National Forensic Sciences University School of Cyber Security and Digital Forensics

Course Name: M.Sc. Cyber Security/M. Tech. AI&DS (Batch: 2024-26)

Semester - II

Subject Code: CTMSCS SII P3/CTMTAIDS SII P2

Time: 3.30 PM to 5.00 PM Subject Name: M.S. / M.S.F

Exam: Mid-Semester Examination (March - 2024)

Total Marks: 50

Date: 21-Mar-2025

Instruction:

- 1. Start the Question from a new page.
- 2. Write the answer to the question to the point and discuss the code if needed.

Q1. Answer the following questions in short. (Attempt any 5)

[25 Marks]

- 1) Write down five ADB commands and their purpose in one line.
- 2) Describe the Android Boot Process in detail.
- 3) What is path traversal vulnerability and how do you test it?
- 4) Is it possible to access the content of the database or external file directly through ADB or using some other exploit? Discuss the attack with an example.
- 5) How to pen-test the unprotected content provider/ leakage.
- 6) Discuss the concept of Sandboxing in Android Applications. Also, give advantages for the same.

Q2. Answer the following questions in detail. (Attempt any 2)

[16 Marks]

- 1) How do you test exported activity using am or drozer?
- 2) Discuss your approach to carrying out the Mobile Security Pen-Testing.
- 3) Describe the Android Application Components and their role in any Android application.

Q3. Answer the following questions in detail. (Attempt any 1)

[09 Marks]

- 1. Describe the Android Partitions and Android File System in detail with the importance of each directory.
- 2. Describe the concept of Content Provider in Android Applications with appropriate examples and explain the Application permission role.