

**Department of Computer Science**  
Faculty of Computing and Information Technology  
University of the Punjab

CC-403 Information Security **BSCSF21 Morning (Term Spring 25)** Student ID: \_\_\_\_\_

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**Quiz 04**

**Time: 12 mins**

**Marks: 10**

**Quiz will be cancelled if any student is found looking at his/her neighbor's paper or writing after the expired time.**

A. Usually, device drivers live in kernel space, however, in Android OS, the device drivers live inside the Hardware Abstraction Layer. Mention two reasons of this. **[2]**

B. When you unzip an apk file, there is a directory named META-INF. Name the files of this directory and their importance in one line each. **[2]**

C. In context to the Android booting process, differentiate between IPL and SPL **[2]**

D. What do you mean by insecure data storage? Mention some mitigation techniques against this vulnerability **[2]**

E. How encryption and data protection differ in Android Kernel and Linux Kernel **[2]**