

Chapter 5 - Concurrency: Mutual Exclusion and Synchronization (Quiz)

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1. _____ are memory words used as a synchronization mechanism.	Event flags	14. A situation in which a runnable process is overlooked indefinitely by the scheduler, although it is able to proceed, is _____.	starvation
2. A _____ is a data type that is used to block a process or thread until a particular condition is true.	condition variable	15. The term _____ refers to a technique in which a process can do nothing until it gets permission to enter its critical section but continues to execute an instruction or set of instructions that tests the appropriate variable to gain entrance.	spin waiting
3. A _____ is an integer value used for signaling among processes.	semaphore		
4. The _____ is a programming language construct that provides equivalent functionality to that of semaphores and is easier to control.	monitor		
5. _____ is when the sequence of instruction is guaranteed to execute as a group, or not execute at all, having no visible effect on system state.	Atomic operation		
6. The management of multiple processes within a uniprocessor system is _____.	multiprogramming		
7. A _____ means for two processes to exchange information is with the use of _____.	messages		
8. A _____ occurs when multiple processes or threads read and write data items so that the final result depends on the order of execution of instructions in the multiple processes.	race condition		
9. Probably the most useful combination, _____ allows a process to send one or more messages to a variety of destinations as quickly as possible.	nonblocking send, blocking receive		
10. A _____ relationship allows multiple server processes to provide concurrent service to multiple clients	many-to-many		
11. The requirement that when one process is in a critical section that accesses shared resources, no other process may be in a critical section that accesses any of those shared resources is _____.	mutual exclusion		
12. A semaphore that does not specify the order in which processes are removed from the queue is a _____ semaphore.	weak		
13. A semaphore whose definition includes the policy that the process that has been blocked the longest is released from the queue first is called a _____ semaphore.	strong		