**20CS605**

**Hall Ticket Number:**

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| **III/IV B. Tech (Regular) DEGREE EXAMINATION** | | | |
| **July/August, 2023** | **Computer Science & Engineering** | | |
| **Sixth Semester** | **Mobile Application Development** | | |
| **Time:** Three Hours | | **Maximum:** 70 Marks | |
| ***Answer question 1 compulsory.*** | | | **(14X1 = 14Marks)** |
| ***Answer one question from each unit.*** | | | **(4X14=56 Marks)** |

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|  |  |  | **CO** | **BL** | **M** |
| 1 | a) | List any two challenges of Android app development. | CO1 | L1 | 1M |
|  | b) | List types of android applications. | CO1 | L1 | 1M |
|  | c) | Define android. | CO1 | L2 | 1M |
|  | d) | What is an activity? | CO2 | L1 | 1M |
|  | e) | List the building blocks of android. | CO2 | L2 | 1M |
|  | f) | What is the importance of having an emulator within the Android environment? | CO2 | L1 | 1M |
|  | g) | What is the importance of settings permissions in app development? | CO3 | L1 | 1M |
|  | h) | What is the function of an intent filter? | CO3 | L1 | 1M |
|  | i) | When is the onStop() method invoked? | CO3 | L2 | 1M |
|  | j) | What is an intent. | CO3 | L1 | 1M |
|  | k) | What is Android Database? | CO4 | L1 | 1M |
|  | l) | What is the use of content provider. | CO4 | L2 | 1M |
|  | m) | What is a service. | CO4 | L2 | 1M |
|  | n) | What is a bound service? | CO4 | L1 | 1M |
| **Unit-I** | | | | | |
| 2 | a) | Explain about Android SDK features. | CO1 | L2 | 6M |
|  | b) | Draw and explain Android System Architecture. | CO1 | L6 | 8M |
|  |  | **(OR)** |  |  |  |
| 3 | a) | Design an android app to develop interactive user interface. | CO1 | L3 | 8M |
|  | b) | Demonstrate a code snippet to Change the background color. | CO1 | L6 | 6M |
| **Unit-II** | | | | | |
| 4 | a) | What is use of AndroidManifest.xml file in any android application? Explain with an example. | CO2 | L2 | 7M |
|  | b) | What are view and view group classes in android? Why layouts are created using xml file? Explain with an example. | CO2 | L4 | 7M |
| **(OR)** | | | | | |
| 5 | a) | Explain Fragment Activity and Fragment Manager, and demonstrate their activities with a small piece of code. | CO2 | L2 | 8M |
|  | b) | Enlist and explain any eight types of Android UI control components. | CO2 | L4 | 6M |
| **Unit-III** | | | | | |
| 6 | a) | Explain the following with small piece of code:   1. Creating the Broadcast Receiver ii. Registering the Broadcast Receiver. | CO3 | L3 | 8M |
|  | b) | Design an android app to develop Implicit Intent. | CO3 | L6 | 6M |
| **(OR)** | | | | | |
| 7 | a) | Demonstrate Creating and Saving of shared preferences with proper syntactic representations. | CO3 | L6 | 7M |
|  | b) | Explain about any four Input Controls while developing an Android application. | CO3 | L4 | 7M |
| **Unit-IV** | | | | | |
| 8 | a) | What are different types of Android Databases? Write different ways to host a database. | CO4 | L3 | 7M |
|  | b) | What is meant by Binding Services to Activities? Create a bound service with a binder class. | CO4 | L3 | 7M |
| **(OR)** | | | | | |
| 9 | a) | Design an android app to develop menus. | CO4 | L2 | 7M |
|  | b) | Explain in detail about Opening and Closing Android SQLite Database Connection. | CO4 | L3 | 7M |

