marks.
   Q.4. d) 6-Marks.
   Q.5. d) 6-Marks.
   Q.6. d) 6-Marks.

Descriptive Question

1. Enlist the use of following UI components.
   a. Text View
   b. Button
   c. Image Button
   d. Toggle Button
   e. 5.Radio Button
   f. Radio Group Button.
   g. Custom Toast alert
   h. 8.Scroll View

2. Design the registration form using following UI components.
   a. Text View
   b. Button
   c. Image Button
   d. Toggle Button
   e. Radio Button
   f. Radio Group Button.

3. Explain the use of List View and grid view.

 4. Develop an application for date-time picker.

5. What items are important in every Android project?

6. What is the importance of XML-based layouts?

7. What are containers?

8. What is Orientation?

9. What is the importance of Android in the mobile market?

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10. What do you think are some disadvantages of Android?
11. What is adb?
12. What are the four essential states of an activity?
13. What is ANR?
14. Which elements can occur only once and must be present?
15. How are escape characters used as attribute?
16. Do all mobile phones support the latest Android operating system?

MCQ Question

(Total number of Question=Marks*3=12*3=36)

Note: Correct answer is marked with **bold.**

1. Required folder when Android project is created.
   - a) build
   - b) build/
   - **c) bin**
   - d) bin/

2. Adb stands for
   - a) Android Drive Bridge.
   - **b) Android Debug Bridge.**
   - c) Android Destroy Bridge.
   - d) Android Delete Bridge.

3. Is list data type supported by AIDL?
   - **a) Yes**
   - b) No

4. Component which is NOT under the Android application.
   - a) Content providers
   - b) Resource externalization
   - **c) Applications**
   - d) Notifications

5. Language which is supported by Android for application development?
   - a) PHP
   - b) VB.NET
   - c). **Java**
   - d). C++

6. Which of the following contains all the code that provides the main features of an Android OS?
   - a) Linux kernel
   - **b) Libraries**
   - c) Android runtime
   - d) Application

7. What is contained within the manifest xml file?
   - a) The source code
   - b) The list of strings used in the app
   - **c) The permissions the app requires**
   - d) None of the above

8. What is the name of the program that converts Java byte code into Dalvik byte code?
   - a) Mobile Interpretive Compiler (MIC)
   - b) Dex compiler
   - **c) Dalvik Converter**
   - d) Android Interpretive Compiler (AIC)

9. Android is based on Linux for the following reason.

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a) Portability   c) Networking

b) Security   **d) All of these**

10. Which piece of code used in Android is not open source?

    a) Power management   **c) Wi-Fi driver**

    b) Audio driver   d) Keypad driver

11. What was the main reason for replacing the Java VM with the Dalvik VM when the project began?

    a) Java VM ran too slow

    b) Java VM was too complicated to configure

    c) Java virtual machine was not free

    d) There was not enough memory capability

12. From a phone manufacturer's point of view, what makes Android so great?

    a) Aside from some specific drivers, it provides everything to make a phone work

    b) It allows them to compete with Apple's iPhone

    c) It makes the hardware work better

    d) It allows users to create apps, generating revenue for the companies

13. Which of the following is not a component of an APK file?

    a) Dalvik executable

    b) Native Libraries

    c) Resources

    d) All of these are components of the APK

14. _____is the virtual resource that cans be used as a background, title, or in other parts of the screen.

    a) drawable   c) menu

    b) layout   d) mipmap

15. _____owns the android platform.

    a) Google   c) Intel

    b) OHA   d) Samsung

16. _____ layer contains all the low level device driver.

