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M.C.A. EXAMINATION, 2026

(Fourth Semester)

(From 2021-22 Onwards)

(Re-appear Only)

MOBILE APPLICATION DEVELOPMENT

Time : 2 *Hours*] [*Maximum Marks :* 40

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) Define Android Operating System. **2**

(b) Explain the concept of threads in mobile application development **2**

(c) Define Shared Preferences. **2**

(d) What is White Box Testing ? **2**

Unit I

2. Explain the architecture of Android OS and discuss the features of Android applications. **8**

3. Describe the steps for setting up Android development environment and explain the role of Android Virtual Device (AVD). **8**

Unit II

4. Explain the Activity Life-Cycle in Android with a neat diagram. **8**

5. Discuss Broadcast Receivers and Notifications in Android applications with suitable examples. **8**

Unit III

6. Explain SQLite Database in Android and discuss the use of Shared Preferences. **8**

7. Describe multimedia support and location services in Android applications. **8**

Unit IV

8. Explain the process of debugging and testing mobile applications. **8**

9. Discuss app signing, packaging and distribution of Android applications on the marketplace. **8**

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