

Student Name: _____ ID: _____

Student Name: _____ ID: _____

Process & Threads:

~~~~~

- What is a process?
- What is a process control block? What is it used for? What information does it contain?
- What execution states can a process be in? What do they mean? What causes a process to change execution states?
- How does the OS keep track of processes?
- What is a context switch? What happens during a context switch? What causes a context switch to occur?
- What is the difference between a process and a thread?
- What is the difference between a kernel thread and a user-level thread?
- How are processes created? Fork() and Exec()
- Write pseudo-code for process creation using fork

### CPU Scheduling:

~~~~~

- What are FCFS, Round Robin, SJF, Multilevel Feedback Queue, and Lottery Scheduling algorithms?
- What are the advantages and disadvantages of each?
- What is preemptive scheduling? What is non-preemptive scheduling? Which scheduling algorithms can be

preemptive?

- What is a time slice? What effect does a very small time slice have? What effect does a very large time slice have?
- What is an I/O bound process? What is a CPU bound process? Is there any reason to treat them differently for scheduling purposes?