**Question 1**

What types of User Notifications are provided by Android?

Fragments.

Notification Area Notifications.

Dialogs.

Tabs.

Toast Messages.

**Question 2**

(True or False) Toast messages are used to get information from the user?

True.

False.

**Question 3**

Why do Notification Area Notifications use PendingIntents?

The PendingIntent can add a listener to the underlying Intent

The underlying Intent will be used by the system, rather than by the component that created it.

The underlying Intent has a reference to the sending component which can lead to memory leaks.

To allow Extra data to be provided to the Activity that will be started.

**Question 4**

Which of the following capture why it is preferable to notify the user with a Notification Area Notification, rather than with a Dialog, or vice versa.

Use a Dialog (DialogFragment) when using a large screen device such as a tablet.

Use a Dialog when the application needs to get user feedback.

Use a Notification Area Notification when the user should be notified outside of any currently running application.

Use a Notification Area Notification to prevent onPause() from being called.

**Question 5**

When should your application send broadcasts using the LocalBroadcastManager class, rather than by using the Context class or vice versa?

Use the LocalBroadcastManager to broadcast Intents that will only be received within the same application the sends the broadcasts.

Use the Context class when the broadcast must be sticky.

Use the Context class to improve application reliability.

Use the LocalBroadcastManager to register BroadcastReceivers that don't want to receive broadcasts from outside the application.

**Question 6**

If your application only wants to receive certain broadcasts while it is active and in the foreground, which of the following scenarios might it implement?

Dynamically register its BroadcastReceivers in onResume() and unregister them in onPause().

Statically register its BroadcastReceivers with low priority.

Dynamically register its BroadcastReceivers with low priority. The use abortBroadcast() at runtime to prevent delivery.

Load the Intents through a menu or ActionBar action.

**Question 7**

Which of the following methods is guaranteed to run on the application's UI Thread?

View.post().

AsyncTask.doInBackground().

Activity.runOnUIThread().

Handler.sendMessage().

**Question 8**

Which of the following statements correctly capture why an application that uses a Handler, might send Messages to the Handler, rather than post Runnables to it, or vice versa?

Runnables are less efficient than messages.

Runnables are used when the Sender implements the action to be taken.

Messages are used when the Handler implements the Message response.

Messages can take parameters. Runnables can't.

**Question 9**

Which of the following statements capture how Alarms are different from other Android capabilities?

Notification Area Notifications inform users about events without interrupting their work, while Alarms don't directly inform users.

Handlers cannot be used to send Intents at a future point in time.

Alarms are fired at a particular time in the future. Regular Intent Broadcasts are handled at the time the Intent is broadcast.

**Question 10**

How does an application get access to the AlarmManager?

Put a <manager> tag in the application's AndroidManifest.xml file.

Use the AlarmManager.newInstance() method to retrieve the singleton instance of the AlarmManager.

Use the Context.getSystemService() method to retrieve a reference to the AlarmManager service.

Use the AlarmManager() constructor to create an instance of the AlarmManager.

**Question 11**

When setting alarms, it's often better to use the ELAPSED\_REALTIME or ELAPSED\_REALTIME\_WAKEUP alarm types, rather than RTC or RTC\_WAKEUP alarm types. Which of the following statements explains why RTC and RTC\_WAKEUP alarms might not be the best approach in some cases?

If the network resets the system clock, RTC Alarms may fire at unpredictable times.

It doesn't really matter, because you can easily convert from one time interpretation to the other.

If the user manually changes the time zone or modifies the system clock, RTC Alarms may fire at unpredictable times.

ELAPSED\_REALTIME Alarms can fire when the CPU is in sleep mode.

**Question 12**

**For API targets prior to 19:** The setInexactRepeating() method is intended to give Android flexibility in the exact timing of alarms. Assuming that mAlarmManager is a valid reference to the AlarmManager and that pi is a valid reference to a PendingIntent, why doesn't the following code snippet (modified from the AlarmCreate application shown in this lesson) accomplish that purpose?

mAlarmManager.setInexactRepeating(AlarmManager.ELAPSED\_REALTIME, SystemClock.elapsedRealtime(),15000, pi);

setInexactRepeating() requires a specific interval constant, such as INTERVAL\_FIFTEEN\_MINUTES.

setInexactRepeating() requires an alarm type of RTC or RTC\_WAKEUP.

setInexactRepeating() requires a time interval of 60000 or greater.

setInexactRepeating() is a method of the Alarm class.

**Question 13**

Android supports several HTTP clients. Which one of the following HTTP clients will be Android's preferred HTTP client in the future? See http://android-developers.blogspot.com/2011/09/androids-http-clients.html for more information.

DefaultHttpClient.

AndroidHttpClient.

HttpURLConnection.

**Question 14**

Which of the following statements are generally true about DOM parsers?

DOM parsers use a streaming model in which the parser calls back into the application when specific elements are parsed.

DOM parsers provide iterators that pull XML content into an application on demand.

DOM parsers tend to use more memory than the other kinds of Parsers we discussed in this lesson.

DOM parsers convert an XML document into a tree structure, which can make it easier to do whole document analyses.