T.

1. A classic process represents the concept of a program in execution
2. A critical section is a segment of code, in which a process may be changing common and shared variables, updating a table, writing a file, and so on.
3. The monitor construct ensures that only one process at a time can be active within the monitor.
4. In a time sharing system, a user’s program is preempted at regular intervals, but due to relatively slow human reaction time, this is transparent to the user.

F.

1. The processor itself is not a resource so the OS is not involve in determining how much of the processor time is devoted to the execution of a user program.
2. Uniprogramming typically provides better utilization of system resources than multiprogramming.
3. Thread creation is very heavyweight whereas process creation is very lightweight.
4. Semaphores are only useful for solving critical section problems and not other synchronization problems.
5. Race condition is a situation in which two or more processes continuously change their states in response to changes in other processes without doing any useful work.
6. It is possible for one process to lock the mutex and another to unlock it.

MC.

1. A user program executes in a <**user mode**>, in which certain areas of memory are protected from the user’s use and in which certain instructions may not be executed.
2. Multiprogramming operating systems are fairly sophisticated compared to single-program or <**uniprogramming**> systems.
3. Operating systems functions are normally categorized into one of these categories except: <**Window management**> **\***(Not process, memory, or device management)
4. The technique where a system clock generates interrupts and at each clock interrupt the OS regains control and assigns the processor to another user is <**time slicing**>.
5. It is the principle responsibility of the <**OS**> to control execution of the processes.
6. Basic process states include the following except: <**switching**>.
7. A process is in the <**blocked**> state when it is in the main memory and awaiting an event.
8. A <**semaphore**> is an integer value used for signaling among processes.
9. The requirement that when one process is in a critical section… <**mutual** **exclusion**>.
10. The management of multiple processes within a uniprocessor system is <**multiprogramming**>

Short:

Monolithic Kerel – contains virtually a complete OS…Implemented as a single process with all elements sharing the same address space.

Micro Kernel – is a privileged OS core that provides… relying on other processes.