    a) Libraries   **c) LINUX KERNEL**

    b) Application Framework layer   d) Android Runtime

17. In _____ year Google purchases Android.

    a)   2007   **c)   2005**

    b)   2006   d)   2004

18. Dalvik Virtual Machine (DVM) actually uses core features of _____

a) Windows   **c) Linux**

b) Mac   d) Contiki

19. A type of service provided by android that allows sharing and publishing of data to other applications is _____

    a) View System   c) Activity Manager

    b) Content Providers   d) Notifications Manager

20. Android library that provides access to UI pre-built elements such as buttons, lists, views etc. is

    a) android.text   c) android.view

    b) android.os   **d) android.webkit**

21. A type of service provided by android that shows messages and alerts to user is

    a) Content Providers   **c) Notifications Manager**

    b) View System   d) Activity Manager

22. A type of service provided by android that controls application lifespan and activity pile is

    a) Activity Manager   c) Notifications Manager

    b) View System   d) Content Providers

23. One of application component, that manages application's background services is called _____

    a) Activities   **c) Services**

    b) Broadcast Receivers   d) Content Providers

24. In android studio, callback that is called when activity interaction with user is started is _____

    a) onStart   **c) onResume**

    b) onStop   d) onDestroy

25. Tab that can be used to do any task that can be done from DOS window is _____

    a) TODO   **c) terminal**

    b) messages   d) comments

26. Broadcast that includes information about battery state, level, etc. is _____

    a) android.intent.action.BATTERY_CHANGED

    b) android.intent.action.BATTERY_LOW

    c) android.intent.action.BATTERY_OKAY

    d) android.intent.action.CALL_BUTTON

27. OHA stands for ____

    a) Open Host Application   c) Open Handset Association

    b) Open Handset Alliance   d) Open Handset Application

28. Android OS uses which virtual machine
   a) Simple Virtual M **c) Dalvik virtual machine**
   b) JVM d) None of these

29. In android architecture top most layer is of
   a) Applications c) Applications framework
   b) Linux kernel d) System libraries & android runtime

30. Requests from Content Provider class is handled by method
   a) onCreate c) onClick
   b) onSelect **d) ContentResolver**

31. Android component that manages appearance and format on screen is called
   a) fragment c) view
   b) intent **d) layout**

32. Android component that shows part of an activity on screen is called
   a) intent c) view
   b) fragment d) manifest

33. In which directory XML layout files are stored?
   a) /assets c) /res/values
   b) /src **d) /res/layout**

34. What Are The Functionalities In AsyncTask In Android?
   a) OnPreExecution() c) DoInBackground()
   b) OnPostExecution() d) OnProgressUpdate()

35. Which Media Format Is Not Supported By Android
   a) MP4 c) MIDI
   b) AVI d) MPEG

36. What is intents
   a) are messages that are sent among various building blocks
   b) trigger activities to being, services to start, stop or broadcast
   c) are synchronous
   d) all the above

37. what is an activity
   a) android packages
   b) android classes
   c) android functions
   d) **a single screen in an application with supporting java code**

38. Android Emulator is_____
   a) gaming application

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b) debugging tool

c) none of these

d) used for developing android applications and looks like a mobile devices

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5. Activity and Multimedia with database

Position in Question Paper   **Total Marks-26**

Q.1. a) 2-Marks.

Q.2. b) 2-Marks.

Q.3. c) 4-Marks.

Q.4. c) 6-Marks.

Q.6. d) 6-Marks.

Descriptive Question

1. Explain Intend Filter
2. Explain life cycle of service in android.
3. How to define new service in Android.
4. Explain multimedia framework in Android
5. Write short note on
   1. Bluetooth
   2. Camera
   3. Animation
6. Explain Broad caste life cycle in Android.
7. Explain Contend provider.
8. Explain Activity life cycle.
9. Explain sensor in android.
10. Explain Text to Speech in android.
11. Explain Sensors in android.
12. Explain SQLite database and create database of your choice.
13. How to extract value from cursor in Android.
14. Explain ACID properties of Transactions.
15. What is the importance of settings permissions in app development?
16. What is the importance of settings permissions in app development?
17. What is the function of an intent filter?
18. Enumerate the three key loops when monitoring an activity
19. When is the onStop() method invoked?
20. Is there a case wherein other qualifiers in multiple resources take precedence overlocate?

