

**PAN AFRICA CHRISTIAN UNIVERSITY
EXAMINATIONS PAPER**



EPAN AFRICA CHRISTIAN UNIVERSITY

BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY

COURSE CODE: BIT 305

COURSE TITLE: MOBILE APPLICATION DEVELOPMENT

EXAM DATE: JANUARY, 2021

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Three questions in Section **B**.
- Write only your **student number** on the answer booklet provided.
- None programmable calculator permitted
- Calculators on phones, tablets and computers are NOT permitted in Theory Papers

SECTION A

(Answer ALL questions in this section)

QUESTION ONE

- a) Show how you would navigate from one activity to another using an Intent
[2 Marks]
- b) State any **TWO** methods associated with the WebView class. [2 Marks]
- c) James is developing an application; he opts to use a webserver for data storage. Highlight **TWO** factors reasons that may have informed his decision for data storage. [2 Marks]
- d) Assuming you have asked to do an interface for the following scenarios. What kind of the layout would be appropriate? Give a reason for your answer
[2 Marks]
 - i Real Location Tracking System
- e) Outline a snippet code give that would display the following toast message" BIT 305 CLASS, PAC". [2 Marks]

SECTION B (Answer Any Three (3) Questions)

QUESTION TWO

- a) Discuss the process of publishing an app to either App Store or Google Play Store. What are some the core things to consider when doing this? What steps do you have to take? Make sure to discuss self-signing with Android or provisioning profiles with iOS. [3 Marks]
- b) Describe the concept of using core persistent data on both iOS and Android. Touch on the similarities and differences between the platforms, specifically highlighting the advantages on each. [3 Marks]
- c) Write short notes on following based on android

- i) Menus **[2 Marks]**
- ii) Notifications **[2 Marks]**

QUESTION THREE

Normally, in the process of carrying out a screen reorientation, the Android platform tears down the foreground activity and recreates it, restoring each of the view values in the activity's layout. In an app you're working on, you notice that a view's value is not being restored after screen reorientation.

- i) What could be a likely cause of the problem that you should verify, at a minimum, about that particular view? **[2 Marks]**
- ii) Is it possible to create an activity in Android without a user interface? Explain

[3 Marks]

- iii) What is the relationship between the life cycle of an `AsyncTask` and an `Activity`? What problems can this result in? How can these problems be avoided?

[3 Marks]

- iv) Explain the scope of the android code as used below. **[2 Marks]**

```
public class MainActivity extends AppCompatActivity {  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
    }  
}
```

QUESTION FOUR

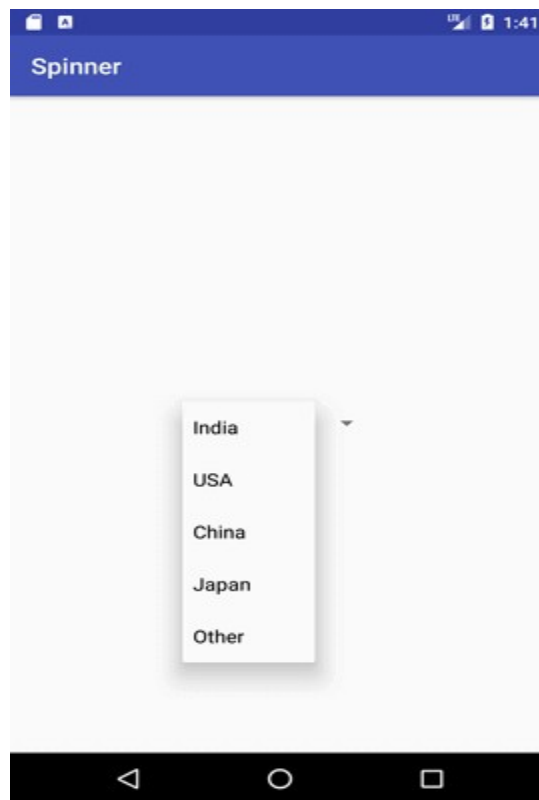
a) Describe **THREE** common use cases for using an Intent. [6 Marks]

b) Discuss **TWO** major security issues facing mobile technology today. [4 Marks]

QUESTION FIVE

a) Write a code snippet that would display the following output interface in Android studio. Separate code for different layout and activity to display the country list.

[8 Marks]



b) Outline a snippet code give that would display the following toast message" BIT 305 CLASS, PAC UNIVERSITY". [3 Marks]