

**PAN AFRICA CHRISTIAN UNIVERSITY  
EXAMINATIONS PAPER**



**PAN AFRICA CHRISTIAN UNIVERSITY**

**BACHELOR OF BUSINESS INFORMATION TECHNOLOGY**

**END OF SEMESTER EXAMINATION**

**DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY**

**COURSE CODE: BIT/BICT 305**

**COURSE TITLE: MOBILE APPLICATION DEVELOPMENT**

**EXAM DATE: DECEMBER, 2021**

**INSTRUCTIONS**

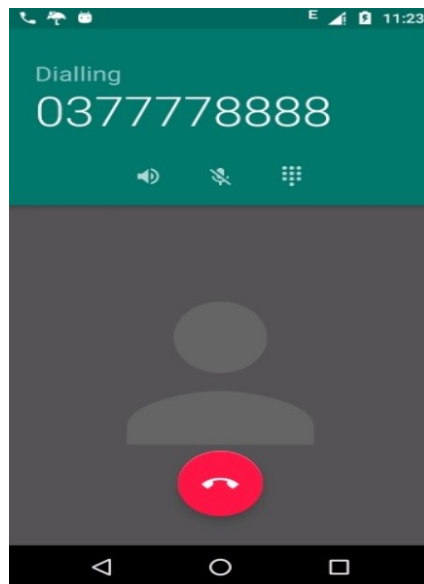
- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Three questions in Section **B**.
- Write only your **student number** on the answer booklet provided.
- None programmable calculator permitted
- Calculators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

**SECTION A**

**(Answer ALL questions in this section)**

**QUESTION ONE**

- a) Using appropriate attributes, write a snippet code that would display the following toast message "*covid-19 is real, keep social distance*". **[4 Marks]**
- b) Write a snippet code that would display the following output in an emulator. **[6 Marks]**



**SECTION B (Answer Any Three (3) Questions)**

**QUESTION TWO**

- a) Describe **THREE** things we can do as developers to make our apps more accessible to people who cannot use a mobile device the standard way. **[3 Marks]**
- b) Consider a brand new, state-of-the-art mobile device that could sit in a stand and project it's user interface up onto the windshield of a car. The interface can be manipulated on the windshield as well - think tapping icons in mid-air. Discuss illusion, hands-in and bits-out **[7 Marks]**

### **QUESTION THREE**

a) Mobile phone software development environment poses unique challenges as opposed to Computer software development environment, explain any **THREE** of the challenges **[3 Marks]**

c) Write an android snippet code that would convert the following *Url*:  
"<https://www.pacuniversity.ac.ke/>" to an application **[7 Marks]**

### **QUESTION FOUR**

a) Discuss **THREE** ethical concerns with gathering data through sensors and analytics methods, specifically touching on privacy, security, equity, and social forgetting. **[6 Marks]**

b) Using reasons, explain the appropriate layout that would be appropriate in the following applications: **[4 Marks]**

- i) Tour guide application
- ii) Food order application

### **QUESTION FIVE**

- a) Company A recently bought company B. The two companies want to integrate their applications. Discuss **THREE** challenges that the integration will face. For each challenge give a concrete example. **[6 Marks]**
- b) Considering app publication policies for Android and iOS. Describe any similarities and differences between them. **[4 Marks]**

### **QUESTION SIX**

- a) Discuss the general algorithm for signing a mobile application in reference to a developer, the platform holder, and the user. **[6 Marks]**

b) Provide a snippet of that would display the following output in an emulator.

**[4 Marks]**