MCQ Question

(Total number of Question=Marks*3=20*3=60)

Note: Correct answer is marked with **bold.**

1. Dalvik Debug Monitor Server is integrated in
   - a) **Eclipse**
   - b) java
   - c) virtual machine
   - d) none of these

2. following is client server tool in android
   - a) Android Emulator
   - b) **Android Debug Bridge**
   - c) none of these
   - d) Dalvik Debug Monitor Server

3. what does .apk extension stands for
   - a) **Application Package**
   - b) Application Program Kit
   - c) Application Proprietary Kit
   - d) Android Package

4. Which of these are one of the three main components of APK?
   - a) Dalvik Executable
   - b) Resources
   - c) Native Libraries
   - d) **Webkit**

5. while developing android applications, developers can test their apps on
   - a) Emulator included in Android SDK
   - b) Physical Android Phone
   - c) Third Party Emulators(youwave etc.)
   - d) **All of three will work**

6. What Is JNI In Android?
   - a) Java Interface
   - b) **Java Native Interface**
   - c) Java Network Interface
   - d) Image Editable Tool

7. Activity can be thought of a corresponding to what?
   - a) Java Project
   - b) **Java class**
   - c) the method call
   - d) an object field

8. Required android environment for development is called
   - a) **SDK**
   - b) IDE
   - c) APK
   - d) JDK

9. Package of compiled Java codes with some other resources is called
   - a) IDE
   - b) **APK**
   - c) JDK
   - d) IDE

10. _____file contains detailed configuration information for your application.
    - a) Layout file
    - b) String XML

   c) Androidmanifest File   d) R file

11._____makes a special set of applications data available to other applications.
   a) Content Provider   c) indent
   b) Broadcast receiver   d) none of these

12.A _____is a component that does nothing but receive and react to broadcast announcement.
   a) Content Provider   c) indent
   b) Broadcast receiver   d) none of these

13._____ doesn't have a visual user interface , but rather runs in a background for an indefinite period of time.
   a) Content Provider   c) indent
   b) Broadcast receiver   **d) service**

14.what are the components of android?
   a) Activity, Intent
   b) Services
   c) Broadcast receiver, Content Provider
   d) all of these

15.Data sharing between application is managed by
   a)Activity Manager   c) Telephony manager
   b) **Content Provider**   d) Location manager

16._____ represents a behavior or a portion of user interface in activity.
   a) Package   c) content Provider
   b) fragment   d) activity manager

17.Android applications are of _____ type
   a) Foreground and Background   c) Widget
   b) intermittent   **d) all of these**

18.which is not correct name for an android version
   a) kitkat   c) nougat
   b) marshmallow   **d) watermelon**

19.Which is the screen densities in Android?
   a) low density   c) extra high density
   b) medium density   **d) all of the above**

20.You can shut down an activity by calling its _____ method
   a) onDestory()   **c) finish()**
   b) finishActivity()   d) none of the above

21.Which of the following is Layouts in android?

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a) Frame Layout   c) Relative Layout

b) Linear Layout   **d) All of the above**

22. How many ways to start services?

    a) started   **c) both a & b**

    b) bound   d) messenger

23. When the activity is not in focus, but still visible on the screen it is in?

    a) running state   **c) paused state**

    b) stopped state   d) destroyed state

24. The XML file that contains all the text that your application uses.

    a) stack.xml   **c) strings.xml**

    b) text.xml   d) string.java

25. What is the name of the program that converts Java byte code into Dalvik byte code?

    a) Android Interpretive Compiler (AIC)

    b) Dalvik Converter

    c) Dex compiler

    d) Mobile

26. The Emulator is identical to running a real phone EXCEPT when emulating/simulating what?

    a) Telephony

    b) Applications

    c) Sensors

    d) The emulator can emulate/simulate all aspects of a smart phone

27. While developing Android applications, developers can test their apps on

    a) Emulator included in Android SDK

    b) Physical Android phone

    c) Third-party Emulators

    d) All the above

28. Creating a UI in Android requires careful use of

    a) Java and SQL   c) XML and C++

    b) XML and Java   d) Dream weaver

29. What built-in database is Android shipped with?

    a) SQLite   c) MySQL

    b) Apache   d) Oracle

30. Which of the following is NOT a state in the lifecycle of a service?

    a) Starting   c) Destroyed

    b) Running   **d) Paused**

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31. What is contained within the manifest xml file?
    a) The permissions the app requires
    b) The list of strings used in the app
    c) The source code
    d) All the above

