Ceng 328 - Quiz 1

April 1, 2011

Solve all questions.
For Thursday section

1. (1.75 pts) A process control block _____

   A) includes information on the process's state

   B) stores the address of the next instruction to be processed by a different process

   C) determines which process is to be executed next

   D) is an example of a process queue

2. (1.75 pts) The list of processes waiting for a particular I/O device is called a(n) _____

   A) standby queue

   B) device queue

   C) ready queue

   D) interrupt queue

3. (1.75 pts) The _____ of a process contains temporary data such as function parameters, return addresses, and local variables.

   A) text section

   B) data section

   C) program counter

   D) stack

4. (1.75 pts) The _____ refers to the number of processes in memory.

   A) process count

B) long-term scheduler

C) degree of multiprogramming

D) CPU scheduler

5. (8 pts) Describe the operating system's two modes of operation.

For Friday section

1. (1.75 pts) When a child process is created, which of the following is a possibility in terms of the execution or address space of the child process?

   A) The child process runs concurrently with the parent.

   B) The child process has a new program loaded into it.

   C) The child is a duplicate of the parent.

   D) All of the above

2. (1.75 pts) A process may transition to the Ready state by which of the following actions?

   A) Completion of an I/O event

   B) Awaiting its turn on the CPU

   C) Newly-admitted process

   D) All of the above

3. (1.75 pts) Which of the following statements is true?

   A) Shared memory is typically faster than message passing.

   B) Message passing is typically faster than shared memory.

   C) Message passing is most useful for exchanging large amounts of data.

   D) Shared memory is far more common in operating systems than message passing.

4. (1.75 pts) A process may transition to the Ready state by which of the following actions?

   A) Completion of an I/O event

   B) Awaiting its turn on the CPU

   C) Newly-admitted process

   D) All of the above

5. (8 pts) Explain the concept of a context switch.