A-0839

Total Pages: 3 Roll No.

MCS-604

INTRODUCTION TO MOBILE ARCHITECTURE

(MCA)

Examination, June 2025

Time: 2:00 Hrs. Max. Marks: 70

Note:— This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

Long Answer Type Questions $2 \times 19 = 38$

Note: Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each.

Learners are required to answer any two (02) questions only.

- What do you understand by native mobile application?
 Describe the architecture of a native mobile application and its components.
- 2. What is mobile operating system? Describe the architecture of a mobile operating system with a focus on Android.
- 3. Explain the prerequisites and steps for publishing apps to Google Play Store and Apple App Store.
- 4. What are native development tools? What are the differences between native development tools for Android and iOS?
- 5. Discuss the role of input-output components like cameras and speakers in mobile hardware.

Section-B

Short Answer Type Questions

 $4 \times 8 = 32$

- **Note:** Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.
- 1. Compare and contrast mobile applications with web applications.
- Discuss the challenges developers face when designing mobile applications.

- 3. Explain the components of a mobile support infrastructure with an example.
- 4. Outline the design considerations and best practices for mobile app development.
- 5. What are the basic features and functionalities of Android as a mobile operating system ?
- 6. Outline the multitasking and accessibility features of iOS.
- 7. What is Virtual Private Networking (VPN), and how is it utilized in Windows phones?
- 8. Discuss the key features of Qualcomm Snapdragon and Samsung Exynos processors.
