| Reg. No. |  |  |  |  |  |  |  |  |  |  |  |  |
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Question Paper Code 12469

## B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023

Fifth Semester

### **Computer Science and Business Systems**

#### 20CBEL505 - MOBILE APPLICATION DEVELOPMENT WITH LABORATORY

(Regulations 2020)

Duration: 3 Hours Max. Marks: 100

#### $PART - A (10 \times 2 = 20 Marks)$

Answer ALL Questions

|     | Answer ALL Questions                                   |  |
|-----|--|--|
| 1.  | What is Mobile Applications?                           | Marks,<br><b>K-Level, CO</b><br>2,K1,CO1 |
| 2.  | State the difference between web apps and mobile apps. | 2,K2,CO1                                 |
| 3.  | Define Android Emulator.                               | 2,K1,CO2                                 |
| 4.  | Write the features of Android OS.                      | 2,K1,CO2                                 |
| 5.  | How to create a Database in SQLite.                    | 2,K1,CO3                                 |
| 6.  | Define Content Provider.                               | 2,K1,CO3                                 |
| 7.  | What is location based services in Android?            | 2,K1,CO4                                 |
| 8.  | Define Sensors.  | 2,K1,CO4                                 |
| 9.  | List out the commonly accessed ios tools.              | 2,K1,CO5                                 |
| 10. | Define Accelerometer.                                  | 2,K1,CO5                                 |
|     | PART - B (5 × 13 = 65 Marks) Answer ALL Questions      |  |

| 11. | a) | (i) Explain about common myths of mobile application in detail. | 8,K2,CO1 |
|-----|----|---|----------|
|     |    | (ii) Explain Mobile app marketing in detail.                    | 5,K2,CO1 |

#### OR

- b) Briefly explain Various types of Mobile platforms used for mobile 13,K2,CO1 application.
- 12. a) (i) Explain in detail about Android architecture with neat diagram. 10,K2,CO2

(ii) Define Layout. Explain different types of Layout.

# pes of Layout. 3,K2,CO2

OR

b) Define Notification. Explain the steps to create and send Notification 13,K2,CO2 with suitable example.

| 13. | a) | Explain in detail about Internal and external storage with example.  | 13,K2,CO3 |
|-----|----|--|-----------|
|     |    | OR   |           |
|     | b) | (i) Demonstrate a simple Android application to display a toast message: "Hello how are you today!!" (Write a JAVA Code) | 5,K2,CO3  |
|     |    | (ii) Explain content provider with neat architecture diagram.  | 8,K2,CO3  |
|     |    | (ii) Emplain content provider with near aremovement diagrams   |           |
| 1.4 | `  |  | 13,K2.CO4 |
| 14. | a) | Explain in detail about the types of sensors and illustrate how one can  | 13,K2.CO4 |
|     |    | listen to sensor readings with an example.   |           |
|     |    | OR   |           |
|     | b) | (i) Explain in detail about Android Bluetooth communication.   | 8,K2,CO4  |
|     |    | (ii) Explain how to play audio using Media player.   | 5,K2.CO4  |
|     |    |  |           |
| 15. | a) | Explain in detail about Objective C with an example.   | 13,K2,CO5 |
| 15. | u) | •  |           |
|     |    | OR   |           |
|     | b) | (i) Discuss in detail about UI elements to be used to develop an iOS application.  | 8,K2,CO5  |
|     |    | (ii) Explain about iOS features and Tools used in iOS.   | 5,K2,CO5  |
|     |    | (ii) Emplain decay less leddards and leons assa in less.   |           |
|     |    | PART - C $(1 \times 15 = 15 \text{ Marks})$  |           |
|     |    | FART - C (1 × 15 – 15 WIAFRS)  |           |
| 16. | a) | (i) Illustrate the steps involved in building camera application in android with example.                                | 8,K2,CO4  |
|     |    | (ii) Explain how to create a Native iOS application.   | 7,K2,CO5  |
|     |    | . , .  |           |
|     |    | OR   |           |
|     | b) | (i) Demonstrate a mobile application that uses GPS location information.   | 7,K2,CO4  |
|     |    | (ii) How do we access SQLite using iOS Mobile application and  | 8,K2,CO5  |
|     |    | explain with suitable application.   |           |
|     |    |  |           |
|     |    |  |           |