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GABA CAMPUS - ELDORET

MAIN EXAMINATION

SEPTEMBER – DECEMBER 2021 TRIMESTER

FACULTY OF SCIENCE

BACHELOR OF SCIENCE

DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE

CMT 314: INTRODUCTION TO MOBILE COMPUTING

Date: December 2021

Duration: 2 Hours

Instructions: Answer Question **ONE** and any other **TWO** Questions

QUESTION ONE

- i) Define the following **(5 Marks)**
- a) Android
 - b) Jdk
 - c) Sdk
 - d) Adt
 - e) Avd
- ii) Define android Services? **(2 Marks)**
- iii) List five Features of Android **(5 Marks)**
- iv) List and explain four main components that can be used within an Android application **(8 Marks)**
- v) List steps of Creating an Android Application **(4 Marks)**
- vi) Define android Content Providers **(2 Marks)**
- vii) List four directories and files in the Android project **(4 Marks)**

QUESTION TWO

- i) What is android activity? **(2 Marks)**
- ii) List Android Developer Tools **(2 Marks)**

- iii) List and explain four android callbacks methods **(8 Marks)**
- iv) A service has lifecycle callback methods that you can implement to monitor changes in the service's state and you can perform work at the appropriate stage. Draw a diagram to show the lifecycle when the service is created with startService() **(8 Marks)**

QUESTION THREE

- i) List steps on how to **Run** android application **(4 Marks)**
- ii) Define android Broadcast Recievers **(2 Marks)**
- iii) List two important steps to make Broadcast Receiver work for the system broadcasted intents **(4 Marks)**
- iv) What is Application Components? **(2 Marks)**
- v) What are the methods which you need to override in Content Provider class to have your Content Provider working **(8 Marks)**

QUESTION FOUR

- i) What are android Fragments? **(2 Marks)**
- ii) Explain six important points about fragment **(12 Marks)**
- iii) Draw two UI modules defined by fragments can be combined into one activity for a tablet design, but separated for a handset design **(6 Marks)**

QUESTION FIVE

- i) Draw four main layers of android architecture diagram. **(10 Marks)**
- ii) List and explain five section of android Architecture **(10 Marks)**

END