(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR FOUR SEMESTER TWO EXAMINATIONS

FOR THE DEGREE OF
BACHELOR OF SCIENCE COMPUTER SCIENCE

COURSE CODE : CSC 465E

COURSE TITLE : MOBILE APPLICATION PROGRAMMING

DATE: 29/8/2022 **TIME:** 2:00 P.M – 4:00 P.M

INSTRUCTIONS TO CANDIDATES

ANSWER **QUESTIONS ONE** AND **ANY OTHER TWO**.
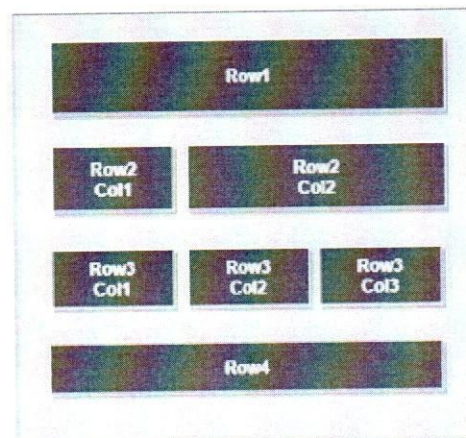
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QUESTION ONE (COMPULSORY) [30 MARKS]

a) List features of Android Operating System. [4Marks]

b) Define Android Virtual Devices (AVD). [2Marks]

c) Write the directory path where images are stored while developing Android application.

[2Marks]

d) List all attributes to develop a simple button. [4Marks]

e) Write the syntax for Intent-Filter tag. [4Marks]

f) Define services in Android operating system. [6Marks]

g) Enlist the steps to publish the Android application. [4Marks]

h) Discuss four characteristics of mobile applications. [4Marks]

QUESTION TWO [20 MARKS]

a) Draw and explain android architecture in detail. [4Marks]

b) Differentiate between JVM and DVM. [4Marks]

c) Explain the activity life cycle. [4Marks]

d) Discuss the need of permissions in Android. [4Marks]

e) Describe the permissions to set system functionalities like Bluetooth and camera.

[4Marks]

QUESTION THREE [20 MARKS]

a) Describe the significance of SQLite database in Android. [4Marks]

b) Explain any four UI Components of Android application. [8Marks]

c) Write a program to display following output using suitable layout. [8Marks]

QUESTION FOUR [20 MARKS]

a) Discuss the concept of Mobile Software Engineering.   [4Marks]

b) Explain the design considerations in Mobile Software Engineering.   [6Marks]

c) Describe the process of storing and retrieving data in Android environment.   [6Marks]

d) Discuss various user interfaces in mobile application.   [4Marks]

QUESTION FIVE [20 MARKS]

a) Security of any application is critical. Explain security measures that can be employed in android application.   [6Mks]

b) Describe how you will distribute your application after development.   [4Mks]

c) The end goal of mobile application development is a product that will give economic and social gain. Discuss how you will monetize your application.   [6Mks]

d) Discuss emerging issues in mobile application development.   [4Mks]