Roll No…….. **Total No. of Printed Pages: [01]**
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B. Tech CSE (Semester – 6th)
MOBILE APPLICATION DEVELOPMENT
Subject Code: BCSED1611
Paper ID: [18111131]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a. Define mobile computing and discuss its significance in today's technological landscape.
b. Explain the role of ARM architecture in mobile devices and its advantages.
c. Differentiate between native and hybrid mobile applications.
d. Discuss the importance of touch interfaces in mobile user experience.
e. Briefly describe the deployment process of mobile applications on the Google Play Store.
f. What are the key features of Android's kernel structure?
g. Define data synchronization in the context of mobile applications.
h. Explain the concept of power management in mobile devices and its impact on battery life.
i. Discuss the security considerations in mobile application development.
j. Describe the characteristics of mobile application frameworks and their significance in development.

Section – B **(5 marks each)**

Q2. Discuss the components of the Android Development Environment (ADE) and their roles in mobile app development.

Q3. Discuss the architectural difference between Android, iOS, and windows mobile operating systems.

Q4. Explain how mobile applications access and use device features such as contacts and photos.

Q5. Describe the process of storing and retrieving data in Android using content providers.

Q6. Describe the significance of intents and services in Android application development, providing examples.

Section – C **(10 marks each)**

Q7. Explain different testing methodologies for mobile applications, including unit testing, integration testing, and user acceptance testing. Provide examples of tools used for each type of testing.

Q8. Explain the process of storing and retrieving data in Android application using SQLite databases. Discuss best practices for data management and security.

Q9. Elaborate on the different testing methodologies for mobile application, including unit testing, integration testing, and UI testing. Discuss tools that can be used for testing Android applications.