32. What is contained within the Layout xml file?
    a) Orientations and layouts that specify what the display looks like
    b) The permissions required by the app
    c) The strings used in the app
    d) The code which is compiled to run the app

33. The file specifies the layout of your screen?
    a) Layout file   c) Strings XML
    b) Manifest file   d) R file

34. The android OS comes with many useful system services, which include processes you can easily ask for things such as your.
    a) Location   c) WiFi Hot Spots
    b) Sensor Readings   **d) All of these**

35. What is an Activity?
    a) A single screen the user sees on the device at one time
    b) A message sent among the major building blocks
    c) A component that runs in the background without any interface
    d) Context referring to the application environment

36. To create an emulator, you need an AVD. What does it stand for?
    a) Android Virtual Display   c) Active Virtual Device
    b) Android Virtual Device   d) Application Virtual Display

37. Which of the following are not a component of an APK file?
    a) Resources
    b) Native Libraries
    c) Dalvik executable
    d) All of these are components of the APK

38. What runs in the background and does not have any UI components?
    a) Intents   **c) Services**
    b) Content Providers   d) Applications

39. What operating system is used as the base of the Android stack?
    a) Linux   c) Java
    b) Windows   d) XML 132

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40. What is a thread in android?
    a) Same as services
    b) Background activity
    c) Broadcast receiver
    d) **Independent dipatchable unit**.

41. Android is licensed under which open source licensing ?
    a) Gnu GPL
    b) OSS
    c) **Apache/MIT**
    d) Sourceforge

42. Which of the following are UI elements that you can use in a window in an Android application?
    a) TextBox
    b) TextView
    c) EditText
    d) **Both b&c**

43. Which of the following are valid features that you can request using request WindowFeature?
    a) FEATURE_NO_TITLE
    b) FEATURE_NO_ICON
    c) FEATURE_RIGHT_ICON
    d) **Both a& c**

44. The R file is a(an) generated fileWhat is Android-dx?
    a) A command line tool to create Android project files
    b) A framework to create unit tests for Android projects
    c) **A tool to generate Android byte code from .class files**
    d) A resource editor to create user interface for Android applications

45. Immediate base class for activity and services
    a) **CONTEXT**
    b) APPLICATION CONTEXT
    c) CONTEXTAPP
    d) ONCREATE ANSWER: A

46. Which of the following can be accomplished by using the TelephoneNumberUtil class?
    a) Save a phone number to the contacts in the phone device
    b) Retrieve a phone number from the contacts in the phone device
    c) Delete a phone number from the contacts in the phone device
    d) **Format an international telephone number**

47. Which of the following can you use to add items to the screen menu?
    a) Activity.onCreateOptionsMenu
    b) Activity.onCreate
    c) Activity.onPrepareOptionsMenu
    d) **Both a&b**

48. Which of the following can you use to display a progress bar in an Android application?
    a) ProgressBar
    b) ProgressDialog
    c) ProgressView
    d) **Both a&b**

49. What are return types of startActivityForResult() in android?

a) RESULT_OK

c) RESULT_CRASH

b) RESULT_CANCEL

d) BOTH A AND B

50. Which of the following is the parent class for the main application class in an Android application that has a user interface?

a) MIDLet

c) Activity

b) AndroidApp

d) AppLet

51. Which of the following is/are appropriate for saving the state of an Android application?

a) Activity.onFreeze()

c) Activity.onStop()

b) Activity.onPause()

d) Activity.onDestroy()

52. Which of the following should be used to save the unsaved data and release resources being used by an Android application?

