

Quiz 6

Course: cs241 - System Programming, CS Department

Date: March 17, 2006

Netid:

Name:

UIN:

Note: Completion of quiz is an individual effort. The quiz takes 10 minutes. The student gets additional 5 points for taking the quiz. *Each question has ONLY ONE ANSWER!!!*

1. (1 Point) Polling is a concept that means
 - a. The device controller reads a busy bit from the host
 - b. The host reads a status register from the device controller
 - c. The device controller waits for a signal from the device

2. (1 Point) The CPU detects an interrupt
 - a. Using busy bit
 - b. Using interrupt handler
 - c. Using interrupt request line

3. (1 Point) Cycle stealing happens
 - a. During the handshaking protocol between DMA controller and device controller
 - b. During the handshaking protocol between the host and the device controller
 - c. During the DMA data transfer between the main memory and the device controller

4. (1 Point) Synchronous I/O means
 - a. CPU starts the transfer and goes off to do something else until interrupt arrives
 - b. CPU starts the transfer and waits until the transfer is finished
 - c. None of the above

5. (1 Point) The reason for buffering is
 - a. To cope with speed mismatch only
 - b. To cope with different data transfer sizes only
 - c. To cope with context switching overhead and avoid copy semantics for application I/O
 - d. (a) and (b)
 - e. (a) and (b) and (c)

6. (1 Point) Spooling is a concept that is required for devices such as
 - a. Disks
 - b. Network adaptors
 - c. Printers

7. (1 Point) Caching and buffering are the same function
 - a. True
 - b. False

8. (1 Point) Symbolic links can span across
 - a. One file system
 - b. Multiple file systems

9. (1 Point) Difference between hard links and symbolic links is that the hard links allow for leaving these links dangling when the file entry is deleted, and symbolic links don't allow this.
 - a. True
 - b. False

10. (1 Point) The file-reference count in system-wide open table is good for
 - a. Counting number of read bytes
 - b. Counting number of open files