

A-1312

Total Pages : 3

Roll No.

MCS-604

(MCA)

Introduction to Mobile Architecture

Examination February, 2026

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) (2×19=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.

A-1312

(1)

P.T.O.

1. Explain PC-based, web-based, and mobile-based applications. Discuss their evolution and compare them with respect to deployment, scalability, and platform dependency.
2. Describe the end-to-end architecture of Android mobile applications. Explain the role of mobile client components and support infrastructure.
3. Discuss the basics of mobile application design. Explain design patterns, UI elements, deployment issues, power optimization, synchronization, and security best practices.
4. Explain different types of mobile operating systems. Discuss existing and discontinued mobile operating systems and explain how to identify the OS of a mobile device.
5. Describe the mobile hardware architecture. Explain mobile processors such as Qualcomm Snapdragon, Samsung Exynos, and NVIDIA Tegra.

Section–B

(Short Answer Type Questions) (4×8=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. Explain the basic functions of an operating system with reference to process and memory management.
2. Describe the features of Windows Mobile, including Windows Phone 7, 8, and Windows 10 Mobile.
3. Explain volatile and non-volatile memory used in mobile devices.
4. Describe mobile sensors such as gyroscope, compass, and proximity sensor.
5. Explain input-output components of a mobile device.
6. Discuss native development tools for Android, and Windows mobile platforms.
7. Explain approaches for cross-platform mobile application development.
8. What is the difference between Google Play Store and Apple App Store.
