Name: _____

gtID: _____

(e.g. gtg123a)

1. Do you know the conditions under which a process/thread may join the ready queue and leave the ready queue? Y / N

2. Can you name all the steps that happen during a context switch? Y / N

3. Can you name at least three different types of interprocess communication? Y / N

4. Do you know what is meant by Data Race in a parallel program? Y / N

5. In a preemptive scheduler, do you understand what the word "preemptive" refers to? Y / N

6. Do you understand the difference between "round robin", "shortest-job-first", and "priority scheduling"? Y / N

7. Do you know the name for a section of code that accesses variables or resources that are shared between multiple threads of execution? Y / N

8. Do you know the necessary and sufficient conditions for deadlock to occur? Y / N

9. Do you understand why, when, and how to use mutual exclusion? Y / N

10. Can you describe the role the translation look-aside buffer (TLB) plays in a virtual memory system? Y / N

11. Do you understand the difference between a "segment" and a "page" in a memory hierarchy? Y / N

12. Do you know the difference between a "page" and a "frame" in a virtual memory system? Y / N

13. Do you know the difference between "first-in, first-out", "least-recently-used", and "least-frequently-used" replacement policies? Y / N

14. Do you know what it means for a process to "trap" to the kernel? Y / N

15. Can you name the mechanism by which asynchronous hardware events may notify the CPU (and thus the kernel) of an event? Y / N

16.	Can you explain why "ports" are necessary in network communication?	Y / N
17.	Do you know what processor cache (e.g. L1, L2) has to do with context switches?	Y / N
18.	Have you written a substantial (i.e. not "Hello World") program in C or C++?	Y / N
19.	Have you written a multi-threaded program?	Y / N
20.	Have you written a networked program using a sockets API (e.g. Linux/POSIX sockets or winsock)?	Y / N
21.	Have you written a program that handles one or more signals in Linux/POSIX?	Y / N
22.	Do you know how to take timing measurements of a program?	Y / N