CSc 360: Operating Systems (Summer 2006)

Self-test Questions 3

This list, by no means thorough, is compiled from "This lecture" on the lecture slides.

1. Process synchronization algorithms (assumptions, conditions, properties).
2. Using and implementing semaphores (with or without busy-wait).
3. Using and implementing monitors (with or without busy-wait).
4. Deadlock conditions, prevention and avoidance.
5. Memory system concepts (organization, structures, operations).
6. Memory allocation algorithms (pros, cons, trade-offs)
7. Paging and page table structures (pros, cons, trade-offs)
8. Virtual memory (demand paging, page fault, other features)
9. Page replacement algorithms (pros, cons, trade-offs)
10. Page allocation algorithms (pros, cons, trade-offs)
11. Trashing conditions, prevention and avoidance
12. File system concepts (organization, structures, operations)
13. File directory structures, file allocation structures
14. Mass-storage system concepts (organization, structures, operations)
15. Disk scheduling algorithms (pros, cons, trade-offs)
16. I/O system concepts (organization, structures, operations)