1. Go through the steps that must take place in a context switch. Make sure that you give the conditions under which a context switch could actually occur. Give two scenarios, one that is the result of a program action, one that is not.

2. What is the difference between message passing and shared memory for communication between processes.

3. Define the term “System Call.” Give a list of the various system calls that could be performed by a program.

4. Explain the difference between preemptive and non-preemptive scheduling. What is the danger of non-preemptive scheduling?

5. What is SJF? Give an example of several processes scheduled using SJF and compute the average wait time.

6. Same as question 4, except this time use FCFS.

7. What is Starvation, and how can it occur in SJF scheduling?

8. Can Starvation occur in FCFS scheduling?

9. Describe the storage hierarchy, and list the various elements of it.

10. Explain the concept of memory protection, and why it is needed.