

Code No: 156BW**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year II Semester Examinations, August/September - 2024****MOBILE APPLICATION DEVELOPMENT****(Common to CSE, IT, CSBS, CSIT, CSE(CS), CSE(AI&ML), CSE(DS))****Time: 3 Hours****Max. Marks: 75**

- Note:** i) Question paper consists of Part A, Part B.
ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A**(25 Marks)**

- 1.a) What are Android Virtual Devices (AVD)? [2]
- b) What do you mean by android activities? [3]
- c) List all attributes to develop a simple button. [2]
- d) List different User Interface Elements. [3]
- e) What is the use of Intent filters? [2]
- f) Define what a Toast message is and its typical use cases in Android applications. [3]
- g) Draw the hierarchical directory structure of android application. [2]
- h) Define Shared Preferences. [3]
- i) List the Characteristics of SQLite database. [2]
- j) What is the significance of SQLite database in Android? [3]

PART – B**(50 Marks)**

- 2.a) Explore the Steps to install and configure Android Studio and SDK.
- b) Write a program to implement Android Activity Life Cycle. Use toast messages to display message through life cycle. [5+5]

OR

- 3.a) Draw and explain android architecture in detail.
- b) Describe types of permissions used while developing android applications. [5+5]
- 4.a) Develop a simple calculator using table layout.
- b) Discuss about list, and preference fragments. [5+5]

OR

- 5.a) Define Dialog. Demonstrate with a code snippet the usage of Alert Dialog.
- b) List the different input controls for making choices. Demonstrate with a code snippet the usage of Radio Button. [5+5]
- 6.a) Demonstrate with code snippet how to pass data between activities with Intent using Intent Extra.
- b) Demonstrate the usage of Implicit Intent with Code Snippet. [5+5]

OR

- 7.a) Develop an android application for sending Short Message Service (SMS).
b) Explain what native actions are and how they are used within the context of Android intents. [5+5]
- 8.a) Illustrate the technique for writing a record to a record store and reading records from the record store.
b) Demonstrate with Code Snippet the usage of Shared Preferences. [5+5]

OR

9. Explain the process of creating and accessing Shared Preferences, including the use of context methods like `getSharedPreferences()`, `getPreferences()`, and `getDefaultSharedPreferences()`. [10]
- 10.a) Explain with an example sharing the data between application using Content Provider.
b) What is SQLite database? Explain the process and code of connecting to a Database. [5+5]

OR

- 11.a) With a neat diagram, explain the app architecture with Content Provider.
b) Justify why SQLite database is better option of storing the data? [5+5]

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Aug-2024