a) Activity.onStop()

c) Activity.onDestroy()

b) Activity.onPause()

d) Activity.onShutdown

53. What is the purpose of the ContentProvider class?

a) To play rich media content files

b) To create and publish rich media files

c) To share data between Android applications

d) To access the global information about an application environment

54. Which of the following would you have to include in your project to use the SimpleAdapter class?

a) import android.content

c) import android.database

b) import android.widget

d) import android.database.sqlite

55. Which of the following can be used to bind data from an SQL database to a ListView in an Android application

a) SimpleCursor

c) SimpleAdapter

b) SimpleCursorAdapter

d) SQLiteCursor

56. What Activity method you use to retrieve a reference to an Android view by using the id attribute of a resource XML?

a) findViewByReference(int id);

c) retrieveResourceById(int id)

b) findViewById(int id)

d) findViewById(String id)

57. Which of the following is NOT a valid usage for Intents?

a) Activate an Activity

b) Activate a Service

c) Activate a Broadcast receiver

d) Activate SQLite DB Connection

58. What is the name of the folder that contains the R.java file?

   a) src   c) bin

   b) res   **d) gen**

59. What is a correct statement about an XML layout file?

   a) A layout PNG image file

   b) A file used to draw the content of an Activity

   c) A file that contains all application permission information

   d) A file that contains a single activity widget

60. Which file specifies the minimum required Android SDK version your application supports?

   a) main.xml   c) strings.xml

   b) R.java   **d) AndroidManifest.xml**

6. Security and Application development

Position in Question Paper   **Total Marks-20**

Q.1. a) 2-Marks.
Q.2. d) 4-Marks.
Q.4. d) 6-Marks.
Q.5. d) 6-Marks.
Q.6. d) 6-Marks.

Descriptive Question

1. Explain importance of developer console in android application development.
2. Explain Process of getting the map of API key.
3. Explain SMS service in android application development.
4. Explain the concept of encoding and reverse decoding.
5. Explain steps to create sign of APK for android application.
6. Steps for deploying android application on Google play store.
7. Explain android security model.
8. Explain Steps to publish an android application.
9. How can the ANR be prevented?
10. What role does Dalvik play in Android development?
11. What is the AndroidManifest.xml?
12. What is the proper way of setting up an Android-powered device for app development?
13. Enumerate the steps in creating a bounded service through AIDL.
14. What is the importance of Default Resources?
15. When dealing with multiple resources, which one takes precedence?
16. When does ANR occur?
17. What is AIDL?
18. What data types are supported by AIDL?
19. What is a Fragment?
20. What is a visible activity?
21. When is the best time to kill a foreground activity?
22. Is it possible to use or add a fragment without using a user interface?
23. How do you remove icons and widgets from the main screen of the Android device?
24. What are the core components under the Android application architecture?
25. What composes a typical Android application project?

MCQ Question

(Total number of Question=Marks*3=20*3=60)

Note: Correct answer is marked with **bold.**

1. What is the parent class of all Activity widgets?
   a) ViewGroup
   b) Layout
   c) **View**
   d) Widget

2. What is the name of the class used by Intent to store additional information?
   a) Extra
   b) Parcelable
   c) **Bundle**
   d) DataStore

3. Which is not included in the Android application framework?
   a) WindowManager
   b) NotificationManager
   c) **DialerManager**
   d) PackageManager

4. What Eclipse plugin is required to develop Android application?
   a) J2EE
   b) Android Software Development Kit
   c) **Android Development Tools**
   d) Web Development Tools

5. Which of these files contains text values that you can use in your application?
   a) AndroidManifest.xml
   b) res/Text.xml
   c) res/layout/Main.xml
   d) **res/values/strings.xml**

6. What does the Android project folder res contain?
   a) Java Activity classes
   b) **Resource files**
   c) Java source code
   d) Libraries 160

7. Which of the following Java call-back method is invoked when a view is clicked?
   a) Detector
   b) OnTapListener
   c) OnClickDetector
   d) **OnClickListener**

8. Which of the following Activity life-cycle methods is called once the activity is no longer visible?
   a) **onStop**
   b) onPause
   c) onDestroy
   d) onHide

9. The DalvikVM core libraries are a subset of which of the following?
   a) Java ME
   b) **Java SE**
   c) Java EE
   d) JAX-WS

