

No.: _____

Name: _____

**Computer Science
Homework for Chapter 3**

Due: 2010/04/14

- _____ 1. Multitasking in a computer with only one CPU is accomplished by a technique called
A. Bootstrapping B. Batch processing C. Time sharing
- _____ 2. Which of the following is not a means of obtaining a form of multitasking?
A. Pipelining B. Time sharing C. Virtual memory D. Multiple processors
- _____ 3. Which of the following events is detrimental to an operating system's performance?
A. Deadlock B. Interrupt C. Booting
- _____ 4. A section of a program that should be executed by at most one process at a time is called a
A. Utility B. Critical region C. Privileged instruction
- _____ 5. Which of the following is not a role of a typical operating system?
A. Control the allocation of the machine's resources
B. Control access to the machine
C. Maintain records regarding files stored in mass storage
D. Assist the computer user in the task of processing digital photographs
- _____ 6. Which of the following components of an operating system is executed as the result of an interrupt signal?
A. Dispatcher B. Memory manager C. File manager

7-10. Fill in the blanks below with the part on the operating system (file manager, memory manager, device drivers, window manager, scheduler, dispatcher) that performs the activity described.

7. _____ executes each time a time slice terminates.
8. _____ removes entries from the process table.
9. _____ maintains a record of available mass storage space.
10. _____ displays icons on the computer screen.

11. In the following table, connect the term to each phrase that gives the best description of the term. (40%)

Term	Descriptive Phrase
process	_____ A. Extended storage space created by the memory manager
bootstrap	_____ B. A storage system in which the first entry in is the first entry out
ROM	_____ C. Allows the user to communicate with the computer system while the user's application is being performed
directory path	_____ D. A sequence of folders each containing the next
shell	_____ E. Memory area whose contents cannot be altered
deadlock	_____ F. A situation in which activities find themselves waiting on each other
virtual memory	_____ G. A means of communicating with a computer user by means of images rather than words
mutual exclusion	_____ H. The act of performing more than one activity at the same time
kernel	_____ I. The activity of executing a program
queue	_____ J. The requirement that a process complete a block of instructions before another process is allowed to start the block
GUI	_____ K. The part of an operating system that communicates with the user
auditing software	_____ L. The heart of an operating system
multitasking	_____ M. The program first executed when a computer is turned on
interactive processing	_____ N. A signal that suspends the CPU's current activities
interrupt	_____ O. A tool used to monitor a computer system's activities