

**GANPAT UNIVERSITY**  
**U. V. PATEL COLLEGE OF ENGINEERING**  
**B. TECH. SEMESTER – V (CE/IT)**  
**FIRST INTERNAL EXAMINATION, SEP-2020**  
**2CEIT5PE5: MOBILE APPLICATION DEVELOPMENT**

**Time: 1 Hour]**  
**Instructions:**

**[Total Marks: 20**

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

- Q-1[A]

Explain step by step functionality of Android Architecture with an example (Example: while clicking an icon of an android application like Whatsapp).

CO1, CO2

[3]
- Q.1 [B]

Draw a diagram that explains the Compilation process to generate an apk file of android application.

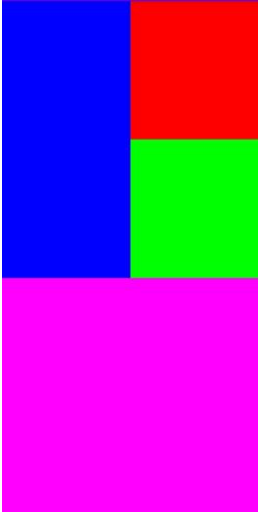
CO6

[2]
- Q-2

What type of layout views are available to android developers for designing an application? Which layout is very suitable to create UI as shown in image. Explain by writing an xml file only to design the UI as shown in image. (Note: you can't use absolute value in attributes layout\_width & layout\_height, you can use only match\_parent, wrap\_content, 0dp in layout\_width & layout\_height)

CO4

[5]



- Q. 3

What is the difference between Activity and service? Write a code to develop a music player application with play,pause and stop functionality with service. (Note: Write Kotlin files & manifest file only)

CO4, CO6

[4]
- Q-4

Write code for implicit type of Intent calls with activity (only Kotlin) files which open url www.uvpce.ac.in and also open google map with location of Ganpat university in google Map.

CO4

[3]
- Q-5

Write the code of yellow lines as shown in the below image. This code is for displaying a list of country names in listview and when the user clicks on country name then it will be displayed in Toast message. (Note: Write Line number in front of your answer while writing answer of yellow line code)

CO3, CO5

[3]

```
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.ArrayAdapter
import android.widget.ListView
import android.widget.Toast
import kotlinx.android.synthetic.main.*
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        //getting from string.xml-array
        var countryArray=resources.getStringArray(R.array.countries_array)
        //create a adapter
        Line 1: Create an adapter & stored in variable name "arrayad
        //bind
        listview1.adapter=arrayAdapter
        listview1.setOnItemClickListener { parent, view, position, id ->
            Line 2: retrieve clicked country name from listview
            Line 3: Display clicked country name in Toast Message
        }
    }
}
```