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# 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; Jan. / Feb. - 2021

### 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. | Explain Android Native applications.                           | 10 |
|      | b. Discuss different features of Android SDK.                  | 10 |
| 2 a. | What is open handset alliance? Explain.                        | 5  |
|      | b. Why development of Android application is popular? Discuss. | 10 |
|      | c. Discuss briefly Dalvik Virtual Machine.                     | 5  |

#### UNIT - II

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|------|---|----|
| 3 a. | Explain different types of Android applications.  | 10 |
|      | b. Explain different hardware constraints need to be considered while developing an Android application | 10 |
| 4 a. | Explain the building blocks of Android application.   | 10 |
|      | b. Define Activity. Explain Activity life cycle.  | 10 |

#### UNIT - III

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|------|--|----|
| 5 a. | Discuss the fundamental Android UI components.           | 10 |
|      | b. What are Layouts? Explain different types of Layouts. | 10 |
| 6 a. | What are Fragments? Explain Fragment life cycle .        | 10 |
|      | b. Discuss briefly Intents and Broadcast-Receivers.      | 10 |

#### UNIT - IV

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|------|---|----|
| 7 a. | What is SQLITE? Explain the different navigation functions of cursor class. | 10 |
|      | b. Discuss Content provider in detail.                                      | 10 |
| 8 a. | Explain different sensors supported by Android.                             | 10 |
|      | b. Discuss the uses of Environmental sensors.                               | 10 |

#### UNIT - V

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|-------|--|----|
| 9 a.  | What is location based services? Explain.  | 10 |
|       | b. Explain the following:                  |    |
|       | i) Location privacy                        | 10 |
|       | ii) Finding the last known location        |    |
| 10 a. | Discuss MediaPlayer in detail.             | 10 |
|       | b. Explain the subclasses of Audio Effect. | 10 |

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