

Make sure to study the review sheets for exams #1 and #2. Material from these two study sheets may appear on the final.

1. What are the most important things you will find on a hard disk?
2. What are the three primary types of file storage?
3. What are some of the cool properties of NTFS?
4. What are some of the cool properties of EXT2/3?
5. Explain the terms Buffer, Spooling, Caching.
6. Explain how the elevator and scan algorithms work.
7. Explain how I/O streams to disk files are handled.
8. Explain how network requests, such as a request for an HTML page, are recognized and processed.
9. What is protection? Explain some protection mechanisms that exist in the Linux operating system.
10. What are some of the security threats that exist for today's systems? Discuss specifically boot-sector viruses and buffer overflow attacks.
11. How can I use a public key system to authenticate messages from a specific user?
12. How can I use a public key system to transmit secure information from a web page to the web server?
13. What is a network sniffer?
14. Describe how we can use timestamps for global ordering, even though clocks may not be synchronized.
15. Explain how mutual exclusion can be enforced in a distributed system.
16. Describe the bully algorithm for selecting a coordinator in a distributed system.
17. For real time systems, describe preemptive priority-based scheduling, Preemptive kernels, and minimized latency. Describe the priority inversion problem.
18. Describe rate-monotonic scheduling and Earliest-deadline-first scheduling.