



**FACULTY OF SCIENCE**

**ACADEMY OF COMPUTER SCIENCE & SOFTWARE ENGINEERING**

**MODULE** IT18X37/IT00137  
Mobile Programming

**CAMPUS** APK

**SSA Exam** July 2019

**DATE:** 2019-07

**SESSION:**

**ASSESSORS**

MR HJC VAN DER WESTHUIZEN

**MODERATOR**

PROF BL TAIT (UNISA)

**DURATION** 120 minutes

**MARKS** 100

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**PLEASE TAKE CAREFUL NOTE OF THE FOLLOWING:**

1. Answer ALL questions in the ANSWER SHEET supplied.
  2. Do NOT write in pencil. Anything in pencil WILL NOT BE MARKED.
  3. Write neatly and legibly.
  4. Answers must pertain to the material covered during the course of the module.
  5. NO calculators may be used.
  6. This question paper consists of 2 (including this cover page) pages.
  7. This question paper consists of 5 question sections.
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**Question 1**

- 1.1 Identify the major components of the Android Platform and describe each component. (12)
- 1.2 As a user navigates through, out of, and back to your app, the Activity instances in your app transition through different states in their lifecycle. What is the main purpose of the activity lifecycle? (2)
- 1.3 List and discuss each of the lifecycle methods. (12)

**[26]**

**Question 2**

- 2.1 Smartphone malware can be characterised based on three distinguishing features. Briefly discuss the difference between these three features. (12)
- 2.2 Briefly discuss the evolution of malware from desktops to smartphones for any 3 malware types. (6)

**[18]**

**Question 3**

- 3.1 Define the concept UX. (3)
- 3.3 Briefly name and discuss any 2 activities that are designed to assist with Settings and Main. (4)

**[7]**

**Question 4**

- 4.1 Discuss the two signing options that can be used to sign an Android application. (10)
- 4.2 What distribution strategies could be used for a mobile app? (6)

**[16]**

**Question 5**

- 5.1 List and discuss the design principles that could be used as a teaching/learning tool (12)
- 5.2 You have been task with developing an application for the occupants of an old age home. With the aid of the Universal design principles, provide the principle a guideline for each and an example of a consideration that should be taken for the given project. (21)

**[33]**

**Total 100**