A–1149

BCA-ED

Introduction to Mobile Architecture

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   2×19=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.

1. Explain the evolution of mobile applications over the years. Highlight major technological advancements and user experience improvements.

2. Discuss in detail the advantages and disadvantages of cross Platform Mobile App. Development Tools.

3. Define a mobile operating system. Discuss its key features, architecture, and the role it plays in smart phones with suitable examples

4. Describe the three-layer architecture of a mobile operating system Layer 0, Layer 1, and Layer 2. Explain the function of each layer with an illustrative diagram.

5. Explain the fundamentals of the Android Operating System. Describe its history, features, components, and architecture in detail. Discuss why Android has become the most widely used mobile operating system.

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. What is Siri ? Explain its features, usage, and integration within the iOS ecosystem.

2. What are mobile processors ? Discuss the role of mobile processors in smart phones and tablets.

3. How do mobile applications differ from traditional desktop applications ?

4. Mention any five security best practices for mobile applications.

5. What are the steps involved in deploying an app to the Play Store or App Store ?

6. Explain the features of iOS which enable a visually impaired person to use this platform.

7. What were the key features and limitations of Windows Phone 7 ?

8. What is memory in a mobile phone, and why is it crucial for its performance ?

****