K1 LEVEL QUESTIONS

17PMC640 ANDROID PROGRAMMING

Unit:1

1) Dalvik Virtual Machine (DVM) actually uses core features of

A. Windows
B. Mac
C. Linux
D. Contiki

2) A type of service provided by android that allows sharing and publishing of data to other applications is

A. View System
B. Content Providers
C. Activity Manager
D. Notifications Manager

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

A. android.text
B. android.os
C. android.view
D. android.webkit

4) A type of service provided by android that shows messages and alerts to user is

A. Content Providers
B. View System
C. Notifications Manager
D. Activity Manager

5) A type of service provided by android that controls application lifespan and activity pile is

A. Activity Manager
B. View System
C. Notifications Manager
D. Content Providers

6) One of application component, that manages application's background services is called

A. Activities
B. Broadcast Receivers
C. Services
D. Content Providers

7) In android studio, callback that is called when activity interaction with user is started is

A. onStart
B. onStop
C. onResume
D. onDestroy

8) Tab that can be used to do any task that can be done from DOS window is

A. TODO
B. messages
C. terminal
D. comments

9) 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

10) OHA stands for

a) Open Host Application
b) Open Handset Alliance
c) Open Handset Association
d) Open Handset Application

Answers:

1) C) linux
2) B) Content Providers
3) D) android.webkit
4) C) Notifications Manager
5) A) Activity Manager
6) C) Services

7) C) onResume
8) C)terminal
9) A) android.intent.action.BATTERY_CHANGED
10) B) Open Handset Alliance

Unit:2

1) Android is based on linux for the following reasons
    a) Security
    b) Portability
    c) Networking
    d) All of these
2) Android OS uses which virtual machine
    a) Simple Virtual M
    b) JVM
    c) Dalwik virtual machine
    d) None of these
3) In android architecture top most layer is of
    a) Applications
    b) Linux kernel
    c) Applications framework
    d) System libraries & android runtime
4) Requests from Content Provider class is handled by method

    A. onCreate
    B. onSelect
    C. onClick
    D. ContentResolver

5) Android component that manages appearance and format on screen is called

    A. fragment
    B. intent
    C. view
    D. layout

6) Android component that shows part of an activity on screen is called

    A. intent
    B. fragment
    C. view
    D. manifest

7) In which directory XML layout files are stored

a)/assets b)/src c)/res/values d)/res/layout

8) Adb Stands For

a) Android Debug Bridge.b) Android Drive Bridge.

c) Android Delete Bridge d) Android Destroy Bridge.

9) What Are The Functionalities In AsyncTask In Android?

a) OnPreExecution() b) OnPostExecution()

c) DoInBackground() d) OnProgressUpdate()

10) Which Media Format Is Not Supported By Android

a) MP4 b) AVI c) MIDI d) MPEG

Answers:

1) D) all of these
2) C) dalwik virtual machine
3) A) applications
4) D) ContentResolver
5) D) layout
6) B) fragment
7) D)/res/layout
8) A) Android Debug Bridge.
9) B)OnPostExecution()
10) B) AVI

Unit :3

1) What is indents

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

2) what is an activity

a) android packages b)android classes c)android functions

d) a single screen in an application with supporting java code

3) Android Emulator is_____

a) gaming application b) debugging tool c) none of these
d) used for developing android applications and looks like a mobile devices.

