BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE

BSc HONS DEGREE IN COMPUTER SCIENCE

CSH205 MOBILE APPLICATION DEVELOPMENT

DURATION 3 HOURS Total Marks is 100

JUN 2023

Instructions to candidates:

The paper consists of Section A (Theory) and Section B (Practical)
Answer all questions.

Section A: Theory

Question 1

a) There are four Java classes related to the use of sensors on the Android platform. List them and explain the purpose of each. **[12]**

b) Identify and explain the four essential states of an activity . **[8]**

Question 2

a) Copy and fill up the missing parts in table 1 **[10]**

Event handler	Event listener and description
onClick()	
onLongClick()	
onTouch()	
onMenuItemClick()	
onKey()	

Table 1 :Event handlers

b) Outline and explain any five mobile application development challenges in the market today. **[10]**

Section B: Practical

Create a folder on the desktop and name it using your registration number and course code. Save all you work in this folder.

Question 3

Design an interface shown in Figure 1 and add functionality such that when the user clicks addition values entered in to EditTexts will be added,subtraction will subtract value in second EditText from value in first EditText.Clear button will refresh the EditTextboxes. **[20]**

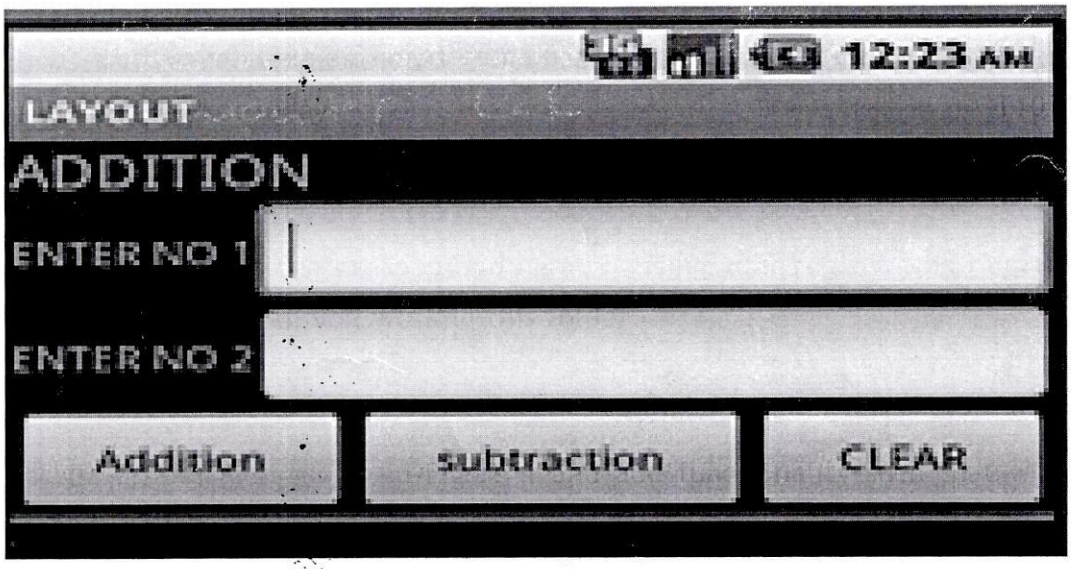

Figure 1:Calculator

Question 4

Figure 2 has been designed so that the user can be able to populate the SQLITE database with values entered or delete records from the database.Add functionality to make the design work. **[20]**

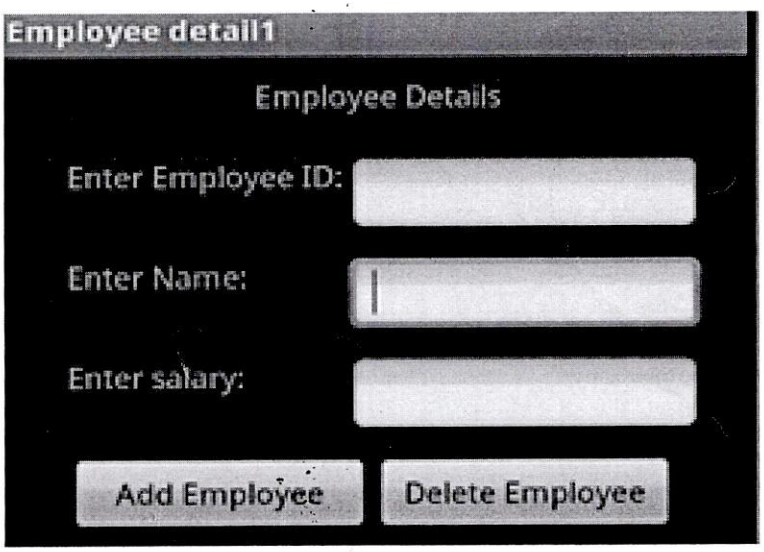

Figure 2: Database cinnectivity

Question 5

Android phones contain a number of sensors such as accelerometer, gyroscope, magnetometer, proximity, light,pressure etc. It must be however noted that not all android phones come with these sensors.Assuming that all necessary libraries have been imported write a code segment to determine and display in a textview all the sensors in a particular cellphone. **[20]**

***********END OF EXAM************