**Input/Output & Computer Peripherals**

1. When an interrupt occurs, what happens to the program that is currently executing at the time?
2. State and explain at least three primary uses of interrupts
3. What kind of interrupt occurs when a user’s program tries to execute a privileged instruction?
4. What are the three primary conditions that are required for DMA to take place?
5. What data must an I/O controller have before a DMA transfer takes place?
6. What is the purpose of a completion interrupt at the conclusion of a DMA transfer?
7. Why would DMA be useless if the computer did not have interrupt capability?
8. Consider the interrupt that occurs at the completion of a disk transfer.
   1. ‘‘Who’’ is interrupting ‘‘whom’’?
   2. Why is the interrupt used in this case?
   3. What would be necessary if there were no interrupt capability on this computer?
   4. Describe the steps that take place after the interrupt occurs.
9. In general, what purpose does an interrupt serve? Stated another way, suppose there were no interrupts provided in a computer. What capabilities would be lost?
10. Describe the steps that occur when a system receives multiple interrupts.