GANPAT UNIVERSITY
U. V. PATEL COLLEGE OF ENGINEERING
B. TECH. SEMESTER – V (CE/IT/CE-AI)
SECOND INTERNAL EXAMINATION, OCT-2021
2CEIT5PE5: MOBILE APPLICATION DEVELOPMENT

Time: 1 Hour]   **[Total Marks: 20**

Instructions:
1. Figures to the right indicate full marks.
2. Be precise and to the point in your answer.

Q-1 Assume that JSON data as shown in image is available to you. Create **[4]** Employee Class which is used to store data. Create ParseJsonData() method to Parse JSON data and that method returns array of object of class Employee according to JSON data.

```
[⊟
  {⊟
    "_id":"617675c43f3258f510fd9f7c",
    "name":"Loretta Spencer",
    "email":"lorettaspencer@jumpstack.com",
    "phone":"+91 (804) 464-2328",
    "address":"537 Guider Avenue, Shasta, Rhode Island, 9284"
  },
  {⊟
    "_id":"617675c448849735de6f2ca5",
    "name":"Elaine Willis",
    "email":"elainewillis@jumpstack.com",
    "phone":"+91 (983) 521-3110",
    "address":"264 Central Avenue, Grapeview, Indiana, 3035"
  }
]
```

Q-2 What is the difference between SQLite & SharedPreference? Write down code to fetch data by **[4]** using sharedPreference (write code in getPrefValue method) and store data by using sharedPreference (write code in setPrefValue method) by using getDefaultSharedPreferences as it is shown in following code:

```kotlin
class PrefUtil {
    companion object{
        fun getPrefValue(context: Context, key: String):String?{
            // Write Code Here
        }

        fun setPrefValue(context: Context, key: String, value: String)
        {
            // Write Code Here
        }
    }
}
```

Q. 3 Write a xml code for tween animation in which the object can rotate for 2 seconds and at the same **[4]** time grow (scale) for the first 1 second & after 1 second it will shrink (scale) & get the original position so total time of animation will be 2 seconds. Write animation.xml file.

Q-4 Write the code for the Option menu where there are three items named Black, Orange and Yellow. **[4]** When user click on particular color name then background of layout set to that particular color. Write **MainActivity.kt file.** (Only write code of "Write your code Here" section in your answer for MainActivity.kt file, Write your answer with title Answer-1 or Answer-2)

```kotlin
import ...
                          MainActivity.kt File

class MainActivity : AppCompatActivity() {
    var relativeLayout: RelativeLayout? = null
    var textView: TextView? = null
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        relativeLayout = findViewById(R.id.rl1)
        textView = findViewById(R.id.tv1)
        relativeLayout!!.setOnCreateContextMenuListener(this)
    }

    override fun onCreateOptionsMenu(menu: Menu): Boolean {
        Write your code here  Answer-1

        return super.onCreateOptionsMenu(menu)
    }

    override fun onOptionsItemSelected(item: MenuItem): Boolean {
        Write your code here  Answer-2
        return super.onOptionsItemSelected(item)
    }
}
```

Q-5 What are the different types of resources available in android? Explain the res directory structure **[4]** with respect to different resources. Also differentiate between style and theme with example.

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