4) Dalvik Debug Monitor Server is integrated in

a) Eclipse b)java c) virtual machine d) none of these

5) following is client server tool in android

a)Android Emulator b)Android Debug Bridge

c) none of these d) Dalvik Debug Monitor Server

6) what does .apk extension stands for

a) Application Package b) Application Program Kit

c) Application Proprietary Kit d) Android Package

7) which of these are one of the three main components of APK?

a) Dalvik Executable b)Resources c) Native Libraries d)Webkit

8) 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

9) What Is JNI In Android?

a) Java Interface b) Java Native Interface

c) Java Network Interface d) Image Editable Tool

10) Activity can be thought of a corresponding to what?

a) Java Project b) Java class c)the method call d)an object field

Answers:

1) D) all the above
2) d) a single screen in an application with supporting java code
3) d) used for developing android applications and looks like a mobile devices.
4) a) Eclipse
5) b)Android Debug Bridge
6) a) Application Package
7) d)Webkit
8) d) All of three will work
9) b) Java Native Interface
10) b) Java class

Unit : 4

1) View Pager Is Used For

a) Swiping Activities b) Swiping Fragments

c) Paging Down List Items d) View Pager Is Not Supported By Android SDK

2) Action Bar Can Be Associated To

a) Only Fragments b) Only Activities c) Both Activities And Fragments d)None Of The Above

3) API stands for

a) Application Performance interface b) Application Programming Institute

c) Application Programming Interface d)Application Proposal Interface

4) NDK stands for

a) New Development kit b) Native Development Kit

c) Native Development key d)None of these

5) Required android environment for development is called

A. SDK
B. IDE
C. APK
D. JDK

6) Most common environment to run Java programs written for PC only is called

A. JRE
B. JDK
C. IDE
D. SDK

7) Package of compiled Java codes with some other resources is called

A. IDE
B. APK

C. JDK
D. IDE

8) DVM is developed by

a) Linus Torvald b)Dennis Ritchie c)Dan Bornstein d) none of these

9) WAP stands for

a) Wireless Application Program b) Wireless application protocol

c) Wireless Application Portal d) None of these

10) which file is used for glueing everything together

a) Layout file b) String XML c)Manifest File d) R file

Answers:

1)b) Swiping Fragments

2) b) Only Activities

3) c) Application Programming Interface

4) b) Native Development Kit

5) a) SDK

6) a)JRE

7) b)APK

8)c)Dan Bornstein

9) b) Wireless application protocol

10) c)Manifest File

Unit: 5

1) A _____ makes a special set of applications data available to other applications.

a) Content Provider b) Broadcast receiver c)indent d) none of these

2) A _____is a component that does nothing but receive and react to broadcast announcement.

a) Content Provider b) Broadcast receiver c)indent d) none of these

3) _____ doesn't have a visual user interface , but rather runs in a background for an indefinite period of time.

a) Content Provider b) Broadcast receiver c)indent d) service

4) what are the components of android

a) Activity, Intent b) Services c) Broadcast receiver, Content Provider d) all of these

5) Data sharing between application is managed by

a)Activity Manager b) Content Provider c) Telephony manager d) Location manager

6)JSON stands for

a) JavaScript Object Notation b) JavaScript Object Notion

c) JavaScript Object Neutral d) JavaScript Object Number

7) _____ represents a behavior or a portion of user interface in activity.

a) Package b) fragment c) content Provider d) activity manager

8) Android applications are of _____ type

a) Foreground and Background b) intermittent c) Widget d) all of these

9) which is not correct name for an android version

a) kitkat b)marshmallow c) nougat d)watermelon

10) What Does AAPT Stands For?

a) Android Asset Processing Tool b) Android Asset Providing Tool.

c) Android Asset Packaging Tool. d) Android Asset Packaging Technique

Answers:

1) a) Content Provider

2) b) Broadcast receiver

3) d) service

4) d) all of these

5) b) Content Provider

6) a) JavaScript Object Notation

7) b) fragment

8) d) all of these

9) d)watermelon

10)c) Android Asset Packaging Tool.

P.G DEPARTMENT OF COMPUTER APPLICATIONS

Android Programming-17PMC640

K2 LEVEL QUESTION& ANSWER

Unit:1

1. What is Android?
   Android, as a system, is a Java-based operating system that runs on the Linux 2.6 kernel.
   The system is very lightweight and full featured.