10. Which of the following is not a ContentProvider provided natively by android
    a) The contacts list
    b) The telephone log

   c) The bookmarks   d) **The application list**

11. Which manifest file permission you should add to allow your application to read the device address book?
    a) READ_ADDRESS_DATA   c) READ_PHONE_CONTACTS
    b) READ_PHONE_STATE   d) **READ_CONTACTS**

12. You can create a custom view by extending class:
    a) android.widget.View   c) **android.view.View**
    b) android.widget.LinearLayout   d) android.content.Context

13. Which of the following Android View sub-classes uses the WebKit rendering engine to display web pages?
    a) PageView   c) MapView
    b) **WebView**   d) HttpClient

14. Which of the following methods updates a ListView when an element is added to the data set?
    a) notify( )   c) **notifyDataSetChanged( )**
    b) notifyAll( )   d) notifyDataSetInvalidate( )

15. The values of which of the following classes cannot be mapped in a Bundle object?
    a) Parcelable   c) ArrayList
    b) String   d) **Context**

16. Which among these are NOT a part of Android native libraries?
    a) Webkit   c) OpenGL
    b) **Dalvik**   d) SQLite

17. _____is the recommended way for sharing data across packages?
    a) **Content providers**   c) Messaging
    b) Data persistence   d) None

18. _____stores data such as missed calls, call details and so on
    a) Browser   c) Contacts
    b) **Call log**   d) None

19. Which permissions are required to get a location in android?
    a) **ACCESS_FINE and ACCESS_COARSE**   c) WIFI permission
                              d) GPRS permission
    b) Internet permission

20. What is DDMS in android?
    a) Dalvik Memory Server
    b) Distributed Denial Memory Services
    c) **Dalvik Debug Monitor Server**

d) None

21. The class performs the cursor query on a background thread and hence does not block the application UI.
    a) SimpleCursorAdapter
    b) CursorLoader
    c) **CursorAdapter**
    d) None

22. _____views are commonly used views such as the TextView, EditText and Button Views
    a) **Basic View**
    b) Picker view
    c) Frame view
    d) None

23. _____are the views that enable users to select from a list, such as Date and Time picker views.
    a) **Picker view**
    b) Basic view
    c) List view
    d) None

24. _____are views that display a long list of items.
    a) Specialised fragments
    b) **List view**
    c) Frame view
    d) None

25. In order to automatically adjust to fit the content, the layout_height must be set to
    a) **wrap content**
    b) fill parent
    c) X and Y coordinate
    d) none

26. The attribute is an identifier for a view so that it may later be retrieved using the View.findViewById method.
    a) **id**
    b) X axis
    c) Y axis
    d) None

27. What is JSON in android?
    a) Java Script Object Native
    b) Java Script Oriented Notation
    c) **Java Script Object Notation**
    d) None

28. What is singleton class in android?
    a) **Class that can create only one object**
    b) Anonymous class
    c) Java class
    d) Manifest file

29. _____is an object carrying a message from one component to another component with in the application.
    a) **Intent**
    b) Filters
    c) Activity
    d) Services

30. _____is a view group that aligns all children in a single direction, vertically or horizontally.

a) **Linear layout**
c) Table layout
b) Relative layout
d) Absolute layout.

31. _____is a view group that displays child views in relative positions
   a) Table layout
   c) **Relative layout**
   b) Linear layout
   d) None

32. _____layout enables you to specify the exact location of the children
   a) Frame
   c) Table
   b) List
   d) **Absolute**

33. _____is designed to block out an area on the screen to display a single item
   a) **Frame layout**
   c) Linear layout
   b) Table layout
   d) Absolute layout

34. An actually bridges between UI components and the data source that fill data into UI component.
   a) Cursor
   c) Database
   b) **Adapter**
   d) None

35. _____is a pre defined subclass of textview that includes rich editing capabilities.
   a) Button
   c) **Edittext**
   b) Textview
   d) None

36. _____is used when presenting users with a group of selectable options that are not mutually exclusive.
   a) **Check Box**
   c) Radio button
   b) Toggle button
   d) None.

