Main memory is a large array of ----------called memory locations ranging in size from hundreds of thousands to billions.

Answer (Please select your correct option)

○ Interrupts

○ Registers

○ Digits

○ Words

In ----------- model, there is a kernel thread for every user thread

Answer (Please select your correct option)

○ Many-to-Many

○ None of the given options

○ One-to-One

○ Many-to-One

A time interval when a process uses CPU only is called

Answer (Please select your correct option)

○   CPU burst

○   IO burst

○   Scheduling

○   None of the given options

The part of the program where the shared memory is accessed is called -----------

Answer (Please select your correct option)

○   Buffer

○   Critical Section

○   Semaphore

○   None of the given options

Utilities used for system administration (halt, ifconfig, fdisk, etc.) are stored in _____ directory.

Answer (Please select your correct option)

○ /dev

○ /boot

○ /sbin

○ /lib

The Swap instruction which is the hardware solution to synchronization problem does not satisfy the _____ condition, hence not considered to be a good solution.

Answer (Please select your correct option)

○ Progress

○ Bounded waiting

○ Mutual exclusion

○ None of the given

All ------------ within a process share the same address space

Answer (Please select your correct option)

○ Threads

○ Processes

○ CPU burst

○ IO Burst

In a Multilevel Queue, the foreground queue has -------- scheduling algorithm and background queue has ------------- scheduling algorithm

Answer (Please select your correct option)

○   First Come First Serve, Round-Robin

○   Round-Robin, First Come First Serve

○   Round-Robin, Round-Robin

○   First Come First Serve, First Come First Serve

Priority of a process is ----------- to the priority number of the process.

Answer (Please select your correct option)

○ Directly proportional

○ Equal

○ Inversely proportional

○ Greater

i think but not
sure

The ………….. view is that it is a program that acts as an intermediary between a user of a computer and the computer hardware, and makes the computer system convenient to use.

Answer (Please select your correct option)

○ Top-down

○ Bottom-up

○ Alternate

○ None of the above

_____ commands in Linux helps to create a new directory.

Answer (Please select your correct option)

○ ls

○ cp

○ mv

○ mkdir

_____ scheduler selects the process from the job pool and put them in main memory.

Answer (Please select your correct option)

○ Long term

○ Short term

○ Medium term

○ Swapper

---------------are used for communication between unrelated processes on a system.

Answer (Please select your correct option)

○   Pipes

○   Named pipe (FIFO):

○   BSD Sockets

○   none of the given options

The syntax for output redirection is

Answer (Please select your correct option)

○   command < output-file

○   command >= output-file

○   command > output-file

○   command =< output-file

The shared buffer can be implemented as a circular array with ……………… logical pointers.

Answer (Please select your correct option)

○ Five

○ Two

○ Three

○ Four

Limit register contains

Answer (Please select your correct option)

○ The size of the process

○ Starting address of the process

○ Address of the next instruction

○ Operand to be fetched

Which of the following command is used to read data from file named academics?

Answer (Please select your correct option)

○ con < academics

○ cat < academics

○ socket > academics

○ ran > academics

_____command puts a foreground process into background.

Answer (Please select your correct option)

○ fg

○ bg

○ Ctrl z

○ None of the given

_____ is solution to the problem of indefinite blockage of low-priority processes.

Answer (Please select your correct option)

○ Aging

○ Starvation

○ Deadlock

○ None of the given

What is the requirement for solution to critical section problem?

Answer (Please select your correct option)

○ Mutual Exclusion

○ Progress

○ Bounded Waiting

○ All of the given

Preemptive Shortest Job First scheduling algorithm is best algorithm for minimizing the waiting time for the processes. How can you calculate the average waiting time in preemptive Shortest Job First scheduling algorithm?
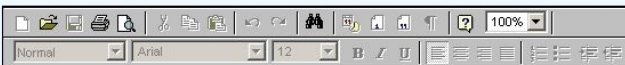
Answer (Please click here to Add Answer)
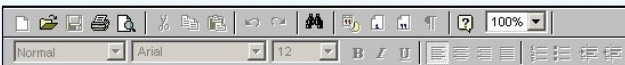
Critical section has hardware based or software based solutions. You have to write the structure of the software based solution for the critical section problem.

Answer (Please click here to Add Answer)

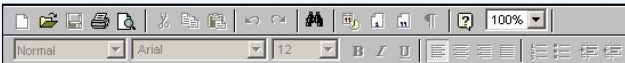Consider this algorithm for mutual exclusion.

Process 1{	Process 2 {
while true {	while true {
while (turn == 1)	while (turn == 2)
; /* do nothing */	; /* do nothing */

Answer (Please click here to Add Answer)

```
        ; /* do nothing */              ; /* do nothing */
    critical section                critical section
    turn = 2;                       turn = 1;
    other non-critical code         other non-critical code
    }                               }
}                               }
```

Answer (Please click here to Add Answer)

```
        other non-critical code              other non-critical code
    }                                    }
}                                   }
```

Does this solution have any problem? If yes then justify your answer.
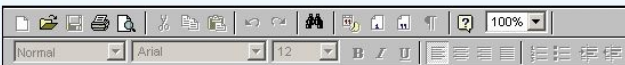
Answer (Please click here to Add Answer)

Process can run either as background process or as foreground process. If the process is running in background and you wanted to move a background process into foreground in a UNIX/LINUX shell. Which command will you use for it?

Answer (Please click here to Add Answer)

Semaphore is a variable or abstract data type that provides a simple but useful abstraction for controlling access by multiple processes to a common resource in a parallel environment. We can use semaphores to deal with the n-process critical section problem. You have to explain the working of Semaphore Algorithm.
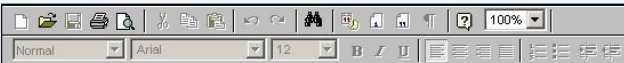
Answer (Please click here to Add Answer)
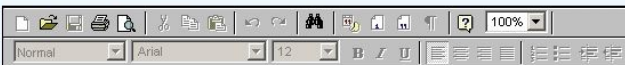
Considering the resource sharing feature of threads, what do you think is 'resource sharing' an advantage of a thread or disadvantage of a thread. State your answer briefly with strong argument.

Answer (Please click here to Add Answer)