2. What is the difference between Google and the Open Handset Alliance?
   The Open Handset Alliance
   is a group of hardware and software developers, including Google, NTT DoCoMo, Sprint Nextel, and HTC, whose goal is to create a more open cell phone environment. The first product to be released under the alliance is the mobile device operating system, Android.

   Google made available a host of development tools
   and tutorials to aid would-be developers onto the new system. Help files, the platform software development kit (SDK), and even a developers' community can be found at Google's Android website, http://code.google.com/android. This site should be your starting point, and I highly encourage you to visit the site.

3. What is Eclipse?
   Eclipse is one of the most fully featured, free, Java IDEs
   available. Eclipse is also very easy to use, with a minimal learning curve. This makes Eclipse a very attractive IDE for solid, open Java development.

4. What are the 3 directories in the project root?
   res Directory
   assets Directory
   src Directory

5. What is DVM?
   The Dalvik Virtual Machine (**DVM**) is an **android**virtual machine optimized for mobile devices. It optimizes the virtual machine for memory, battery life and performance. Dalvik is a name of a town in Iceland

6. What is ADB?
   Android Debug Bridge (**adb**) is a versatile command-line tool that lets you communicate with a device. ... You can invoke a client from a command-line terminal by issuing an **adb** command. A daemon (adbd), which runs commands on a device.

7. What Is the Google Android SDK?
   development home page contains a host of valuable tools and documents about developing for the Android platform, including links to the Android developer forum.

8. What is the importance of having an emulator within the Android environment?
   The **emulator** lets developers “play” around an interface that acts as if it were an actual mobile device. They can write and test codes, and even debug. **Emulators**are a safe place for testing codes especially if it is **in** the early design phase.

9. What are Intents?
   An Intent is Android’s method for relaying certain information from one Activity to another. An Intent, in simpler terms, expresses to Android your intent to do something.
   You can think of an Intent as a message passed between Activities.

10. What items are important in every Android project?
    AndroidManifest.xml
    build.xml
    bin/
    src/
    res/
    assets/

Unit:2

11. What are the four essential states of an activity?
    Active
    Paused
    Stoped
    Inactive

12. What role does Dalvik play in Android development?
    Dalvik Virtual machine is used to run your **android** projects. Usually,**android** apps are written in java and compiled to bytecode version using java virtual machine (JVM) which is then translated to **Dalvik** bytecode or .dex file.

13. What composes a typical Android application project?
    A project under Android development, upon compilation, becomes an .apkfile.Thisapk file format is actually made up of the AndroidManifest.xml file, application code, resource files, and other related files

14. What is an action?
    An activity is the user interface you provide to your user. An intent filter is like a "port" you add your activity to and allow other applications to search for all applications running on the "port" and call them. The **action** name is just what the app is meant to do when called.

15. What is An android manifest file?
    The **manifest file** describes essential information about your app to the **Android**build tools, the **Android** operating system, and Google Play. Among many other things,

the **manifest file** is required to declare the following: ... The permissions that the app needs in order to access protected parts of the system or other apps.

16. What kernel is used in Android?
    Android (operating system) Android is a mobile operating system developed by Google. It is based on a modified version of the **Linux kernel**

17. Define spinner.
    Spinners provide a quick way to select one value from a **set**. In the default state, a **spinner** shows its currently selected value. Touching the **spinner**displays a dropdown menu with all other available values, from which the user can select a new one. You can add a **spinner** to your layout with the **Spinner** object .

18. What is the Android SDK?
    The Android SDK is easily accessible from the http://code.google.com/android page. From the development home page, click the Download the SDK link under Getting Started. After you agree to the terms of the Android SDK License Agreement, you will
    see the Download the Android SDK page.

19. Define Forward-facing tool.
    "Forward-facing" tools are tools that in turn call other tools located deeper in the ../tools/ directory.

20. List out the parameters in out option.
    The --out option tells ActivityCreator that you want it to output something. This command
    option takes two parameters, <folder> and <package.activity>.

