Operating System Concept

Review Sheet for Mid-Term I.

Part 1.
Interrupts,
Direct memory access (DMA).
Multiprogramming,
Time Sharing,
Operating System Services,
System calls
API's
Difference between System calls and system programs.
What is a process?
What kinds of resources a process has?
What is a thread, what kinds of resources they have?
Multithreading, why we need it? Benefits of multithreading
How a thread can be canceled?
What is a thread pooling? The benefits of thread pools,

Part 2.
The states of processes, and the transactions between them,
The state of a thread.
Process control Block (process table)
Possible ways to create a process,
Possible ways to cancel a process,
Methods for intersperses communication

Part 3.
When we need to schedule
CPU burst cycle, I/O burst cycle,
Different between short term scheduling and long term scheduling,
Preemptive and no preemptive algorithms
Starvation
Aging
Scheduling criteria;
Scheduling algorithms
FCFS,
Shortest job first (SJF)
Priority Scheduling
Round-Robin Scheduling;

Part 4.
I will give you a set of processes, I will ask you to schedule this processes by using a
specific algorithm (I will give you what algorithm you have to use) , and you also have to

find out some criteria about the processes, such as waiting time, response time, turnaround time