

# CBCS SCHEME



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22MCA263

## Second Semester MCA Degree Examination, June/July 2023 Mobile Application Development

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.  
2. M : Marks , L: Bloom's level , C: Course outcomes.*

| Module - 1        |    |  | M  | L  | C   |
|-------------------|----|--|----|----|-----|
| Q.1               | a. | With a neat diagram explain GSM architecture.  | 10 | L1 | CO1 |
|                   | b. | Explain system service architecture of mobile application.                                   | 10 | L2 | CO1 |
| <b>OR</b>         |    |  |    |    |     |
| Q.2               | a. | What is protocol? Explain protocol architecture in mobile computing with a neat diagram.     | 10 | L2 | CO1 |
|                   | b. | What is handover? Explain its different types.   | 10 | L1 | CO1 |
| <b>Module - 2</b> |    |  |    |    |     |
| Q.3               | a. | What is android? Explain its architecture with a neat diagram.                               | 10 | L1 | CO2 |
|                   | b. | Explain steps involved in installing android.  | 5  | L1 | CO2 |
|                   | c. | Explain steps involved in creating android virtual device.                                   | 5  | L1 | CO2 |
| <b>OR</b>         |    |  |    |    |     |
| Q.4               | a. | How you will create and execute first android project? Explain with program steps.           | 10 | L2 | CO2 |
|                   | b. | Write a android program to print "Hello welcome" on emulator with a image in the background. | 10 | L3 | CO2 |
| <b>Module - 3</b> |    |  |    |    |     |
| Q.5               | a. | What is activity? Explain the activity, Life cycle in android with a neat diagram.           | 10 | L2 | CO3 |
|                   | b. | Explain content providers in android.  | 10 | L2 | CO3 |
| <b>OR</b>         |    |  |    |    |     |
| Q.6               | a. | Explain table layout and its features.   | 5  | L1 | CO3 |
|                   | b. | Write a program to illustrate different drawing graphics in android.                         | 10 | L2 | CO3 |
|                   | c. | How animation is created in Android? Explain.  | 5  | L1 | CO3 |
| <b>Module - 4</b> |    |  |    |    |     |
| Q.7               | a. | With an example for each, explain common views in Android.                                   | 10 | L1 | CO4 |
|                   | b. | Explain different layouts in android.  | 10 | L1 | CO4 |
| <b>OR</b>         |    |  |    |    |     |
| Q.8               | a. | How multimedia can be implemented in Android? Explain.                                       | 10 | L2 | CO4 |
|                   | b. | Explain how to check internet connection in Android programmatically.                        | 10 | L3 | CO4 |
| <b>Module - 5</b> |    |  |    |    |     |
| Q.9               | a. | Write a program to demonstrate GPS connection in Android.                                    | 10 | L3 | CO5 |
|                   | b. | Explain the procedure of sending email in Android project.                                   | 10 | L3 | CO5 |
| <b>OR</b>         |    |  |    |    |     |
| Q.10              | a. | Explain services in android.   | 10 | L3 | CO5 |
|                   | b. | Explain procedure involved in publishing android application in Google play store.           | 10 | L3 | CO5 |

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