Unit:3

21. What is Java Home Variables?

    The JAVA_HOME variable is needed only if you are working in the command-line environment.

22. List out any five adb commands.
    install<path>
    pull<remote file><local file>
    push<local file><remote file>
    forward<local port><remote port>
    kill-server Stops the server
    ppp<tty><params> Uses a PPP connection over USB

23. Describe the syntax for path statement.
    echo $PATH

24. Which command is used to add android to the path statement?

Use the **export** command to add Android to the PATH statement (see the next illustration):
export PATH=$PATH:<android path>

25. Name the command that is used to put Vi in the insert mode.
    Use the command **:i**to put vi in insert mode

26. Name the command used to write the file.
    use the command **:w** to write the file

27. Name the command used to quit the file.
    use**:q** to quit.

28. What are the two main categories for intents?
    Intents are broken up into two main categories:
    - **Activity Action Intents**
    - **Broadcast Intents**

29. Define activity action intents.
    Intents used to call Activities outside of your application.
    Only one Activity can handle the Intent. For example, for a web browser, you need to open the Web Browser Activity to display a page.
30. Define the broadcast intents.
    Intents that are sent out for multiple Activities to handle. An
    example of a Broadcast Intent would be a message sent out by Android about the current battery level. Any Activity can process this Intent and react accordingly—for example, cancel an Activity if the battery level is below a certain point.

Unit:4

31. Which is the method to create a menu?
    To create the Menu, you need to override the onCreateOptionsMenu( ) method of the Activity.

32. What is the Boolean method that is called when the user first selects the menu button?
    The method onCreateOptionsMenu( ) is a Boolean method that is called when
    the user first selects the Menu Button

33. List out the view names that you will need to add to the menu.
    The following is the list of View names that you will need to add to
    the Menu:
    - AutoComplete
    - Button
    - CheckBox
    - EditText
    - RadioGroup
    - Spinner

34. Which is the method used to override to handle the calls to the menu items?

The method you need to override to handle the calls to the Menu items is onOptionsItemSelected( ).

35. Name the types of files in button code.
    This code represents four files, AndroidManifest.xml, Button.xml, testButton.java, and AndroidViews.java.

36. Expand GPS.
    Global Positioning System (GPS)

37. Describe the different format for providing information to the android location based API.
    different format for providing information to the Android Location-Based API.
    - kml
    - nmea
    - track

38. What is track file?
    The file that Android provides in the *gps*folder is an .nmea file (National Marine Electronics Association file). An .nmea file can be output from many popular GPS products. These files are in a common format and can contain multiple coordinates and elevations, representing trips or *tracks*.

39. List out the steps of creating android LBS activity.
    The following are the steps for creating this simple Activity:
    1. Adjust the permissions level.
    2. Create your Activity's layout.
    3. Write the code to run your Activity.
    4. Run the Activity.

40. Expand kml file.
    Keyhole Markup Language file.

Unit:5

41. Define content providers.
    content providers are primarily intended to be used by other applications, which access the**provider** using a **provider** client object

42. List out the methods for content providers.
    The Content Provider contains several methods that you will want to override, includingonCreate( ), query( ), insert( ), delete( ), and update( ).

43. Which method that you will be overriding calls in SQLiteOpenHelper?

onCreate( )

44. Name the two methods for DatabaseHelper class.
    The DatabaseHelper class you just created contains two overridden methods: onCreate( ) and onUpgrade( ).

45. Name the two methods for Override next.
    The two methods that you will override next, onResume( ) and onPause( ), will do the work of reading from and writing to the database, respectively. Within the Android
    life cycle, onResume( ) is called when an Activity is open and on the top of the focus. onPause( ) is called when an Activity is being closed but before focus is handed to another Activity.

