Name: _____ ID: _____ Section: ____

Department of Computer Science and Engineering
CSE321: Operating Systems
Spring 2024
Take Home Quiz-1
Full Marks: 5
Submission: During the Class of 30/1/24
Please remember that you just have to write very short answers to the given questions. Please submit only handwritten answers.

1. What role does the kernel play in an operating system?
2. Explain the concept of a device abstraction layer in the context of system software.
3. Explain the purpose of a file system in an operating system.
4. What is the significance of system calls in the interaction between application software and the operating system?
5. How do real-time operating systems (RTOS) differ from general-purpose operating systems?
6. Where is the Bootstrap Program typically stored?
7. What is the primary purpose of User Mode in dual-mode operation?
8. How does the dual-mode operation enhance system security?
9. How does a layered operating system handle communication between different layers, and what challenges may arise?
10. Explain the trade-offs between monolithic and microkernel operating system architectures.