CS 314 Operating Systems, Spring 2017
Quiz #2 on January 17, 2017
List of the possible questions

#1: What is “process”? 

#2: Describe how processes differ from programs by mentioning at least three differences between them.

#3: What does “PCB” stand for? Why do operating systems need PCB?

#4: Mention at least five different information contained in a PCB (you do not have to describe them).

#5: What is “process scheduling”?

#6: What are the three different levels of “process scheduling” (just name the three)?

#7: What is “the long-term process scheduling”?

#8: What are the two major reasons the long-term scheduling rejects starting a new process?

#9: Technically explain how “multi-tasking” can improve the processor utilization.

#10: In the following sentence: “The long-term scheduler is the main component that controls __________ in multitasking operating systems”, fill out the blank by a word that best fits to the blank.

#11: What are the two states in “the long-term process scheduling”?

#12: What is “Blocked” state in “the long-term process scheduling”?

#13: What is “the short-term process scheduling”?

#14: What are the three states in “the short-term process scheduling”?

#15: What is “Ready” state in “the short-term process scheduling”?

#16: What is “Running” state in “the short-term process scheduling”?

#17: What is “Blocked” state in “the short-term process scheduling”?

#18: What is “the medium-term process scheduling”?
#19: Show a sketch of the integration of the short-term, medium-term, and long-term process scheduling as a directed state-transition diagram.

#20: How does “FCFS” process scheduling algorithm work?

#21: How does “RR” process scheduling algorithm work?

#22: How does “SJF” process scheduling algorithm work?

#23: How does “SRTF” process scheduling algorithm work?

#24: What is “preemptive process scheduling”?

#25: What is “non-preemptive process scheduling”?

#26: What is “throughput” (in the context of process scheduling)?

#27: What is “response time” (in the context of process scheduling)?

#28: What is “turnaround time” (in the context of process scheduling)?