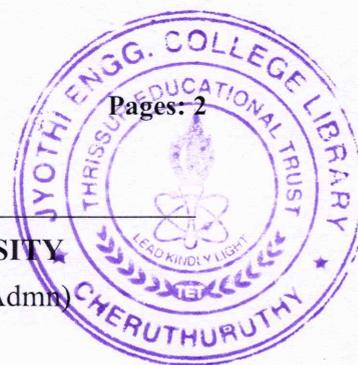


Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
B.Tech S4 (Hons.) Degree Examination May 2025 (2023 Admn)



**Course Code: CCT292**

**Course Name: SECURE MOBILE APPLICATION DEVELOPMENT**

Max. Marks: 100

Duration: 3 Hours

**PART A**

*(Answer all questions; each question carries 3 marks)*

Marks

- |    |   |   |
|----|---|---|
| 1  | How many constraints are there in a mobile system? What are they?                     | 3 |
| 2  | What is Dalvik? What is the difference between Dalvik and JVM?                        | 3 |
| 3  | What is Drawable class used for?  | 3 |
| 4  | Demonstrate the functionality of Button Selector.                                     | 3 |
| 5  | What is the difference between pre-emptive and non-pre-emptive scheduling algorithms? | 3 |
| 6  | List out any five criteria of scheduling.   | 3 |
| 7  | What is Schema in database?   | 3 |
| 8  | What are the functions used to query the space?                                       | 3 |
| 9  | What is the difference between mobile cloud computing and cloud computing?            | 3 |
| 10 | Compare different type of Wireless Network.   | 3 |

**PART B**

*(Answer one full question from each module, each question carries 14 marks)*

**Module -1**

- |    |  |    |
|----|--|----|
| 11 | a) With the help of diagram explain system architecture of Android.            | 7  |
|    | b) List out the challenges of mobile cloud computing.                          | 7  |
| 12 | a) What is an activity in an Android? How to launch an activity in Android?    | 4  |
|    | b) Explain the need of data security and privacy protection in mobile systems. | 10 |

**Module -2**

- |    |  |   |
|----|--|---|
| 13 | a) Explain the life cycle of a Media player with a state diagram.                    | 9 |
|    | b) List the functions of Action bar design element of an Android.                    | 5 |
| 14 | a) How is colour represented in Android.   | 5 |
|    | b) Demonstrate the procedure of execution of video in Android with the help of code. | 9 |

**Module -3**

- |    |  |   |
|----|--|---|
| 15 | a) With the help of diagram explain Linux kernel of Android. | 7 |
|----|--|---|

- b) Explain communication mechanisms used in Android. 7
- 16 a) With the help of an example Explain ASAP scheduling algorithm. 9
- b) What is priority scheduling algorithm? 5

**Module -4**

- 17 a) Interpret the use of Content Providers in Android Apps. 7
- b) What is the difference between storing data in internal storage and external storage? 7
- 18 a) Illustrate the CRUD operations possible in SQLite. 9
- b) Describe the mechanisms used in Android to delete a file. 5

**Module -5**

- 19 a) Illustrate the process of virtual machine implementations in a mobile cloud. 10
- b) Describe cellular network. 4
- 20 a) With the help of diagram explain architecture of mobile cloud computing. 10
- b) Difference between WiMAX and Wi-Fi 4

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