Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER–V • EXAMINATION – SUMMER • 2014

Subject Code: 650003 **Date: 28-05-2014**

Subject Name: Mobile Computing

Time: 10:30 am - 01:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 (a)

(i) Which layout is called to be horizontally oriented LinearLayout? Explain the following view attributes and also mention this attribute is applied to whom? **04**

a.) android:collapseColumns b.) android:layout_span

(ii) What lines should be written to programmatically create green rectangle? **03**

(b)

(i) What is Intent? How can Intent include two extra piece of information – a string value and a Boolean value? **04**

(ii) Where and which tag is used by developers to specify which versions of Android platform an application supports? Explain the three attributes associated with that tag. **03**

Q.2 (a)

(i) Explain the use of following Android Tools. **04**

a.) Dalvik Debug Monitor Server

b.) Android Debug Bridge

(ii) What will the following lines do and also explain the parameters passed. **03**

Log.i(DEBUG_TAG,"MyfirstAndroidApp is running");

Log.e(DEBUG_TAG,"application failed",e)

(b)

(i) How a primary entry point activity can be designated for an Android application? **04**

(ii) Write a code snippet that clears entire RadioGroup so that none of the RadioButton objects are selected. **03**

OR

(b)

(i) Explain the two clock controls available to display the current time. **04**

(ii) What attribute of the SeekBar should be defined in XML layout resource definition so that the user can drag the thumb to any value between 0 and 250? Which method should be used to show what exact value has been selected by the user? **03**

Q.3 (a) What are default resources and what are alternative resources? Explain the Android mechanism for loading the appropriate resources at run time? How color resource, dimension resource, drawable resource can be added and retrieved? What data structure will be used for defining three types of flavors – vanilla, chocolate, strawberry? **07**

(b) Explain with code snippet creation of the options menu and how to handle the event when a menu option item is selected? **07**

OR

Q.3	**(a)**	Explain the key methods that an Activity must use to manage a Dialog. Write the steps involved in adding the dialog to an activity.	**07**
	(b)	Explain with code snippet creation of context menu for Chronometer control and how to handle the ContextMenu clicks?	**07**
Q.4	**(a)**	Which methods should be used to load 2 Bitmap resources and to start animation in case of Frame-by-Frame Animation? Which method should be used to loop continuously for animation?	**07**
	(b)	Explain insert(),update() and delete() methods of SQLiteDatabase class.	**07**

OR

Q.4	**(a)**	Write XML resource file excerpts for following. (i) Transparency change animation taking 10 seconds to fade in fully transparent to fully opaque. (ii) Scaling animation, taking 5 seconds to double an object's size, pivoting from the center of the object. (iii) Translate animation, taking 5 seconds to move an object up by 100 on the y axis and object should not jump back to its starting position when the animation finishes.	**07**
	(b)	How content can be loaded into WebView control in the following 3 cases (i) To load content from a specific web site. (ii) To load an HTML file (iii) To render raw HTML.	**07**
Q.5	**(a)**		
		(i) What permission is needed and how to specify that for the following? a.) To access the private user information provided by the Contacts content provider. b.) For networking to work in any Android application.	**04**
		(ii) Explain the block of code that show how to query for the call state and all possible values.	**03**
	(b)	Which steps are required for publishing an application and guaranteed successful deployment?	**07**

OR

Q.5	**(a)**		
		(i) Which methods of ConnectivityManager class should be used to determine if cellular and WiFi network is available and connected?	**04**
		(ii) For what purpose animation interpolator is used? How it can be specified programmatically?	**03**
	(b)	What is the use of Adapter object in Android sdk. Explain ArrayAdapter in detail.	**07**

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