37. The view provides visual feedback about some ongoing tasks, such as performing a task in a background.
   a) Spinner
   c) Toggle button
   b) Image button
   d) **Progress bar**

38. Which of the following is the most resource hungry part of dealing with Activities on Android
   a) Closing an app
   c) **Opening a new app**
   b) Suspending an app
   d) Restoring the most recent app

39. Which component is not activated by an Intent?
   a) activity
   c) **content provider**
   b) services
   d) broadcast receiver

40. Which of the important device characteristics that you should consider as you design and develop your application?
   a) Screen size and density
   b) Input configurations

c) Device features   d) **All of the above**

41. Which are the screen sizes in Android?
   a) Small   c) Large
   b) Normal   d) **All of the above**

42. How to stop the services in android?
   a) onDestory()   c) **stopSelf()**
   b) finishActivity()   d) None of the above

43. What is the difference between Activity context and Application Context?
   a) **The Activity instance is tied to the lifecycle of an Activity. while the application instance is tied to the lifecycle of the application**
   b) The Activity instance is tied to the lifecycle of the application, while the application instance is tied to the lifecycle of an Activity.
   c) The Activity instance is tied to the lifecycle of the Activity, while the application instance is tied to the lifecycle of an application.
   d) None of the above

44. What is the time limit of broadcast receiver in android?
   a) 15 seconds   c) 1 hour
   b) 5 seconds   d) **10 seconds**

45. What is AIDL in android?
   a) Android Interface Design Language
   b) Android Interface Development Language
   c) **Android Interface Definition Language**
   d) Android Interface Debug Language

46. If you want share the data accross the all applications ,you should go for?
   a) Shared Preferences   c) SQLite Databases
   b) Internal Storage   d) **content provider**

47. Difference between android api and google api?
   a) **The google API includes Google Maps and other Google-specific libraries. The Android one only includes core android libraries.**
   b) The google API one only includes core android libraries. The Android includes Google Maps and other Google-specific libraries.
   c) None of the above.
   d) Both a and b

48. _____sets the gravity of the view or layout in its parent
   a) android:gravity   c) android:weight
   b) **android:layout_gravity**   d) android:orientation

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49. How to store heavy structured data in android?
    a) Shared Preferences
    b) Cursor
    c) **SQlite database**
    d) Not possible

50. Which features are considered while creating android application?
    a) Screen Size
    b) Input configuration
    c) Platform Version
    d) **All of the above**

51. What are the debugging techniques available in android?
    a) DDMS
    b) Breaking point
    c) Memory profiling
    d) **None of the above.**

52. What does httpclient.execute() returns in android?
    a) Http entity
    b) Http response
    c) **Http result**
    d) None of the above

53. What is fragment life cycle in android?
    a) onReceive()
    b) onCreate()
    c) onAttach()
    d) **None of the above**

54. What is transient data in android?
    a) Permanent data
    b) Secure data
    c) Temporary data
    d) **Logical data**

55. How to pass the data between activities in Android?
    a) **Intent**
    b) Content Provider
    c) Broadcast receiver
    d) None of the Above

56. What is the difference between margin and padding in android layout?
    a) Margin is specifying the extra space left on all four sides in layout
    b) Padding is used to offset the content of a view by specific px or dp
    c) **Both A and B are correct**
    d) None of the above

57. What is the life cycle of broadcast receivers in android?
    a) send intent()
    b) **onRecieve()**
    c) implicitBroadcast()
    d) sendBroadcast()

58. What is the application class in android?
    a) A class that can create only an object
    b) Anonymous class
    c) Java class
    d) **Base class for all classes**

59. What is a context in android?
    a) It is an interface to store global information about an application
    b) It is used to create new components.

    c) Android has two contexts, those are getContext and getApplicationContext

    d) **All of the Above**

60. What is android view group?

    a) **Collection of views and other child views It is used to pass the data between activities**

    b) It will fire at a future point of time.

    c) Base class of building blocks

    d) Layouts

61. What is splash screen in android?

    a) Initial activity of an application

    b) Initial service of an application

    c) Initial method of an application

    d) **Initial screen of an application**