Dersin Kodu: BIMU4084	Dersin Adı: MOBILE PROGRAMMING
Dersin Öğretim Üyesi: Yrd.Doç.Dr. Özgür Can TURNA	Sınav Türü: BİTİRME
Sınav Tarihi ve Süresi: 03.01.2018 (50dk)	Öğrenci No:
Öğrenci Ad - Soyad:	İmzası:

1. **(5p)** An Intent object carries information that the Android system uses to determine which component to start. Which one is not a primary information contained in an Intent?
   a. Component Name
   b. Action
   c. Connection String
   d. Category
   e. Flags

2. **(5p)** By using _____ tag in your manifest file your application can be opened and shown from other apps.
   a. <action>
   b. <activity>
   c. <category>
   d. <data>
   e. <intent-filter>

3. **(5p)** You can override a method named "onRestoreInstanceState" in your activity. The purpose of this method is _____.
   a. to save your activity last state.
   b. to open another activity to get results.
   c. to recreate the activity data structure from activity back stack.
   d. to get data back if it is stored with onSaveInstanceState method.
   e. to set the activity state on "running".

4. **(5p)** ArrayAdapter is used to _____.
   a. be a bridge between data sources and list-based UI components.
   b. call insert, update, delete queries on an SQLilte database table.
   c. create a preferences file.
   d. save data when the user leaving the activity.
   e. access an ArrayList as a sorted List object.

5. **(5p)** What is wrong about Fragments in Android?
   a. They can be created statically in xml file or dynamically in code file.
   b. They can directly exchange data with each other.
   c. They are useful to create apps for different screen sizes.
   d. They have to be placed inside an activity.
   e. Using fragments is a best-practice for code reusability.

6. **(10p)** What is the purpose of "onCreateOptionsMenu(…)" method in activity? Show it with a sample code.

7. (5p) What is the purpose of this code lines?

```
Toast.makeText( getApplicationContext(),"Kolay Gelsin",
Toast.LENGTH_LONG).show();
```

    a. Open a dialog window.
    b. Create a fragment.
    c. Open an activity with "Kolay Gelsin" title.
    d. Show a flashing bulletin with "Kolay Gelsin" text.
    e. Set the application title as "Kolay Gelsin", gives it high priority and start the first activity.

8. (5p) Which one is correct for Android file system?
    a. You can access all the files inside your phone with your application.
    b. External storage is better for database storage.
    c. To use external storage you have to get permission.
    d. The files in internal storage are read-only.
    e. Shared Preferences files can be accessed by all applications in phone.

9. (5p) Which is not an Annotation for Room Persistent Library?
    a. @Database
    b. @Activity
    c. @Entity
    d. @Dao
    e. @Query

10. (5p) Which is not a list-based UI component?
    a. Spinner
    b. ListView
    c. GridView
    d. AutoComplete TextView
    e. DateTime Picker

11. (30) Create an activity which has a custom ListView to show an output like

Icon1	Text1
Icon2	Text2
Icon1	Text3
Icon2	Text4
Icon1	Text5
Icon2	Text6
Icon1	Text7
Icon2	Text8
….	…..

Separate each file in your writing and give names to your files. The text are stored in a table named as "Title" and has columns as "TitleId" , and "TitleText". Write also necessary codes to read the data from database file. Your database file name is "MyDB".

12. (15p) Write a sample code to generate random numbers in every second and shows them in a textVeiw. (Hint: Use Multi-Threading)