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Uni. Roll No. ....

Program: B.Tech. (Batch 2018 onward)
Semester: 7/8th
Name of Subject: Mobile Application Development
Subject Code: PEIT-116
Paper ID: 17414

Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

1) Parts A and B are compulsory
2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
3) Any missing data may be assumed appropriately

Part – A

[Marks: 02 each]

Q1.

a) List the naming conventions for Android XML resource files.

b) What is Android, and why is it a significant platform in mobile development?

c) What is the purpose of the spawning process in Android?

d) List the hardware and software requirements necessary to set up a development environment for Android.

e) Create a button that changes its color each time it is clicked.

f) Create a string resource for a welcome message that can be displayed to the user.

Part – B

[Marks: 04 each]

Q2. Provide an overview of what Android Studio is and its role in the Android app development process

Q3. What is the primary purpose of the built-in SQLite content provider in Android, and how is it typically used in app development?

Q4. List the components of the mobile ecosystem, including operators, networks, devices, platforms, operating systems, applications, and frameworks

Q5. Design a step-by-step process for creating a user interface from scratch in an Android app, including considerations for layout and user experience.

Q6. Develop a user interface that utilizes Button elements to interact with various app functions, ensuring an intuitive user experience.

Q7. Compare and contrast the advantages and disadvantages of using Fragments in Android app development. Analyze scenarios where using Fragments can lead to more effective and user-friendly applications.

Part – C   [Marks: 12 each]

Q8. What are the key stages or steps involved in the process life cycle, and can you briefly describe each stage?

OR

Compare the advantages and disadvantages of Relative, Linear, Table, and Grid Layouts in different Android app design scenarios.

Q9. You are tasked with developing an Android app that relies on data storage and retrieval. In this context, analyze the advantages and disadvantages of using the built-in SQLite Content Provider in Android. Compare this approach to alternative data storage and retrieval methods, and justify your choice based on specific use case scenarios. Additionally, discuss the security and performance considerations when using the SQLite Content Provider in a real-world application.

OR

Design an Android application that utilizes intent filters to enhance user interactions. Describe the specific scenarios and use cases where intent filters can be effectively employed to improve the user experience. Justify your design choices and explain how intent filters contribute to the success of your app.

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