



# P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

**Fifth Semester, Master of Computer Applications (MCA)**

**Semester End Examination; February - 2022**

**Mobile Application Development**

*Time: 3 hrs*

*Max. Marks: 100*

*Note: Answer FIVE full questions, selecting ONE full question from each unit.*

## UNIT - I

- |   |    |   |    |
|---|----|---|----|
| 1 | a. | Define Android. Discuss the advantages of Android.                  | 10 |
|   | b. | Explain .apk and .dex extension.                                    | 5  |
|   | c. | List and explain Android SDK features.                              | 5  |
| 2 | a. | List and describe the features available on Android.                | 10 |
|   | b. | Explain the advantages and disadvantages of Dalvik Virtual Machine. | 5  |
|   | c. | Outline Android software stack with a neat diagram                  | 5  |

## UNIT - II

- |   |    |  |    |
|---|----|--|----|
| 3 | a. | Define activity. Explain the life cycle of an activity.  | 10 |
|   | b. | Outline the details of an Android emulator, also explain the Android development tool used in Eclipse IDE. | 10 |
| 4 | a. | Explain various types of Android applications.   | 10 |
|   | b. | Describe creating resource for different languages and hardware.   | 10 |

## UNIT - III

- |   |    |  |    |
|---|----|--|----|
| 5 | a. | Define intents and discuss the use of them in application development. Also explain any five Native Android actions. | 10 |
|   | b. | Illustrate launch activities using intents.  | 10 |
| 6 | a. | Define Fragments. Explain the life cycle of Fragments.   | 10 |
|   | b. | Discuss any five Android widget toolbox controls.  | 10 |

## UNIT - IV

- |   |    |  |    |
|---|----|--|----|
| 7 | a. | Discuss insertion, updation and deletion of rows with respect to SQLite. | 10 |
|   | b. | Discuss the uses of environmental sensors.                               | 5  |
|   | c. | Explain Barometer sensors.   | 5  |
| 8 | a. | List and describe any five Android sensors.                              | 10 |
|   | b. | Discuss the following concepts:  |    |
|   |    | i) Registering content provider  | 10 |
|   |    | ii) Storing files in a content provider                                  |    |

Contd... 2

**UNIT - V**

- 9 a. List and explain any five parameters used for camera setting. 10
- b. Explain the following:
  - i) Location privacy 10
  - ii) Finding the last known location
- 10 a. Explain the procedure to find the current location in Android application. 10
- b. Explain forward and reverse geo coding. 10

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