MSc Progress Test Sample – Mobile and Social Application Programming

Question 1

Suppose the following attribute declaration occurs in AndroidManifest.xml:

```
<application android:label="@string/app name">
```

What is the effect of the "@" symbol?

- [A] It has no special effect: it is just another character.
- [B] It sets the value of the android:label attribute to a value declared elsewhere in the project and identified by "app name".
- [C] It sets the value of the android: label attribute to the literal string "string/app name".
- [D] The effect is undefined.

Question 2

The main advantage of specifying a GUI layout directly in XML instead of Java is:

- [A] The layout can be edited visually in a typical IDE.
- [B] The layout can be varied dynamically.
- [C] The layout can use custom-designed components.
- [D] The choice of components can more easily be restricted to follow a standard design.

Question 3

What does "match parent" mean when specifying the width of a component?

- [A] It applies to container components, and fits closely around the width of the content.
- [B] It sets the width to a fixed number of pixels.
- [C] It sets the width to the width of the parent component.
- [D] It sets the width to the width of the entire screen.

Question 4

When an Android activity that is currently in the *resumed* state is closed by the user navigating away from the app using the "back" button what is the complete sequence of lifecycle events expected to occur?

```
[A] onBack().
[B] onPause(), onDestroy().
[C] onPause(), onStop().
[D] onPause(), onStop(), onDestroy().
```

Question 5

The commonly overridden onDraw () method is a member of which class?

- [A] Intent
- [B] Graphics
- [C] View
- [D] Canvas

Question 6

When opening an existing File for writing, how can you ensure that new data overwrites any existing data?

- [A] Simply open the File: this will happen by default.
- [B] Open the File then call the method setOverWrite() on it.
- [C] Open the File with the File.OVERWRITE integer flag passed as one of the arguments
- [D] Set user shared preferences to Android.FILE OVERWRITE.

Question 7

Which one of the following is a standard way to add items to the options menu?

- [A] Override the onCreateOptionsMenu() method of Activity and add String items to the Menu object that was passed as a parameter.
- [B] Override the onAddMenuItem() method of Activity and add String items to the Menu object that was passed as a parameter.
- [C] Override the onResume() method, call the getOptionsMenu() method of Activity and then add String items to the returned Menu object.
- [D] Override the onStart() method, call the getOptionsMenu() method of Activity and then add String items to the returned Menu object.

Question 8

Suppose an activity pops up a Dialog window which then waits for user interaction. Which one of these statements is true about the activity's state transitions?

- [A] The activity goes from the paused state to the stopped state.
- [B] The activity is destroyed then re-created.
- [C] The activity goes from the resumed state to the paused state.
- [D] The activity goes from the resumed state to the killed state.