

CSc 360: Operating Systems (Summer 2006)

Self-test Questions 1

1. Briefly explain and compare polling, interrupt, and DMA (direct memory access)-based I/O access.
2. Briefly itemize, explain and compare the memory hierarchy found in modern computers.
3. Briefly explain and compare uni-programming vs multiprogramming, and batch-processing vs time-sharing.
4. Briefly explain and compare the implementation of internal commands and external commands supported by an operating system interpreter (i.e., shell).
5. Briefly explain and compare system calls and application programming interfaces.
6. Briefly explain and compare layered, micro-kernel and modular OS structures.
7. Briefly itemize, explain and compare possible ways of machine virtualization.
8. Briefly explain and compare program and process.
9. Briefly explain and compare longterm, short-term, and medium-term scheduling in process management.
10. Briefly explain and compare shared memory and message passing inter-process communication.