



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

(An Autonomous Institution affiliated to VTU, Belagavi)

Third Semester, Master of Computer Applications (MCA)

Semester End Examination; February / March - 2022

Mobile Application Development

Time: 3 hrs

Max. Marks: 100

Course Outcomes

The Students will be able to:

CO1: Identify the Fundamentals of Mobile Application Development.

CO2: Create simple android applications.

CO3: Design and develop the user interface that leverage evolving mobile device capabilities.

CO4: Construct of mobile application using android SQLite and content providers and categorize the mobile sensors.

CO5: Understand the mobile applications based on maps, location based, audio, video and camera.

Note: I) Answer any FIVE full questions, selecting ONE full question from each unit.

II) Any THREE units will have internal choice and remaining TWO unit questions are compulsory.

III) Each unit carries 20 marks.

Q. No.	Questions	Marks	BLs	COs	POs
UNIT - I					
1 a.	How Android is different from other mobile development platforms?	5	L5	CO1	PO5
b.	With a neat block diagram, explain the Android software stack.	10	L2	CO1	PO5
c.	What is Android? What android Isn't?	5	L1	CO1	PO1
UNIT - II					
2 a.	List any five factors to be considered, while developing software for mobile application or embedded devices. Explain.	5	L1	CO2	PO3
b.	What are the guidelines to be considered, while developing an Android application?	5	L1	CO1	PO1
c.	List and explain the different types of Android applications.	10	L2	CO1	PO1
UNIT - III					
3 a.	What are layout managers? List and briefly explain four commonly used layout classes.	5	L2	CO2	PO5
b.	What are fragments? How do you use fragment transactions?	5	L5	CO2	PO1
c.	What are intents? Why do you use intents?	10	L2	CO2	PO1
OR					
3 d.	With a neat block diagram, explain the lifecycle of the fragment.	10	L2	CO2	PO1
e.	How do you optimize layouts?	10	L3	CO2	PO2
UNIT - IV					
4 a.	How do you use add, delete and update methods on the content resolver to perform transactions?	10	L5	CO3	PO3
b.	Explain insert, delete, update method of the SQLite database class.	10	L2	CO4	PO3
OR					

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|---|----|----|-----|-----|
| c. List and explain any five android supported sensors. | 10 | L2 | CO5 | PO5 |
| d. How do you detect the acceleration changes? | 5 | L5 | CO5 | PO5 |
| c. Discuss briefly how sensors are monitored? | 5 | L2 | CO5 | PO5 |

UNIT - V

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|---|----|----|-----|-----|
| 5 a. How do you translate between street address and map coordinates? | 10 | L2 | CO5 | PO3 |
| b. What are the ways to initialize the audio content for playback? | 5 | L3 | CO5 | PO3 |
| c. What are the different ways to add effects to audio? | 5 | L1 | CO5 | PO3 |

OR

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|---|----|----|-----|-----|
| 5 d. What are the different ways to record video? | 10 | L1 | CO5 | PO3 |
| e. How do you find your current location in an android application? | 10 | L6 | CO5 | PO3 |

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