46. Define Friends Map Activity.
    The FriendsMap Activity is the final Activity that will be callable from the main application. This Activity will call your recordset from the Friends database and draw a circle on a Google Map for each friend. The Activity will also draw a circle for you at your current location.
47. List out the android emulator commands.
    emulator -console - Enables the console shell on the current terminal
    emulator -data <filename> - Uses a different file as the working user-data disk image
    emulator -debug-kernel - Sends kernel output to the console
    emulator -flash-keys - Flashes keypresses on the device skin
    emulator -help - Prints a list of all Emulator commands

48. List out the android Debug Bridge command.
    adbBugreport Prints dumpsys, dumpstate, and logcat data to the screen, for the purposes of bug reporting
    adb call <phonenumber> Simulates an inbound phone call from <phonenumber>
    adb cancel <phonenumber> Cancels an inbound phone call from <phonenumber>
    adb -d {<ID>|<serialNumber>} Lets you direct an adb command to a specific Emulator/device instance, referred to by its adb-assigned ID or serial number
    adb data <state> Changes the state of the GPRS data connection to <state>

49. Discuss the function of adb help.
    adb help Prints a list of supported adb commands

50. Define the function of adb kill-server.
    adb kill-server Terminates the adb server process

K3 QUESTIONS

17PMC640 ANDROID PROGRAMMING

Unit I

1. Explain the history of embedded programming
2. Explain the Open handset alliance and android
3. Examine the features of Android programming
4. Explain the core building blocks of Android
5. Explain the Service component with its life cycle
6. Explain the Activity component with its life cycle
7. Why do we use Eclipse as an IDE for developing Android Applications
8. Write short notes on android documentation
9. Explain the architecture of Android
10. Explain the Versions of Android OS

Unit II

11. Discuss on the Android SDK
12. Discuss on Android Documentation
13. Elucidate on Android Samples
14. Discuss on Android APIs.
15. Describe the application life cycle
16. Explain the 3 directories in project root
17. Describe the process of creating the first Android project using Eclipse
18. Describe the process of examining the Android created files

Unit III

19. List and explain the adb commands
20. Explain the process of running the Hello World Activity in Linux
21. Describe the process of using the dialer
22. Describe the process of placing a call from your activity

Unit IV

23. Explain the process of creating the activity for AutoComplete
24. Explain the steps for creating the spinner view
25. Explain the steps for creating the Button view
26. Explain the steps for creating the CheckBox view
27. Explain the steps for creating the EditText view

28. List and explain the steps for creating an activity for the RadioGroup
29. Explain the file types which provide information to the Android location based API
30. List the steps to toggle between Standard Map view and Satellite Map view

Unit V

31. Explain the processing of adding Zoom controls
32. Process of creating the location editor activity
33. Elucidate on the process of creating your own custom provider
34. Explain the process of creating a SQLite Database
35. Explain the process of creating the location editor Activity
36. Describe the Android debug bridge commands

K4 & K5 QUESTIONS

17PMC640 ANDROID PROGRAMMING

Unit I

1. Explain the steps to download and Install JRE
2. Explain the steps to download and install Eclipse
3. Describe the steps to download and install Android plugin for Eclipse
4. How do we configure the Android Plugin for Eclipse

Unit II

5. Describe the Application life cycle
6. Discuss on the Android SDK tools
7. Describe the process of creating a project in Eclipse and examining the android created files
8. Describe the process of creating Hello World using code based UI
9. Describe the process of creating Hello world using XML based UI

Unit III

10. Describe how to create a shell activity using windows CLI
11. Describe the process of creating the Hello World activity in the Windows CLI
12. Describe the process of creating a shell Activity using the Windows CLI
13. Describe the intents and its categories
14. Describe how to modify the android phone dialer

Unit IV

15. Explain the three step process in building the activities
16. Describe how to use the Menus in an Android Application
17. Describe how to read the GPS with the Android location based API.

Unit V

18. Describe how to create a FindAFriend Activity
19. Describe the Android Emulator Commands
20. Explain the process of knowing the current location of the user using the Google maps
21. Describe in detail how to create a Custom content provider?
22. Describe how to create FriendsMap activity