# Operating System Concepts Exam

**Time: 100 min.**

**Select one answer ONLY**

1. Which of the following is a single-user computer operating system?
   a. UNIX
   b. Linux
   c. DOS
   d. MS Windows

11. The operating system manage the processes using Process Control Blocks PCB
   a. True
   b. False

21. Which of the following is not a personal computer operating system?
   a. Linux
   b. MS Windows
   c. MAC OS/X
   d. Symbian

31. The CPU is connected with the RAM through I/O devices.
   a. True
   b. False

41. The flash memory sticks are considered one of the main computer storage.
   a. True
   b. False

51. The CPU is in monitor mode when the control is given to the user application.
   a. True
   b. False

61. Which of the following operating systems does not have a command line interpreter?
   a. MS Windows
   b. UNIX
   c. Symbian
   d. Linux

71. For a process to change state from Running to Ready state, an interrupt must happen.
   a. True
   b. False

81. Multi-programmed system is an example of non-preemptive scheduling.
   a. True
   b. False

91. Terminating a process or more is used to recover from a deadlock.
   a. True
   b. False

You are given the following information about some of processes which are ready to be running with a CPU in an Operating System:

| Process | Arrival Time | Burst Time |
|---|---|---|
| P1 | 0.0 | 7 |
| P2 | 5.0 | 10 |
| P3 | 7.0 | 7 |
| P4 | 8.0 | 3 |

96. In case of using FCFS scheduling algorithm, the average waiting time for the above situation is:

100. In case of using Round Robin scheduling algorithm (with quantum 5), the waiting time for processes P1, P2, P3, P4 are: