

CSE321

SEC:10

TAKE HOME QUIZ

Total Marks : 20

Deadline:3/2/24 (During Class Time)

*******You must submit the Hard Copy*******

Q1) Explain the difference between multiprogramming & multitasking. [2]

Q2) How two modes of hardware provides security to the Operating System? [2]

Q3) What are the requirements of multi-programming? Explain the characteristics of each requirement. [2]

Q4) What are the limitations of Monolithic and Layered architecture? How does Microkernel structure overcome those limitations? [2.5]

Q5) What are the types of system calls? Explain each briefly. [2]

Q6) Explain the potential security risks in a time-sharing environment. [2.5]

Q7) Imagine a software developer working on a critical project with strict deadlines. Their work involves compiling large codebases, running performance tests, and debugging complex algorithms.

Explain which approach would be more appropriate between a time-sharing system and a single-user system in this scenario. [3.5]

Q8) A technology company is planning to upgrade its server infrastructure to support a variety of tasks, including web hosting, database management, and virtualization. They need to decide whether to implement symmetric multiprocessing or asymmetric multiprocessing for their system. Recommend the most suitable approach for their server infrastructure. [3.5]

